

# 2024 G20 Rio de Janeiro Summit Final Compliance Report

20 November 2024 to 5 November 2025

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## 1. Energy: Energy Transition Supply Chains

"We support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies."

G20 Rio de Janeiro Leaders' Declaration

#### **Assessment**

	No Compliance	Partial Compliance	Full Compliance	
Argentina		0		
Australia			+1	
Brazil			+1	
Canada			+1	
China			+1	
France			+1	
Germany			+1	
India			+1	
Indonesia			+1	
Italy			+1	
Japan			+1	
Korea			+1	
Mexico			+1	
Russia			+1	
Saudi Arabia			+1	
South Africa		0		
Türkiye			+1	
United Kingdom			+1	
United States			+1	
African Union		0		
European Union			+1	
Average		+0.86 (93%)		

## **Background**

Since the 2009 Pittsburgh Summit, the G20 has consistently referred to the necessity of adopting renewable energy technologies and increasing renewable energy supplies as part of G20 members' climate and sustainable development goals. Since the 2021 Rome Summit, the G20 has specifically highlighted the importance of supply chain resilience in regard to critical minerals and materials, as well as semiconductors and other technologies. In recognition of its global leadership position, the G20 reiterated its commitment to developing supply chains for energy transitions as part of its climate goals and the United Nations' Sustainable Development Goals at the 2024 Rio de Janeiro Summit.

At the 2009 Pittsburgh Summit, G20 leaders noted the importance of increasing renewable energy supplies and adopting renewable energy technology for promoting sustainable growth and strengthening energy security.<sup>3</sup>

At the 2010 Seoul Summit, G20 leaders committed to creating "environments conducive to the development and deployment of energy efficiency and clean energy technologies" through policies including "technical transfer and capacity building."<sup>4</sup>

<sup>3</sup> G20 Leaders Statement: Pittsburgh Summit, G20 Research Group (Toronto) 25 September 2009. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2009/2009communique0925.html

 $<sup>^4</sup>$  G20 Seoul Summit Leaders' Declaration, G20 Research Group (Toronto) 12 November 2010. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2010/g20seoul-doc.pdf

At the 2011 Cannes Summit, G20 leaders affirmed its support for "the development and deployment of clean energy and energy efficiency (C3E) technologies." 5

At the 2012 Los Cabos Summit, G20 leaders acknowledged "G20 countries' efforts to foster investment" in clean energy technologies "through the sharing of national experiences regarding challenges for technology deployment."

At the 2013 St. Petersburg Summit, G20 leaders welcomed "efforts aimed at promoting sustainable development, energy efficiency, inclusive green growth and clean energy technologies and energy security." The G20 stated it would continue to cooperate with "with international organisations sharing national experiences and case studies regarding sustainable development, clean energy and energy efficiency as well as development, deployment and broader application of related technologies and will take forward work, on a voluntary basis, on corresponding policy options and technologies."

At the 2015 Antalya Summit, G20 leaders affirmed that "increasing investments in clean energy technologies and supporting related research and development activities will be important in tackling climate change and its effects."

At the 2016 Hangzhou Summit, G20 leaders launched the G20 Initiative on Supporting Industrialization in Africa and least developed countries, which encompassed policies including "promoting investment in sustainable and secure energy."

At the 2017 Hamburg Summit, G20 leaders stated its view of "energy security as one of the guiding principles for the transformation of [G20] energy systems." The G20 welcomed "international cooperation on the development, deployment and commercialisation of sustainable and clean energy technologies and support financing by Multilateral Development Banks to promote universal access to affordable, reliable, sustainable and clean energy."

At the 2018 Buenos Aires Summit, G20 leaders encouraged "energy transitions that combine growth with decreasing greenhouse gas emissions towards cleaner, more flexible and transparent systems and cooperation in energy efficiency." The G20 acknowledged "the role of all energy sources and technologies in the energy mix and different possible national paths to achieve cleaner energy systems under the term 'transitions'."

At the 2019 Osaka Summit, G20 leaders acknowledged "the importance of energy transitions that realize the "3E+S" (Energy Security, Economic Efficiency and Environment + Safety) in order to transform [G20] energy systems into affordable, reliable, sustainable and low GHG [greenhouse gas] emissions systems." The G20 further acknowledged "the importance of global energy security as one of the guiding principles for the

G20 Research Group, 18 November 2025

<sup>&</sup>lt;sup>5</sup> Cannes Summit Final Declaration, G20 Research Group (Toronto) 4 November 2011. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2011/2011-cannes-declaration-111104-en.html

<sup>&</sup>lt;sup>6</sup> G20 Los Cabos Summit Leaders' Declaration, G20 Research Group (Toronto) 19 June 2012. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2012/2012-0619-loscabos.pdf

<sup>&</sup>lt;sup>7</sup> G20 St. Petersburg Summit Leaders' Declaration, G20 Research Group (Toronto) 6 September 2013. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2013/2013-0906-declaration.html

<sup>&</sup>lt;sup>8</sup> G20 Antalya Summit Leaders' Communiqué, G20 Research Group (Toronto) 16 November 2015. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2015/151116-communique.html

<sup>&</sup>lt;sup>9</sup> G20 Hangzhou Summit Leaders' Communiqué, G20 Research Group (Toronto) 5 September 2016. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2016/160905-communique.html

 $<sup>^{10}</sup>$  G20 Hamburg Summit Leaders' Declaration, G20 Research Group (Toronto) 8 July 2017. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2017/2017-G20-leaders-declaration.pdf

<sup>&</sup>lt;sup>11</sup> G20 Buenos Aires Summit Leaders' Declaration, G20 Research Group (Toronto) 1 December 2018. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2018/2018-leaders-declaration.html

<sup>&</sup>lt;sup>12</sup> G20 Osaka Summit Leaders' Declaration, G20 Research Group (Toronto) 29 June 2019. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2019/2019-g20-osaka-leaders-declaration.html

transformation of energy systems, including resilience, safety and development of infrastructure and undisrupted flow of energy from various sources, suppliers and routes."

At the 2020 Riyadh Summit, G20 leaders reaffirmed their commitment to ensuring a "stable and uninterrupted supply of energy to support economic growth." Leaders recognized the importance of expediting universal access to affordable and reliable energy for all, emphasizing innovation across various fuel and technology options. The summit also underscored the need to "maintain undisrupted energy flows and enhance energy security and market stability while promoting open, competitive and free international energy markets."<sup>13</sup>

At the 2021 Rome Summit, G20 leaders made a commitment to "cooperate on deployment and dissemination of zero or low carbon emission and renewable technologies, including sustainable bioenergy, to enable a transition towards low-emission power systems." In light of addressing energy security challenges, the G20 also recognized the importance of "reliable, responsible and sustainable supply chains of critical minerals and materials, as well as semiconductors and related technologies."

At the 2022 Bali Summit, G20 leaders called for support to developing countries "in terms of providing access to affordable, reliable, sustainable and modern energy, capacity building, affordable latest technology within the public domain, mutually beneficial technology cooperation and financing mitigation actions in the energy sector." G20 leaders also committed to accelerating energy transitions "by strengthening energy supply chain and energy security and diversifying energy mixes and systems."

At the 2023 New Delhi Summit, G20 leaders affirmed support for "reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semi-conductors and technologies." G20 leaders underscored "the crucial role of technologically neutral, integrated and inclusive approaches to develop and deploy a variety of low-emitting energies, sustainable fuels and technologies."

At the 2024 Rio de Janeiro Summit, G20 leaders reaffirmed their commitment "to accelerating clean, sustainable, just, affordable and inclusive energy transitions." They emphasized the importance of reliable, diversified, sustainable and responsible supply chains for energy transitions, underscoring the need for increased international cooperation, investment and technological innovation to strengthen energy security and support the transition to low-carbon economies.

#### **Commitment Features**

At the 2024 Rio de Janeiro Summit, leaders committed to "support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies." This commitment builds on previous G20 discussions on energy security, climate action and economic resilience by emphasizing the strengthening and diversification of global supply chains to support clean energy transitions. Given the increasing demand for critical minerals, semiconductors and clean energy technologies, this commitment seeks to address vulnerabilities in global supply chains while ensuring their sustainability and ethical sourcing.

<sup>&</sup>lt;sup>13</sup> G20 Riyadh Summit Leaders' Declaration, G20 Research Group (Toronto) 21 November 2020. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2020/2020-g20-leaders-declaration-1121.html

<sup>&</sup>lt;sup>14</sup> G20 Rome Summit Leaders' Declaration, G20 Research Group (Toronto) 31 October 2021. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2021/211031-declaration.html

<sup>&</sup>lt;sup>15</sup> G20 Bali Summit Leaders' Declaration, G20 Research Group (Toronto) 16 November 2022. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2022/221116-declaration.html

<sup>&</sup>lt;sup>16</sup> G20 New Delhi Summit Leaders' Declaration, G20 Research Group (Toronto) 9 September 2023. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2023/230909-declaration.html

<sup>&</sup>lt;sup>17</sup> G20 Rio de Janeiro Summit Leaders' Declaration, G20 Research Group (Toronto) 18 November 2024. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2024/241118-declaration.html

<sup>&</sup>lt;sup>18</sup> G20 Rio de Janeiro Summit Leaders' Declaration, G20 Research Group (Toronto) 18 November 2024. Access Date: 7 March 2025. https://www.g20.utoronto.ca/2024/241118-declaration.html

The commitment does not mandate specific policy instruments or implementation mechanisms, granting G20 members the flexibility to determine their own approaches to compliance. However, it requires demonstrable action in at least one of three key areas: supply chains for critical minerals and materials beneficiated at source, semiconductors and energy transition technologies. Full compliance requires meaningful action in all three areas, reflecting a comprehensive approach to securing supply chains essential for energy transitions.

## **Definitions and Concepts**

The term "support" is understood as the action or act of providing aid, assistance, or backing up an initiative or entity through policies, financial investment, or institutional measures that actively contribute to achieving the commitment's objectives.<sup>19</sup>

"Reliable" is understood to mean consistent in performance and able to function without failure.<sup>20</sup> In the context of supply chains, it implies ensuring consistent availability of critical materials, minimizing disruptions caused by geopolitical tensions, trade restrictions or resource scarcity.<sup>21</sup>

"Diversified" refers to a supply chain that sources critical minerals, semiconductors and technologies from multiple regions or suppliers to mitigate risks associated with reliance on a single source.<sup>22</sup>

"Sustainable" refers to a supply chain that is environmentally and socially responsible, minimizing negative ecological impacts, carbon emissions and waste.<sup>23</sup>

"Responsible" supply chains adhere to ethical, transparent and accountable business practices, including fair labour practices, human rights standards and transparency, preventing exploitation and environmental degradation.<sup>24</sup>

"Critical minerals and materials" refer to naturally occurring elements and compounds essential for energy technologies, including copper, chromium, zinc, aluminium, major battery metals (lithium, nickel, cobalt, manganese, graphite), cadmium, molybdenum, rare earth elements and others.<sup>25</sup>

"Beneficiated at source" means processing and refining raw materials within the country of extraction before exporting them.<sup>26</sup>

"Semiconductors and technologies" refer to microelectronic components [e.g. GaAs, indium arsenide (InAs), gallium nitride (GaN) and indium phosphide] and advanced energy-related tools, systems and innovations

<sup>&</sup>lt;sup>19</sup> Compliance Coding Manual for International Institutional Commitments, G7 and G20 Research Groups (Toronto) 12 November 2020. Access Date: 7 March 2025. http://www.g7.utoronto.ca/compliance/Compliance\_Coding\_Manual\_2020.pdf

<sup>&</sup>lt;sup>20</sup> Reliable, Merriam-Webster (Springfield) n.d. Access Date: 7 March 2025. https://www.merriam-webster.com/dictionary/reliable

<sup>&</sup>lt;sup>21</sup> Keys to resilient supply chains, Organisation for Economic Co-operation and Development (Paris) n.d. Access Date: 7 March 2025. https://www.oecd.org/content/dam/oecd/en/events/2024/3/forum-on-critical-supply-chains-policy-tools-for-preparedness-and-responsiveness/Resilient-Supply-Chains\_Brochure-2025.pdf

<sup>&</sup>lt;sup>22</sup> Keys to resilient supply chains, Organisation for Economic Co-operation and Development (Paris) n.d. Access Date: 7 March 2025. https://www.oecd.org/content/dam/oecd/en/events/2024/3/forum-on-critical-supply-chains-policy-tools-for-preparedness-and-responsiveness/Resilient-Supply-Chains\_Brochure-2025.pdf

<sup>&</sup>lt;sup>23</sup> Building more resilient and sustainable global value chains through responsible business conduct, Organisation for Economic Co-operation and Development (Paris) 2021. Access Date: 7 March 2025. https://mneguidelines.oecd.org/Building-more-resilient-and-sustainable-global-value-chains-through-responsible-business-conduct.pdf

<sup>&</sup>lt;sup>24</sup> Building more resilient and sustainable global value chains through responsible business conduct, Organisation for Economic Co-operation and Development (Paris) 2021. Access Date: 7 March 2025. https://mneguidelines.oecd.org/Building-more-resilient-and-sustainable-global-value-chains-through-responsible-business-conduct.pdf

<sup>&</sup>lt;sup>25</sup> The Role of Critical World Energy Outlook Special Report Minerals in Clean Energy Transitions, International Energy Agency (Paris) 2022. Access Date: 7 March 2025. https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf

<sup>&</sup>lt;sup>26</sup> Beneficiation, Merriam-Webster (Springfield) n.d. Access Date: 7 March 2025. https://www.merriam-webster.com/dictionary/beneficiation

essential for modern energy infrastructure, including smart grids, battery storage and renewable energy deployment.<sup>27</sup>

## **General Interpretive Guidelines**

Full compliance, or a score of +1, will be given to a G20 member that takes strong action in both areas of supply chains specified by 1) supporting reliable, diversified, sustainable and responsible supply chains for energy transitions, taken together as a combined welfare objective; and 2) strengthening supply chains for a) critical minerals and materials beneficiated at source, b) semiconductors and c) energy transition technologies. To fulfill the requirements of full compliance, the G20 member must take strong action across Part 1 of the commitment and at least two of the three components of Part 2.

Strong actions include significant policy action, financial investment or institutional support that advances the commitment, including the establishment of new government agencies or institutions dedicated to supply chain security, enforcing trade agreements that enhance resilience or participating in international frameworks that regulate ethical and sustainable resource extraction. Examples of strong actions that contribute to beneficiation at source include building local processing and refining facilities for lithium, cobalt and rare earth elements, establishing technology-sharing partnerships between resource-rich and industrialized countries, implementing domestic policies that require a percentage of minerals to be processed before export or investing in domestic refining and processing facilities. Strong action to strengthen semiconductor supply chains includes providing subsidies or financial incentives for domestic semiconductor manufacturing, establishing trade partnerships with leading semiconductor-producing nations to secure supply chains or investing in research and development of next-generation semiconductors. To align with technological advancements that facilitate energy transitions, G20 members can implement policies that encourage private sector investment in clean energy technology or facilitate international cooperation on technology transfers and joint research initiatives.

Partial compliance, or a score of 0, will be assigned to a G20 member that takes strong action in at least 50 per cent of the commitment: 1) supporting reliable, diversified, sustainable and responsible supply chains for energy transitions, taken together as a combined welfare objective; and 2) strengthening supply chains for a) critical minerals and materials beneficiated at source, b) semiconductors and c) energy transition technologies. To achieve partial compliance, the G20 member must take strong action in two of the four aforementioned areas (i.e. all of Part 1 and one of the sub-areas of Part 2 or two of the sub-areas of Part 2) or take weak action all four areas. Examples of weak action includes announcing plans or intentions to improve supply chain security but without concrete policy implementation, verbal reiterations of support, diplomatic action without tangible support behind it, such as funds, conference attendance or participation and the like.

Non-compliance, or a score of -1, will be assigned if the G20 member takes insufficient action that does not meet the criteria for a 0, such as taking action in only one area, or taking actions that are directly and explicitly antithetical to the commitment, such as blocking or withdrawing from trade agreements or partnerships that facilitate supply chain resilience or delaying or rolling back policies that support clean technology or critical mineral development.

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<sup>&</sup>lt;sup>27</sup> The Role of Critical World Energy Outlook Special Report Minerals in Clean Energy Transitions, International Energy Agency (Paris) 2022. Access Date: 7 March 2025. https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf

## **Scoring Guidelines**

-1	The G20 member has taken insufficient action to 1) support the combined welfare target of reliable, diversified, sustainable and responsible supply chains for energy transitions and 2) to strengthen supply chains for a) critical minerals and materials beneficiated at source, b) semiconductors and c) energy transition technologies. This includes action that does not meet the criteria for partial compliance, such as taking action in only one of the four areas or taking actions
	that are directly and explicitly antithetical to the commitment.
0	The G20 member has taken strong action across 50 per cent of the commitment, or two of the four components or has taken weak action across all four areas: 1) supporting reliable, diversified, sustainable and responsible supply chains for energy transitions, taken together as a combined welfare objective and 2) strengthening supply chains for a) critical minerals and materials beneficiated at source, b) semiconductors and c) energy transition technologies.
+1	The G20 member has taken strong action towards 1) the combined welfare target of reliable, diversified, sustainable and responsible supply chains for energy transitions and 2) to strengthen supply chains in at least two of the three areas: a) critical minerals and materials beneficiated at source, b) semiconductors and c) energy transition technologies.

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## Argentina: 0

Argentina has partially complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 2 December 2024, Undersecretary of the Environment Ana Lamas met with Finnish Ambassador Nicola Lindertz to promote the establishment of a circular economy.<sup>28</sup> Undersecretary Lamas called for continued innovation regarding bioenergy and waste recovery technologies.

On 10 December 2024, Secretary of Mining Luis Lucero presented mining investment opportunities in Argentina as part of Raw Materials Week 2024 in Brussels.<sup>29</sup> The presentation included discussion on the extraction, processing and refining of critical raw materials in Argentina.

On 27 December 2024, President Milei approved the extension of Argentina's 2023 Budget (Law 27701) into 2025.<sup>30</sup> The budget includes tax exemptions for Energía Argentina Sociedad Anónima, support for green hydrogen projects and fiscal support for the integration of renewable energy into the electricity grid.<sup>31</sup>

On 8 January 2025, Argentina approved a solar park development project's application for membership in the Incentive Regime for Large Investments (RIGI).<sup>32</sup> With its membership in RIGI, the project will receive special

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<sup>&</sup>lt;sup>28</sup> Argentina y Finlandia impulsan una agenda de cooperación estratégica en economía circular, Jefatura de Gabinete de Ministros (Buenos Aires) 2 December 2024. Translation provided by Google Translate. Access Date: 1 May 2025.

https://www.argentina.gob.ar/noticias/argentina-y-finlandia-impulsan-una-agenda-de-cooperacion-estrategica-en-economia-circular <sup>29</sup> Economía presentó las oportunidades de inversión que ofrece Argentina en la Raw Materials Week, Ministerio de Economía (Buenos Aires) 10 December 2024. Translation provided by Google Translate. Access Date: 1 May 2025.

https://www.argentina.gob.ar/noticias/economia-presento-las-oportunidades-de-inversion-que-ofrece-argentina-en-la-raw-materials <sup>30</sup> Decreto 1131/2024, Boletín Oficial de la República Argentina (Buenos Aires) 27 December 2024. Translation provided by Google Translate. Access Date: 18 August 2025. https://www.boletinoficial.gob.ar/detalleAviso/primera/318933/20241230 <sup>31</sup> Ley 27701, Boletín Oficial de la República Argentina (Buenos Aires) 1 December 2022. Translation provided by Google Translate. Access Date: 18 August 2025. https://www.boletinoficial.gob.ar/detalleAviso/primera/276927/20221201 <sup>32</sup> El Gobierno aprobó la solicitud de adhesión al RIGI del proyecto Parque Solar El Quemado, Ministerio de Economía (Buenos Aires) 8 January 2025. Translation provided by Google Translate. Access Date: 1 May 2025. https://www.argentina.gob.ar/noticias/el-gobierno-aprobo-la-solicitud-de-adhesion-al-rigi-del-proyecto-parque-solar-el-quemado

tax, customs and exchange rate incentives. The project will receive an investment of USD211 million and will have a 305 megawatts (MW) capacity once complete.

On 29 January 2025, the Secretariat of Energy eliminated the National Registry of Charging Infrastructure for Electric and Hybrid Electric Vehicles, aiming to promote the expansion of charging stations by reducing costs and regulatory obstacles.<sup>33</sup>

On 30 January 2025, Argentina and India held the First Meeting of the Joint Working Group on Mineral Resources in Buenos Aires.<sup>34</sup> The delegations agreed to establish sub-working groups on exploration cooperation and on investment and to hold a second meeting in 2026.

On 17 February 2025, Argentina launched a large-scale initiative to modernize the electrical grid in the Buenos Aires Metropolitan Area.<sup>35</sup> This initiative includes the installation of 500 MW of energy storage capacity at strategic grid nodes, with an estimated investment of USD500 million over a period of 12 to 18 months.

On 5 March 2025, Secretary Lucero and Minister of Natural Resources of Canada Jonathan Wilkinson signed an agreement to collaborate on critical minerals and mining sustainability.<sup>36</sup> This partnership aims to facilitate sustainable investment in the mining sector and support global supply chain integration.

On 14 March 2025, Argentina implemented reforms simplifying the process of registering mining activities.<sup>37</sup> The measures are designed to benefit mining companies in the production and exploration stages.

On 16 May 2025, Argentina's National Atomic Energy Commission (CNEA), Candu Energy Inc. and CONUAR S.A. signed a Memorandum of Understanding to collaborate in supplying heavy water and exchanging nuclear technology.<sup>38</sup> The memorandum lays the foundation for the supply of heavy water from Argentina to Canada through the Heavy Water Industrial Plant in the province of Neuquén.

On 19 May 2025, the Secretariat for Energy and Mining Coordination, the National Electricity Administration of Paraguay and the Yacyretá Binational Entity signed an agreement whereby Argentina will be able to access up to 85 per cent of the energy produced in a binational hydroelectric plant.<sup>39</sup> This capacity will support reduced costs and support an equitable supply of energy.

<sup>&</sup>lt;sup>33</sup> El Gobierno Nacional avanza en la desregulación de los vehículos eléctricos e híbridos, Ministerio de Economía (Buenos Aires) 29 January 2025. Translation provided by Google Translate. Access Date: 1 May 2025. https://www.argentina.gob.ar/noticias/elgobierno-nacional-avanza-en-la-desregulacion-de-los-vehículos-electricos-e-hibridos

<sup>&</sup>lt;sup>34</sup> Primera reunión del Grupo de Trabajo Conjunto en Recursos Mineros entre la Argentina e India, Ministerio de Economía (Buenos Aires) 30 January 2025. Translation provided by Google Translate. Access Date: 1 May 2025.

https://www.argentina.gob.ar/noticias/primera-reunion-del-grupo-de-trabajo-conjunto-en-recursos-mineros-entre-la-argentina-e <sup>35</sup> Argentina inicia modernización eléctrica histórica en AMBA y convoca a las provincias a replicarlo en nodos críticos, Ministerio de Economía (Buenos Aires) 17 February 2025. Translation provided by Google Translate. Access Date: 16 May 2025.

https://www.argentina.gob.ar/noticias/argentina-inicia-modernizacion-electrica-historica-en-amba-y-convoca-las-provincias <sup>36</sup> Economía firmó un acuerdo sobre minerales críticos con el ministerio de Recursos Naturales de Canadá, Ministerio de Economía (Buenos Aires) 5 March 2025. Translation provided by Google Translate. Access Date: 16 May 2025.

https://www.argentina.gob.ar/noticias/economia-firmo-un-acuerdo-sobre-minerales-criticos-con-el-ministerio-de-recursos-naturales <sup>37</sup> El gobierno facilita el trámite del Registro Fiscal de Actividades Mineras, Presidencia de la Nación (Buenos Aires) 14 March 2025. Translation provided by Google Translate. Access Date: 20 May 2025. https://www.argentina.gob.ar/noticias/el-gobierno-facilita-el-tramite-del-registro-fiscal-de-actividades-mineras

<sup>&</sup>lt;sup>38</sup> CNEA y Candu Energy Inc. acuerdan suministro y cooperación tecnológica en agua pesada, Jefatura de Gabinete de Ministros (Buenos Aires) 16 May 2025. Translation provided by Google Translate. Access Date: 13 August 2025.

https://www.argentina.gob.ar/noticias/cnea-y-candu-energy-inc-acuerdan-suministro-y-cooperacion-tecnologica-en-agua-pesada

<sup>&</sup>lt;sup>39</sup> Argentina y Paraguay firmaron un acuerdo sobre Yacyretá que ordena el uso de la energía y baja el gasto, Ministerio de Economía (Buenos Aires) 19 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025.

https://www.argentina.gob.ar/noticias/argentina-y-paraguay-firmaron-un-acuerdo-sobre-yacyreta-que-ordena-el-uso-de-la-energia-yacyreta-yacyreta-yacyreta-yacyr

On 29 May 2025, the Ministry of Economy announced a national plan to expand Argentina's electricity transportation.<sup>40</sup> The plan includes an additional 5,610 kilometres of electricity transmission lines to ensure a reliable power supply, mitigate outages and address underinvestment. This plan will be carried out by private companies funded through consumer fees.

On 26 June 2025, CNEA President Germán Guido Lavalle and Rolando Instituto Peruano de Energía Nuclear President Páucar Jáuregui signed an agreement to exchange technical expertise and collaborate on nuclear energy projects.41

On 27 June 2025, Minister of Foreign Affairs Gerardo Werthein met with United States Secretary of Energy Chris Wright and senior officials to discuss bilateral cooperation in energy and mining.<sup>42</sup> The meeting highlighted Argentina's regulatory measures to attract investment, including the development of Vaca Muerta for unconventional hydrocarbons, lithium and other critical minerals for energy transition.

On 28 June 2025, Secretary Lucero and French Minister Delegate for Foreign Trade and French Nationals Abroad Laurent Saint-Martin signed a Memorandum of Understanding aimed at developing critical minerals including lithium.<sup>43</sup> The bilateral agreement aims to promote financing and investment for mining projects in Argentina.

On 30 June 2025, Secretary Lucero and French Minister of Foreign Trade Laurent Saint Martin signed a declaration of intent on critical minerals to advance joint mining and industrial projects.<sup>44</sup> The declaration aims to promote sustainable mining activities and build resilient, diversified supply chains to support the energy transition.

On 3 July 2025, President Milei signed the Mercado Común del Sur (MERCOSUR) Presidential Declaration on Energy Integration and Security in MERCOSUR during the 66th MERCOSUR Summit in Buenos Aires. 45 The declaration reaffirmed Argentina's commitment to advancing regional energy integration and emphasized the importance of a fair and inclusive energy transition, regional interconnections and regulatory harmonization to strengthen energy security and support industrial development.

On 7 August 2025, Argentina issued Decree 563/2025 eliminating export duties on 231 mining-related products. 46 The reduction in duties aims to incentivize investment and increase production in the mining sector.

https://www.argentina.gob.ar/noticias/el-gobierno-baja-los-derechos-de-exportacion-productos-de-la-mineria-para-impulsar-la

<sup>&</sup>lt;sup>40</sup> El Gobierno presentará un plan nacional de obras de ampliación del transporte eléctrico que financiará el sector privado, Ministerio de Economía (Buenos Aires) 29 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025.

https://www.argentina.gob.ar/noticias/el-gobierno-presentara-un-plan-nacional-de-obras-de-ampliacion-del-transporte-electrico-que <sup>41</sup> Argentina y Perú profundizan sus lazos de cooperación en materia de energía nuclear, Jefatura de Gabinete de Ministros (Buenos Aires) 26 June 2025. Translation provided by Google Translate. Access Date: 17 August 2025.

https://www.argentina.gob.ar/noticias/argentina-y-peru-profundizan-sus-lazos-de-cooperacion-en-materia-de-energia-nuclear <sup>42</sup> El Canciller Werthein se reunió con el Secretario de Energía de los Estados Unidos, Ministerio de Relaciones Exteriores, Commercio Internacional y Culto (Buenos Aires) 27 June 2025. Translation provided by Google Translate. Access Date: 6 October 2025. https://www.cancilleria.gob.ar/es/actualidad/noticias/el-canciller-werthein-se-reunio-con-el-secretario-de-energia-de-los-estados

<sup>&</sup>lt;sup>43</sup> France and Argentina sign agreement on critical minerals, Buenos Aires Times (Buenos Aires) 28 June 2025. Access Date: 12 August 2025. https://www.batimes.com.ar/news/argentina/argentina-signs-agreement-with-france-on-critical-minerals.phtml <sup>44</sup> Economía firmó declaración de intención con Francia por minerales críticos, Ministerio de Economía (Buenos Aires) 30 June 2025. Translation provided by Google Translate. Access Date: 6 July 2025. https://www.argentina.gob.ar/noticias/economiafirmo-declaracion-de-intencion-con-francia-por-minerales-criticos

<sup>&</sup>lt;sup>45</sup> Declaración Presidencial sobre Integración y Seguridad Energética en el MERCOSUR, Ministerio de Relaciones Exteriores, Commercio Internacional y Culto (Buenos Aires) 3 July 2025. Translation provided by Google Translate. Access Date: 6 October 2025. https://www.cancilleria.gob.ar/es/actualidad/noticias/declaracion-presidencial-sobre-integracion-y-seguridad-energeticaen-el-mercosur

<sup>&</sup>lt;sup>46</sup> El gobierno baja los derechos de exportación a productos de la minería para impulsar la competitividad del sector, Ministerio de Economía (Buenos Aires) 7 August 2025. Translation provided by Google Translate. Access Date: 13 August 2025.

On 1 September 2025, MERCOSUL approved the 2025-2026 Work Plan for mining and geology.<sup>47</sup> The plan includes research of mineral capabilities of Brazil and MERCOSUL members, cooperation in research and extraction of mineral resources, shaping integrated regulatory frameworks and public policy proposals for mining and critical minerals supply chain.

On 23 September 2025, Argentine Geological and Mining Service SEGEMAR participated in the conference "Argentine Mining: Challenges and Opportunities," which convened government and industry representatives to discuss the sector's outlook.<sup>48</sup> SEGEMAR President Julio Bruna Novillo presented the country's geological potential, emphasizing critical minerals such as lithium, copper, rare earth minerals and silver.

Argentina has partially complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated, at source, semiconductors and technologies. Argentina has taken strong action towards the combined welfare target of reliable, diversified, sustainable and responsibly supply chains through initiatives to modernize the electrical grid in the Buenos Aires Metropolitan Area, expand electricity transmission lines across the country and access more affordable hydroelectric energy. It has also taken strong action to strengthen supply chains for energy transition technologies through its investment in a solar park development project, enhanced nuclear technology cooperation, revival of heavy water production, streamlined mining investment regulations and the removal of export duties on many mining products. However, it has not taken strong action across all four commitment components.

Thus, Argentina has received a score of 0.

Analyst: Maham Khokhar

#### Australia: +1

Australia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 28 November 2024, Parliament passed the Future Made in Australia legislation which aims to support the net zero transition.<sup>49</sup> The legislation will focus on renewable energy investments and economic resilience.

On 6 December 2024, Minister for Resources and Northern Australia Madeleine King announced a total of AUD21 million in funding for five projects aimed at "diversify[ing] global supply chains for critical minerals and rare earth elements." This contributes to the commitment's combined welfare target and supports strengthening supply chains for critical minerals and materials beneficiated at source.

On 6 December 2024, Prime Minister Anthony Albanese and Minister for Trade and Tourism Senator Don Farrell announced an additional AUD475 million in financing for Western Australia's Eneabba Rare Earths

<sup>&</sup>lt;sup>47</sup> Mercosul une forças para avançar em mineração estratégica e transição energética, Ministério de Minas e Energia (Brasília) 1 September 2025. Translation provided by Google Translate. Access Date: 17 October 2025. https://www.gov.br/mme/pt-

br/assuntos/noticias/mercosul-une-forcas-para-avancar-em-mineracao-estrategica-e-transicao-energetica

48 SEGEMAR presente en la jornada "La Minería Argentina: Desafíos y Oportunidades", Ministerio de Economía (Buenos Aires) 23

September 2025. Translation provided by Google Translate. Access Date: 6 October 2025. https://www.argentina.gob.ar/noticias/segemar-presente-en-la-jornada-la-mineria-argentina-desafios-y-oportunidades

<sup>&</sup>lt;sup>49</sup> Future Made in Australia legislation passes the Senate, Department of Industry, Science and Resources (Canberra) 28 November 2024. Access Date: 23 June 2025. https://www.minister.industry.gov.au/ministers/king/media-releases/future-made-australia-legislation-passes-senate

<sup>&</sup>lt;sup>50</sup> New grants to build Australia's critical minerals sector, Department of Industry, Science and Resources (Canberra) 6 December 2024. Access Date: 23 June 2025. https://www.minister.industry.gov.au/ministers/king/media-releases/new-grants-build-australias-critical-minerals-sector

Refinery project.<sup>51</sup> The project will support global supply chain resilience for rare earth elements and support sustainable critical minerals that contribute towards the net zero transition.

On 6 December 2024, the Clean Energy Finance Corporation (CEFC) allocated AUD50 million to Bank Australia as part of the Household Energy Upgrades Fund program.<sup>52</sup> This funding will enable up to AUD100 million in green loans, including a lean Energy Home Loan, to strengthen supply chains for the renewable energy transition. This will also contribute to more reliable and sustainable supply chains.

On 6 December 2024, the Department of Climate Change, Energy, the Environment and Water announced a First Nations Clean Energy Strategy that focuses on sustainable and reliable clean energy for First Nations communities.<sup>53</sup> Over the next five years, this strategy will include investments in clean energy supply chains, focus on improving energy performance, establish partnerships with First Nations communities for energy and support First Nations individuals in having a greater role in the clean energy sector.

On 9 December 2024, the CEFC invested USD75 million in "global alternative investment manager Resource Capital Funds" to support Australia's emerging critical mineral supply chain.<sup>54</sup> This investment will bring capital to Australian mining projects and help decarbonize Australia's critical mineral supply chain.

On 20 December 2024, Australia and Korea signed a new Green Economy Partnership Arrangement on Climate and Energy.<sup>55</sup> The partnership agreement includes cooperation on renewable hydrogen, critical minerals and green metals projects. This supports both members' commitments to diversified energy transition technologies and supply chains.

On 15 January 2025, the National Reconstruction Fund Corporation announced AUD200 million in funding for Arafura Rare Earths.<sup>56</sup> This investment will help advance the critical minerals supply chain by enabling the development of a new mine and processing facility that is expected to produce 4,440 tonnes of neodymium and praseodymium.

On 16 January 2025, the CEFC announced an AUD100 million investment for an innovating financing mechanism called the built-to-rent strategy.<sup>57</sup> This strategy focuses on building energy efficient and electric homes which can be powered with renewable energy. This action contributes to an equitable energy transition.

<sup>&</sup>lt;sup>51</sup> Additional help for rare earths refining for a Future Made in Australia, Department of Industry, Science and Resources (Canberra) 6 December 2024. Access Date: 23 June 2025. https://www.minister.industry.gov.au/ministers/king/media-releases/additional-help-rare-earths-refining-future-made-australia

<sup>&</sup>lt;sup>52</sup> HEUF delivers green home loans for renovations with Bank Australia, Clean Energy Finance Corporation (Sydney) 6 December 2024. Access Date: 4 May 2025. https://www.cefc.com.au/media/media-release/heuf-delivers-green-home-loans-for-renovations-with-bank-australia/

<sup>&</sup>lt;sup>53</sup> First Nations Clean Energy Strategy, Department of Climate Change, Energy, the Environment and Water (Canberra) 6 December 2024. Access Date: 4 May 2025. https://www.energy.gov.au/energy-and-climate-change-ministerial-council/working-groups/first-nations-engagement-working-group/first-nations-clean-energy-strategy#achieve-economic-benefits-with-first-nations-peoples

<sup>&</sup>lt;sup>54</sup> CEFC invests in homegrown critical minerals to strengthen clean energy supply chain, Clean Energy Finance Corporation (Sydney) 9 December 2024. Access Date: 28 March 2025. https://www.cefc.com.au/media/media-release/cefc-invests-in-homegrown-critical-minerals-to-strengthen-clean-energy-supply-chain

<sup>&</sup>lt;sup>55</sup> Australia and the Republic of Korea Strengthen Cooperation on Climate and Energy, Department of Climate Change, Energy, the Environment and Water (Canberra) 19 December 2024. Access Date: 16 May 2025.

http://dcceew.gov.au/about/news/australia-republic-korea-strengthen-cooperation-climate-energy

<sup>&</sup>lt;sup>56</sup> \$200 million investment in critical minerals to build Australia's future, Minister for Industry and Science (Canberra) 15 January 2025. Access Date: 23 June 2025. https://www.minister.industry.gov.au/ministers/husic/media-releases/200-million-investment-critical-minerals-build-australias-future

<sup>&</sup>lt;sup>57</sup> CEFC invests \$100 million to deliver affordable, greener housing, Clean Energy Finance Corporation (Sydney) 16 January 2025. Access Date: 23 June 2025. https://www.cefc.com.au/media/media-release/cefc-invests-100-million-to-deliver-affordable-greener-housing/

On 20 January 2025, Australia unveiled plans for a new Green Aluminium Production Credit facility, investing AUD2 billion "to support aluminum smelters in transitioning to renewable electricity sources before 2036."<sup>58</sup> This plan aims to support decarbonization in Australia's aluminum industry.

On 23 January 2025, Australia allocated an additional AUD2 billion to the CEFC.<sup>59</sup> These funds will support initiatives for Australia's green transition and renewable energy projects.

On 31 January 2025, the CEFC announced AUD300 million in co-financing with the National Australia Bank to reduce costs associated with the net zero transition.<sup>60</sup> Of note, the Bank's Green Finance for Vehicles and Equipment program will receive AUD200 million from the CEFC to support investment discounts for the manufacturing of "key components used in renewable energy generation" and net zero vehicles and for recycling facilities.

On 4 February 2025, Minister King and Western Australia Mines and Petroleum Minister David Michael announced a AUD3 million investment for a feasibility study of a Critical Minerals Advanced Processing CMAP facility in Western Australia.<sup>61</sup> This facility would process critical minerals and help Australia meet its commitment towards reliable, sustainable and responsible critical minerals supply chains.

On 7 February 2025, the Department of Climate Change, Energy, the Environment and Water announced AUD2.4 million in funding to enhance the electric vehicle charging infrastructure in Australia.<sup>62</sup> This funding will be provided through the Australian Renewable Energy Agency and support the Driving the Nation program which aims to encourage electric vehicle adoption.

On 10 February 2025, Parliament passed legislation for two tax incentives aimed at bolstering Australia's critical minerals and hydrogen production sectors.<sup>63</sup> The Critical Minerals Production Tax Incentive will target critical minerals including lithium, cobalt and rare earth minerals.

On 14 February 2025, the Department of Climate Change, Energy, the Environment and Water announced AUD1.85 million for Allegro Energy.<sup>64</sup> This will support the creation of reliable battery storage technology.

On 14 February 2025, Parliament allocated an additional AUD2 billion to the CEFC.<sup>65</sup> This initiative will support investment in renewable energy generation and energy storage projects.

<sup>&</sup>lt;sup>58</sup> Australia commits USD 1.2bn to renewable-powered aluminium production, Renewables Now (Sofia) 20 January 2025. Access Date: 28 March 2025. https://renewablesnow.com/news/australia-commits-usd-1-2bn-to-renewable-powered-aluminium-production-1269552/

<sup>&</sup>lt;sup>59</sup> CEFC given extra support to help renewable energy transition, Department of Climate Change, Energy, the Environment and Water (Canberra) 23 January 2025. Access Date: 16 May 2025. https://www.energy.gov.au/news/cefc-given-extra-support-help-renewable-energy-transition

<sup>&</sup>lt;sup>60</sup> CEFC and NAB back low-cost green finance for industry, farmers, Clean Energy Finance Corporation (Sydney) 31 January 2025. Access Date: 4 May 2025. https://www.cefc.com.au/media/media-release/cefc-and-nab-back-low-cost-green-finance-for-industry-farmers/

<sup>&</sup>lt;sup>61</sup> Growing critical minerals processing power in WA, Department of Industry, Science and Resources (Canberra) 4 February 2025. Access Date: 16 May 2025. https://www.minister.industry.gov.au/ministers/king/media-releases/growing-critical-minerals-processing-power-wa

<sup>&</sup>lt;sup>62</sup> EV charging infrastructure boosted with \$2.4m initiative, Department of Climate Change, Energy, the Environment and Water (Canberra) 7 February 2025. Access Date: 23 June 2025.

Froduction tax credits pass the Senate, Ministry of Industry, Science and Resources (Canberra) 10 February 2025. Access Date:
 June 2025. https://www.minister.industry.gov.au/ministers/king/media-releases/production-tax-credits-pass-senate
 Battery technology powering our future, Department of Climate Change, Energy, the Environment and Water (Canberra) 14
 February 2025. Access Date: 16 May 2025. https://www.energy.gov.au/news/battery-technology-powering-our-future
 CEFC welcomes additional \$2 billion capital allocation from Australian Government, Clean Energy Finance Corporation (Sydney)
 February 2025. Access Date: 15 April 2025. https://www.cefc.com.au/media/statement/cefc-welcomes-additional-2-billion-capital-allocation-from-australian-government/

On 5 March 2025, the Department of Climate Change, Energy, the Environment and Water announced an AUD20 million investment by the CEFC for green loans for healthcare providers.<sup>66</sup> This initiative aims to encourage healthcare providers to use rooftop solar, electric vehicles, energy-efficient fixtures and other ecologically friendly technologies.

On 14 March 2025, Prime Minister Albanese, Minister for Industry and Science Ed Husic and Minister for Climate and Energy Chris Bowen announced AUD750 million of new funding through the Future Made in Australia Innovation Fund to develop low-emissions technologies in the metals sector.<sup>67</sup> Administered by ARENA, the funding will support projects to enable commercial-scale production of green metals from Australian ores using renewable energy.

On 17 March 2025, the CEFC announced a partnership with Lannock Strata Finance "to develop a green strata loan product for residential strata properties via the Household Energy Upgrades Fund." The partnership will improve the affordability of installing solar panels on residential buildings, enabling the energy transition by encouraging clean energy adoption.

On 28 March 2025, Minister Bowen and Assistant Treasurer and Minister for Financial Services Stephen Jones announced AUD24.5 million in funding for Boral, the largest cement supplier in New South Wales.<sup>69</sup> This action will support the development of low-emissions raw materials, reducing annual emissions by 100,000 tonnes.

On 24 April 2025, Prime Minister Albanese committed to creating a Critical Minerals Strategic Reserve, with AUD1.2 billion allocated in the 2025-26 federal budget.<sup>70</sup> A taskforce in the Department of the Prime Minister and Cabinet will advise on the reserve's design. This fiscal commitment will help secure and strategically manage the county's critical mineral resources, which are essential for energy transition technologies like batteries and clean energy manufacturing.

On 13 May 2025, the CEFC announced an AUD3 million investment for EcoJoule Energy, a clean energy technology company.<sup>71</sup> This investment will support actions to strengthen the power grid and ensure energy networks are equipped to function with distributed energy resources. This will enhance reliability and capacity within the renewable energy supply chain.

On 21 May 2025, ARENA awarded AUD46 million to solar manufacturer 5B through the Solar Sunshot Program to expand domestic manufacturing of its automated solar deployment system.<sup>72</sup> The investment will increase manufacturing capacity to deliver at least 200 megawatts of Maverick units over the next three years, bolstering Australia's solar photovoltaic supply chain.

<sup>&</sup>lt;sup>66</sup> Green loans available for healthcare providers, Department of Climate Change, Energy, the Environment and Water (Canberra) 5 March 2025. Access Date: 23 June 2025. https://www.energy.gov.au/news/green-loans-available-healthcare-providers

<sup>&</sup>lt;sup>67</sup> Joint media release: Backing our metals manufacturers with Aussie Know-How, Department of Climate Change, Energy, the Environment and Water (Canberra) 14 March 2025. Access Date: 23 July 2025. https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-backing-our-metals-manufacturers-aussie-know-how

<sup>&</sup>lt;sup>68</sup> CEFC signs MOU with Lannock Strata Finance to develop green finance for strata properties, Clean Energy Finance Corporation (Sydney) 17 March 2025. Access Date: 23 June 2025. https://www.cefc.com.au/media/media-release/cefc-signs-mou-with-lannock-strata-finance-to-develop-green-finance-for-strata-properties/

<sup>&</sup>lt;sup>69</sup> \$25 million to back New South Wales industry to build Australia's future, The Hon Chris Bowen MP Minister for Climate Change and Energy (Canberra) 28 March 2025. Access Date: 11 August 2025. https://minister.dcceew.gov.au/bowen/media-releases/25-million-back-new-south-wales-industry-build-australias-future

<sup>&</sup>lt;sup>70</sup> Critical Minerals Strategic Reserve, Department of the Prime Minister and Cabinet (Canberra) 24 April 2025. Access Date: 10 October 2025. https://www.pmc.gov.au/domestic-policy/critical-minerals-strategic-reserve

<sup>&</sup>lt;sup>71</sup> CEFC backs EcoJoule Energy to enhance grid stability, Clean Energy Finance Corporation (Sydney) 13 May 2025. Access Date: 23 June 2025. https://www.cefc.com.au/media/media-release/cefc-backs-ecojoule-energy-to-enhance-grid-stability/

<sup>&</sup>lt;sup>72</sup> Homegrown pioneer first project funded for Solar Sunshot, Australian Renewable Energy Agency (Canberra) 21 May 2025. Access Date: 5 August 2025. https://arena.gov.au/news/homegrown-pioneer-first-project-funded-for-solar-sunshot/

On 17 June 2025, the Northern Australia Infrastructure Facility approved an AUD50 million concessional loan to support the Butcherbird manganese project in the Pilbara region.<sup>73</sup> This financing will increase the production of manganese concentrate by more than one million tonnes annually, strengthening the country's domestic critical minerals supply chain.

On 17 June 2025, Minister Bowen, Minister King and Assistant Minister for Climate Change and Energy Josh Wilson announced an AUD19.8 million grant to develop low emissions iron production in Australia.<sup>74</sup> The funding will support the NeoSmelt project, which seeks to technology for a low emissions electric smelting furnace.

On 17 June 2025, the CEFC announced an AUD15 million investment into the new Climate Tech Partners Fund I.75 The fund will focus on early-stage companies possessing technologies with the potential to reduce emissions on a large scale.

On 17 June 2025, the G7 launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit, welcoming Australia's endorsement of the plan. The Action Plan supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by India and Korea.

On 18 June 2025, Minister for the Environment and Water Murray Watt announced federal approval of the 250 MW Weasel Solar Farm near Bothwell, Tasmania.<sup>77</sup> The project will include solar panels, battery storage and generate enough electricity to power 30,000 homes.

On 1 July 2025, Minister for Foreign Affairs Penny Wong attended the Japan-Australia-India-US (Quad) Foreign Ministers' Meeting in Washington D.C. along with United States Secretary of State Marco Rubio, Indian Minister of External Affairs Subrahmanyam Jaishankar and Japanese Minister for Foreign Affairs Iwaya Takeshi. The Quad Foreign Ministers issued a Joint Statement and Fact Sheet announcing the launch of the Quad Critical Minerals Initiative which aims to secure and diversify reliable supply chains for critical minerals, including through electronic waste recovery and re-processing, while coordinating with private sector partners to facilitate investment.

On 3 July 2025, Australia granted Major Project Status to two new large-scale developments: the Northern Silica Project and the Bonaparte Carbon Capture and Storage Initiative.<sup>80</sup> Additionally, it renewed the status for

G20 Research Group, 18 November 2025

Poosting critical minerals supply in Northern Australia, Northern Australia Infrastructure Facility (Canberra) 17 June 2025.
 Access Date: 6 July 2025. https://www.naif.gov.au/media-centre/boosting-critical-minerals-supply-in-northern-australia
 Joint media release: \$19.8 million investment in Australian green metals, Department of Climate Change, Energy, the Environment and Water (Canberra) 17 June 2025. Access Date: 23 July 2025. https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-198-million-investment-australian-green-metals

<sup>&</sup>lt;sup>75</sup> CEFC invests \$15 million to accelerate Australia's climate tech innovation, Clean Energy Finance Corporation (Sydney) 17 June 2025. Access Date: 23 July 2025. https://www.cefc.com.au/media/media-release/cefc-invests-15-million-to-accelerate-australia-s-climate-tech-innovation/

<sup>&</sup>lt;sup>76</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>77</sup> Joint media release: New solar farm in Tasmania to power 30,000 homes, Department of Climate Change, Energy, the Environment and Water (Canberra) 18 June 2025. Access Date: 23 July 2025. https://minister.dcceew.gov.au/watt/media-releases/joint-media-release-new-solar-farm-tasmania-power-30000-homes

<sup>&</sup>lt;sup>78</sup> Japan-Australia-India-U.S. (Quad) Foreign Ministers' Meeting, Ministry of Foreign Affairs Japan (Tokyo) 2 July 2025. Access Date: 3 August 2025. https://www.mofa.go.jp/fp/nsp/pageite 000001 01097.html

<sup>&</sup>lt;sup>79</sup> Factsheet: 2025 Quad Foreign Ministers' Meeting in Washington D.C. (July 01, 2025), Ministry of External Affairs (New Delhi) 2 July 2025. Access Date: 3 July 2025. https://www.mea.gov.in/bilateral-

documents.htm?dtl/39734/Factsheet++2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025 New clean energy and resource projects awarded major project status, Department of Industry, Science and Resources (Canberra) 3 July 2025. Access Date: 6 July 2025. https://www.industry.gov.au/news/new-clean-energy-and-resource-projects-awarded-major-project-status

a solar energy project and a cobalt mine and refinery project. These initiatives are part of Australia's goal to support green technology innovation, sustainable industrial development and electric vehicle supply chains.

On 4 July 2025, the CEFC announced an AUD6 million investment to accelerate the adoption of battery electric trucks in Australia.<sup>81</sup> The investment will help Australia's largest supermarket deploy a fleet of up to 60 battery electric trucks for last-mile deliveries.

On 11 July 2025, Minister Wong, Minister Bowen and Minister for Pacific Island Affairs Pat Conroy announced a letter of intent with Palau to invest an additional AUD16.4 million to upgrade Palau's electricity network infrastructure.<sup>82</sup> The funding, provided through the Australian Infrastructure Financing Facility for the Pacific, will enhance grid reliability and expand renewable energy integration, building on support for Palau's first large-scale solar power plant and battery storage system.

On 5 August 2025, Minister for Climate Change and Energy Chris Bowen and South Australian Minister for Energy and Mining Tom Koutsantonis shared that over fifty community batteries will be provided for solar energy battery storage, with 16 batteries prioritized for social housing.<sup>83</sup>

On 6 August 2025, ARENA announced AUD45.5 million in funding for Tindo, Australia's only solar module manufacturer.<sup>84</sup> The funding is intended to support the Australian solar manufacturing industry by increasing Tindo's production of solar modules and expanding its product range.

On 7 August 2025, the National Reconstruction Fund Corporation announced an AUD50 million investment in Liontown Resources.<sup>85</sup> The investment will support the Kathleen Valley Lithium Operation, one of Australia's largest lithium projects.

On 11 August 2025, Minister Bowen, Assistant Minister Wilson, New South Wales (NSW) Minister for Climate Change and Energy Penny Sharpe and NSW Minister for Housing Rose Jackson announced AUD18 million in joint federal and state funding for housing upgrades to promote energy efficiency. <sup>86</sup> In partnership with 22 community partners, the funds will be used for measures such as rooftop solar panels, shared solar systems and energy-efficient hot water systems.

On 14 August 2025, ARENA announced AUD3.6 million in funding for a "renewable energy microgrid" for a rural First Nations community in Western Australia, to support the energy transition.<sup>87</sup>

<sup>&</sup>lt;sup>81</sup> CEFC commits \$6 million to accelerate Battery Electric Truck adoption in Australia, Clean Energy Finance Corporation (Sydney) 4 July 2025. Access Date: 23 July 2025. https://www.cefc.com.au/media/media-release/cefc-commits-6-million-to-accelerate-battery-electric-truck-adoption-in-australia/

<sup>&</sup>lt;sup>82</sup> Joint media release: Investing in Palau's clean energy transition, Department of Climate Change, Energy, the Environment and Water (Canberra) 11 July 2025. Access Date: 23 July 2025. https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-investing-palaus-clean-energy-transition

<sup>&</sup>lt;sup>83</sup> Joint media release: Powering communities as batteries switched on, Department of Climate Change, Energy, the Environment and Water (Canberra) 5 August 2025. Access Date: 26 August 2025. https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-powering-communities-batteries-switched

 <sup>84 \$45.5</sup> million to supercharge Australian solar manufacturing, Australian Renewable Energy Agency (Canberra) 6 August 2025.
 Access Date: 24 August 2025. https://arena.gov.au/news/45-5-million-to-supercharge-australian-solar-manufacturing/
 85 NRFC to invest \$50 million in Liontown Resources' Kathleen Valley Lithium Project, National Reconstruction Fund Corporation (Canberra) 7 August 2025. Access Date: 24 August 2025. https://www.nrf.gov.au/news-and-media-releases/nrfc-invest-50-million-liontown-resources-kathleen-valley-lithium-project

<sup>&</sup>lt;sup>86</sup> Joint media release: Funding energy upgrades to cut bills and tackle climate change, Department of Climate Change, Energy, the Environment and Water (Canberra) 11 August 2025. Access Date: 26 August 2025. https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-funding-energy-upgrades-cut-bills-and-tackle-climate-change

<sup>&</sup>lt;sup>87</sup> ARENA funding sparks clean energy future for Blackstone, Australian Renewable Energy Agency (Canberra) 14 August 2025. Access Date: 26 August 2025. https://arena.gov.au/news/arena-funding-sparks-clean-energy-future-for-blackstone/

On 15 August 2025, ARENA announced AUD14.4 million for two microgrid renewable energy projects, including battery storage.<sup>88</sup> The projects emphasize reliable and sustainable energy for First Nation groups in Northern and Southern Australia.

On 19 August 2025, ARENA announced a new AUD500 million "Battery Breakthrough Initiative" to build a local battery manufacturing supply chain.<sup>89</sup> This includes funding for battery pack assembly, battery cell manufacturing and production of battery components such as cathode materials and anode materials.

On 4 September 2025, Minister Bowen announced AUD150 million will be invested in Australia's solar manufacturing supply chain.<sup>90</sup> This funding is part of Australia's AUD1 billion Solar Sunshot program.

On 23 September 2025, the National Reconstruction Fund Corporation announced an AUD35 million investment in Morse Micro's semiconductor manufacturing.91

On 9 October 2025, Minister Bowen announced AUD600 million for renewable energy projects. 92 The projects include 12 battery storage initiatives with a "combined storage capacity of 3.5 GW / 11.4 GWh."

Australia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Australia has taken strong action to support reliable, diversified, sustainable and responsible supply chains for energy transitions through investments by the CEFC, funding for electric vehicle charging infrastructure, tax credits, the Future Made in Australia legislation, the First Nations Clean Energy Strategy and a new renewable energy microgrid for a First Nations community. It has also strengthened supply chains for critical minerals and materials beneficiated at source and energy transition technologies through investments to decarbonize Australia's critical mineral supply chain, support Western Australia's Eneabba Rare Earths Refinery project, enhance global critical minerals and rare elements supply chains, support the Kathleen Valley Lithium Operation and encourage renewable energy adoption for consumers.

Thus, Australia receives a score of +1.

Analysts: Eszter Réti, Ana Grace Rans Kolakovic and Erfan Ehsan

### Brazil: +1

Brazil has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

<sup>&</sup>lt;sup>88</sup> Empowering First Nations communities with ARENA backed microgrids, Australian Renewable Energy Agency (Canberra) 15 August 2025. Access Date: 16 October 2025. https://arena.gov.au/news/empowering-first-nations-communities-with-arena-backed-microgrids/

<sup>&</sup>lt;sup>89</sup> Supercharging battery manufacturing in Australia, Australian Renewable Energy Agency (Canberra) 19 August 2025. Access Date: 16 October 2025. https://arena.gov.au/news/supercharging-battery-manufacturing-in-australia/

<sup>&</sup>lt;sup>90</sup> \$150 million boost for homegrown solar manufacturing, Department of Climate Change, Energy and Water (Canberra) 4 September 2025. Access Date: 16 October 2025. https://minister.dcceew.gov.au/bowen/media-releases/150-million-boost-homegrown-solar-manufacturing

<sup>&</sup>lt;sup>91</sup> NRFC backs next generation Wi-Fi HaLow with \$35 million investment in Australia's largest semiconductor manufacturer, National Reconstruction Fund Corporation (Canberra) 23 September 2025. Access Date: 16 October 2025.

https://www.nrf.gov.au/news-and-media-releases/nrfc-backs-next-generation-wi-fi-halow-35-million-investment-australias-largest-semiconductor-manufacturer

<sup>&</sup>lt;sup>92</sup> \$600 million community boost as next wave of renewable projects power ahead, Department of Climate Change, Energy and Water (Canberra) 9 October 2025. Access Date: 16 October 2025. https://minister.dcceew.gov.au/bowen/media-releases/600-million-community-boost-next-wave-renewable-projects-power-ahead

On 29 November 2024, the Ministry of Mines and Energy announced two new resolutions effective 2 December 2024 to maintain water levels in hydroelectric plant reservoirs. This action aims to ensure sustainable water use while supporting energy security.

On 2 December 2024, Minister of Mines and Energy Alexandre Silveira met with the board of Rosatom, Russia's largest nuclear company, to discuss a partnership between Brazil and Rosatom for nuclear energy. <sup>94</sup> The pair are expected to finalize an agreement by the end of 2025 that adheres to responsible, safe and sustainable critical mineral use while expanding Brazil's economic and technological growth.

On 3 December 2024, the National Energy Policy Council (CNPE) and Infra SA signed a Technical Cooperation Agreement to "expand the traceability of raw materials" through the Brazilian National Biofuel Policy and to strengthen Decarbonization Credits.<sup>95</sup> This aims to advance Brazil's goal of decarbonizing the energy sector.

On 5 December 2024, the Ministry of Science, Technology and Innovation announced BRL220 million for Ceitec. 96 This funding will go towards the large-scale production of silicon carbide semiconductors which are essential for the energy transition.

On 10 December 2024, the CNPE approved the establishment of a permanent technical committee to regulate the Fuel for the Future legislation announced in October 2024.<sup>97</sup> The law aims to advance green diesel, sustainable aviation fuel and biomethane, carbon storage and capture and other mechanisms to advance sustainable low-carbon energy.

On 10 December 2024, the CNPE approved a resolution that establishes minimum targets regarding the use of residual oils and fats during the production of biomethane, sustainable aviation fuel and green diesel. The resolution aims to increase the availability of raw materials used to produce biomethane, while supporting sustainable energy.

On 10 December 2024, the CNPE approved a resolution that sets mandatory targets for the reduction of greenhouse gases in Brazil between 2025 and 2034.99 This resolution is set through the Brazilian National

<sup>&</sup>lt;sup>93</sup> Alexandre Silveira articula medidas para recuperação dos níveis dos reservatórios de Furnas e de hidrelétricas do Rio Paranaíba, Ministério de Minas e Energia (Brasília) 29 November 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/alexandre-silveira-articula-medidas-para-recuperacao-dos-niveis-dos-reservatorios-de-furnas-e-de-hidreletricas-do-rio-paranaiba

<sup>&</sup>lt;sup>94</sup> Alexandre Silveira atua para fortalecer cadeia de energia nuclear no Brasil, Ministério de Minas e Energia (Brasília) 2 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/alexandre-silveira-atua-para-fortalecer-cadeia-de-energia-nuclear-no-brasil

<sup>&</sup>lt;sup>95</sup> MME assina Acordo de Cooperação Técnica com a Infra S.A. para fortalecer a rastreabilidade de matérias-primas para o Renovabio, Ministério de Minas e Energia (Brasília) 3 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/mme-assina-acordo-de-cooperacao-tecnica-com-a-infra-s-a-para-fortalecer-a-rastreabilidade-de-materias-primas-para-o-renovabio

<sup>96</sup> MCTI anuncia investimento de R\$ 220 milhões na Ceitec para produção de semicondutores, Ministério da Ciência, Tecnologia e Inovação (Brasília) 5 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2024/12/mcti-anuncia-investimento-de-r-220-milhoes-na-ceitec-para-producao-de-semicondutores 97 CNPE cria comitê interministerial para coordenar a regulamentação do Combustível do Futuro, Ministério de Minas e Energia (Brasília) 10 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-cria-comite-interministerial-para-coordenar-a-regulamentacao-do-combustível-do-futuro 98 CNPE aprova resolução para estimular o uso de óleos e gorduras residuais na produção de biocombustíveis, Ministério de Minas e Energia (Brasília) 10 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-resolução-para-estimular-o-uso-de-pleos-e-gorduras-residuais-

https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-resolucao-para-estimular-o-uso-de-oleos-e-gorduras-residuais-na-producao-de-biocombustiveis

<sup>&</sup>lt;sup>99</sup> CNPE aprova metas do Renovabio para redução de emissões de toneladas de CO2 nos próximos dez anos, Ministério de Minas e Energia (Brasília) 10 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-metas-do-renovabio-para-reducao-de-emissoes-de-toneladas-de-co2-nos-proximos-dez-anos

Biofuel Policy and focuses on decarbonizing the transport sector to ensure sustainable energy security, expand Brazil's renewable energy supply chains and ensure sustainable development. The resolution aims to reduce greenhouse gas emissions by 11.37 per cent by 2034 based on 2018 levels.

On 20 December 2024, the Brazilian Development Bank (BNDES) approved BRL94.8 million in funding to MobiBrasil to support the acquisition of 87 electric buses for São Paulo. Of this BRL49.8 million will be provided through the Severance Indemnity Fund and BRL45 million through the Climate Fund, advancing energy transition technologies and supply chains.

On 7 January 2025, Minister Silveira announced a partnership between BNDES and the Brazilian Studies and Projects Financing Agency (Finep) to promote safe and sustainable mining, especially for critical minerals like lithium, rare earths, nickel, graphite and silicon which are essential to the energy transition.<sup>101</sup> Brazil will invest BRL5 million for this initiative.

On 8 January 2025, the BNDES and government funding agency Finep allocated BRL5 billion in financing for strategic minerals projects. <sup>102</sup> The initiative aims to support strategic mineral production as well as investments in batteries, photovoltaic cells and magnets.

On 10 January 2025, Minister Silveira and the United Arab Emirates' Ministry of Investment signed a Memorandum of Understanding to promote critical minerals which are needed for the clean energy transition. This partnership will include an investment of up to BRL15 million for "mineral research, processing, commercialization, technology transfer and workforce training" to advance sustainable development.

On 10 January 2025, President Luis Inácio Lula da Silva signed a law authorizing offshore wind farm development.<sup>104</sup> This law supports Brazil's energy transition and includes provisions to consult with local communities.

On 31 January 2025, the Ministry of Mines and Energy and the Brazilian Nuclear and Binational Energy Holding Company allocated BRL100 million for government buildings to transition to using renewable energy via renovations and installations of "local renewable energy generation technologies." This supports reliable

<sup>&</sup>lt;sup>100</sup> BNDES aprova R\$ 94,8 mi à Mobi para aquisição de 87 ônibus elétricos para a cidade de São Paulo, Agência BNDES de Notícias (Brasília) 20 December 2024. Translation provided by Google Translate. Access Date: 11 August 2025.

https://agencia denoticias.bndes.gov.br/cultura/BNDES-aprova-R\$-948-mi-a-Mobi-para-aquisicao-de-87-onibus-eletricos-para-acidade-de-Sao-Paulo/

<sup>101</sup> Alexandre Silveira destaca investimento de R\$ 5 bilhões em minerais estratégicos com foco na transição energética, Ministério de Minas e Energia (Brasília) 7 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/alexandre-silveira-destaca-investimento-de-r-5-bilhoes-em-minerais-estrategicos-com-foco-na-transicao-energetica

<sup>&</sup>lt;sup>102</sup> Com R\$ 5 bi, BNDES e Finep apoiarão projetos para transformação de minerais estratégicos, Agência BNDES de Notícias (Rio de Janeiro) 7 January 2025. Translation provided by Google Translate. Access Date: 14 May 2025.

https://agencia denoticias.bndes.gov.br/detalhe/noticia/Com-R\$-5-bi-BNDES-e-Finep-apoiarao-projetos-para-transformacao-deminerais-estrategicos/

<sup>103</sup> Silveira viabiliza cooperação de R\$ 15 bilhões com Emirados Árabes para comercialização de minerais estratégicos na transição energética Silveira viabiliza cooperação de R\$ 15 bilhões com Emirados Árabes para comercialização de minerais estratégicos na transição energética, Ministério de Minas e Energia (Brasília) 10 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/silveira-formaliza-cooperacao-comemirados-arabes-unidos-para-comercializacao-de-minerais-estrategicos-na-transicao-energetica

<sup>&</sup>lt;sup>104</sup> President Lula signs law creating renewable energy generation from offshore wind turbines, Governo Federal (Brasília) 13 January 2025. Access Date: 23 June 2025. https://www.gov.br/planalto/en/latest-news/2025/01/president-lula-signs-law-creating-renewable-energy-generation-from-offshore-wind-turbine

<sup>&</sup>lt;sup>105</sup> ENBPar e MME disponibilizam R\$ 100 milhões para "zerar" consume de energia em prédios públicos, Empresa Brasileira de Participações em Energia Nuclear e Binacional (Brasília) 31 January 2025. Translation provided by Google Translate. Access Date: 9 May 2025. https://enbpar.gov.br/enbpar-e-mme-disponibilizam-r-100-milhoes-para-zerar-consumo-de-energia-em-predios-publicos/

and responsible energy transition technologies with financial transparency measures and partnerships with local energy producers.

On 2 February 2025, the Ministry of Mines and Energy and the Uruguayan Ministry of Industry, Energy and Mining signed a Memorandum of Understanding to promote electrical energy transfer from the Presidente Médici Power Substation in Uruguay to Brazil's Candiota II SE in Rio Grande do Sul. <sup>106</sup> This partnership aims to promote energy integration while supporting renewable energy.

On 18 February 2025, the CNPE approved Brazil's participation as a member in the International Energy Agency and International Renewable Energy Agency and as a participant country in the Charter of Cooperation between Oil Producing Countries.<sup>107</sup> This will help Brazil advance its leadership and involvement in the energy transition.

On 18 February 2025, the CNPE approved the creation of a Working Group focused on diversifying raw materials and supporting small biofuel producers including family farms.<sup>108</sup> This action aims to advance clean energy across the supply chain including in the transportation sector.

On 19 February 2025, Minister of Science, Technology and Innovation Luciana Santos, Minister of Management and Innovation in Public Services Esther Dweck, and Portugal's Minister of Youth and Modernization Margarida Lopes signed a memorandum of understanding to cooperate on and exchange best practice for activities related to semiconductors, artificial intelligence and the digital platform economy among others.<sup>109</sup>

On 13 March 2025, the BNDES approved a BRL241.8 million loan to support Stellantis Automóveis Brasil Ltd. in developing technologies for the production of hybrid and electric vehicles at its Betim plant.<sup>110</sup> This initiative will help the company develop engine technologies for the Brazilian market.

On 26 March 2025, BNDES approved BRL690 million for the construction of two wind farms.<sup>111</sup> The facilities will be part of the Serra do Tigre Wind Complex which has a total capacity of 756 megawatts.

On 28 March 2025, President Lula met with the President of Vietnam to announce and sign the "Action Plan for 2025-2030" which includes increased cooperation for renewable energy development and

https://www.bndes.gov.br/wps/portal/site/home/imprensa/noticias/

conteudo/com-690-milhoes-de-reais-bndes-financia-construcao-de-parques-eolicos-no-rn

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 <sup>&</sup>lt;sup>106</sup> Brasil e Uruguai assinam acordo para ampliar integração energética na América do Sul, Ministério de Minas e Energia (Brasília)
 <sup>2</sup> February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/brasil-e-uruguai-assinam-acordo-para-ampliar-integracao-energetica-na-america-do-sul
 <sup>107</sup> CNPE aprova engajamento do Brasil em organismos internacionais estratégicos para a transição energética, Ministério de Minas e Energia (Brasília)
 <sup>18</sup> February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-aprova-engajamento-do-brasil-em-organismos-internacionais-estrategicos-para-a-transicao-energetica

 <sup>108</sup> CNPE cria Grupo de Trabalho para diversificar matérias-primas e incluir agricultores familiares e pequenos produtores na produção de biocombustíveis, Ministério de Minas e Energia (Brasília) 18 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/cnpe-cria-grupo-de-trabalho-para-diversificar-materias-primas-e-incluir-agricultores-familiares-e-pequenos-produtores-na-producao-de-biocombustiveis
 109 Brasil e Portugal fortalecem a cooperação em CT&I, Ministério da Ciência, Tecnologia e Inovação (Brasília) 19 February 2025. Translation provided by Google Translate. Access Date: 12 July 2025. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2025/02/brasil-e-portugal-fortalecem-a-cooperacao-em-ct-i

<sup>&</sup>lt;sup>110</sup> BNDES aprova R\$ 241,8 mi para Stellantis desenvolver tecnologia para produção de veículos híbridos e elétricos no Brasil, Banco Nacional de Desenvolvimento Econômico e Social (Rio de Janeiro) 13 March 2025. Access Date: 16 April 2025. https://www.bndes.gov.br/wps/portal/site/home/imprensa/noticias/conteudo/bndes-aprova-r-2418-mi-para-stellantis-desenvolver-tecnologia-para-producao-de-veiculos-hibridos-e-eletricos-no-brasil/

<sup>111</sup> Com R\$ 690 mi, BNDES financia construção de parques eólicos no RN, Banco Nacional de Desenvolvimento Econômico e Social (Rio de Janeiro) 26 March 2025. Access Date: 16 May 2025.

implementation.<sup>112</sup> This supports the diversification of renewable energy technologies as well as research partnerships in semiconductors, artificial intelligence and energy.

On 9 April, Minister Santos announced public investments for the state-owned company CEITEC. <sup>113</sup> CEITEC, in collaboration with the Ministry of Science, Technology and Innovation, will produce silicon carbide semiconductors. Furthermore, the investments will create a program that will incentivize Brazilian scientists abroad to return and work on silicon carbide semiconductors in Brazil.

On 10 April 2025, Brazil's Annual Budget Law was published in the Official Gazette.<sup>114</sup> The Investment Budget, attached as Annex XII, includes an investment of BRL4 trillion in electricity and BRL681 million in mining.<sup>115</sup>

On 15 April 2025, Minister Silveira inaugurated an innovative biofuel production unit which will produce green fuel to replace diesel. This facility will receive a BRL80 million investment for research, development and construction. In addition, Minister Silveira also announced construction for a new industrial unit which will produce up to 210 million liters of wheat ethanol per year as well as 153,200 tonnes of animal feed. This facility will receive BRL1.1 billion in funding.

On 8 May 2025, Minister of the Environment and Climate Change Marina Silva announced Brazil's intention to triple its renewable energy infrastructure and double energy efficiency. This decision was in the context of the "United Arab Emirates Consensus" established at the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change.

On 9 May 2025, President Lula da Silva met with Russian President Vladimir Putin in Moscow.<sup>118</sup> The pair discussed expanding cooperation in nuclear energy and in the critical minerals sector.<sup>119</sup>

On 11 May 2025, Minister Silveira, China's Windey Energy Technology Group and SENAI CIMATEC signed a Memorandum of Understanding to develop energy storage, advance wind energy and green hydrogen in

<sup>112</sup> Brasil e Vietnã oficializam Plano de Ação para o período de 2025 a 2030, Presidência da República (Hanoi) 28 March 2025. Translation provided by Google Translate. Access Date: 9 May 2025. https://www.gov.br/planalto/pt-br/acompanhe-o-planalto/noticias/2025/03/brasil-e-vietna-oficializam-plano-de-acao-para-o-periodo-de-2025-a-2030?set\_language=pt-br 113 Na Câmara dos Deputados, Ministra anuncia novidades no CEITEC e no programa Conhecimento Brasil. Ministério da Ciência, Tecnologia e Inovação (Brasília) 9 April 2025. Translation provided by Google Translate. Access Date: 10 May 2025. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2025/04/na-camara-dos-deputados-ministra-anuncia-novidades-no-ceitec-e-no-programa-conhecimento-brasil

<sup>&</sup>lt;sup>114</sup> Lei nº 15.121 de 10/04/2025, Senado Federal (Brasília) 10 April 2025. Translation provided by Google Translate. Access Date: 26 August 2025. https://legis.senado.leg.br/norma/40523493

<sup>&</sup>lt;sup>115</sup> Lei Orçamentária Volume Vi Orçamento De Investimento Quadros Orçamentários Consolidados Detalhamento Da Programação Detalhamento Das Ações, Senado Federal (Brasília) 10 April 2025. Translation provided by Google Translate. Access Date: 26 August 2025. https://legis.senado.leg.br/norma/40523493/publicacao/40683593

<sup>&</sup>lt;sup>116</sup> Alexandre Silveira inaugura unidade de produção do combustível renovável que substitui o diesel, Ministério de Minas e Energia (Brasília) 15 April 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/alexandre-silveira-inaugura-unidade-de-producao-do-combustivel-renovavel-que-substitui-o-diesel <sup>117</sup> Conferência National do Meio Ambiente retoma participação social após 11 anos, Presidência da República (Brasília) 8 May 2025. Translation provided by Google Translate. Access Date: 4 July 2025. https://www.gov.br/secretariageral/pt-br/noticias/2025/maio/conferencia-nacional-do-meio-ambiente-retoma-participacao-social-apos-11-anos

<sup>&</sup>lt;sup>118</sup> Lula at bilateral meeting with Putin: "Strengthening the construction of a strategic partnership," Government of Brazil (Brasília) 12 May 2025. Access Date: 17 August 2025. https://www.gov.br/planalto/en/latest-news/2025/05/lula-at-bilateral-meeting-with-putin-201cstrengthening-the-construction-of-a-strategic-partnership201d

<sup>&</sup>lt;sup>119</sup> In visits to Russia and China, Lula emphasizes the role of BRICS and defends multilateralism and new global governance, BRICS (Brasília) 14 May 2025. Access Date: 16 August 2025. https://brics.br/en/news/lula-emphasizes-brics-role-defends-multilateralism-and-new-global-governance-during-visits-to-russia-and-china

Brazil, promote renewable energy in rural agricultural areas and promote renewable energy within the electrical grid.<sup>120</sup> The two-year partnership ultimately aims to advance renewable energy and low-carbon technologies.

On 12 May 2025, BNDES approved BRL156 million in financing to GreenYellow for the construction of 16 photovoltaic power plants across 13 cities in nine states.<sup>121</sup> The plants will have an installed capacity of megawatts.

On 13 May 2025, Finep President Celso Pansera signed a Technical Cooperation Agreement with the Brazilian Mining Institute to provide technical and financial support for research and development in the mining sector.<sup>122</sup> The initiative seeks to encourage private sector investment in innovative mining projects.

On 13 May 2025, Minister Silveira and China's National Energy Administration signed an agreement to enable Brazil to access China's ethanol market.<sup>123</sup> This partnership is focused on bioethanol and low-carbon ethanol and involves the creation of a Bilateral Working Group on Ethanol and Sustainable Fuels to develop innovative uses for ethanol. This includes its potential to replace gasoline for transportation vehicles.

On 13 May 2025, Minister Silveira and China's National Development and Reform Commission signed an agreement to advance sustainable development in mining.<sup>124</sup> Aiming to support the energy transition, this partnership includes periodic meetings, workforce training and the future creation of the China-Brazil Mining Investment Alliance.

On 16 May 2025, the Ministry of Mines and Energy announced that a new transmission line with a 500-kilovolt potential has been integrated into the National Interconnected System. This action aims to advance energy security, connectivity between Northeast and Southeast Brazil and enable thermoelectric and wind energy to flow from Rio de Janeiro and Espírito Santo to the rest of the country.

On 5 June 2025, Minister Silveria met with French President Emmanuel Macron to expand on cooperation in clean energy, critical minerals and the energy transition. 126 The meeting aimed to reinforce the countries' joint commitment to sustainable development and investment in low-carbon technologies.

<sup>&</sup>lt;sup>120</sup> Ministro Alexandre Silveira assina acordo com a China para impulsionar energias renováveis e tecnologias de baixo carbono, Ministério de Minas e Energia (Brasília) 12 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/ministro-alexandre-silveira-assina-acordo-com-a-china-para-impulsionar-energias-renovaveis-e-tecnologias-de-baixo-carbono

<sup>121</sup> Com R\$ 156 mi do BNDES, mais 16 usinas fotovoltaicas entram em operação no Brasil, Agência BNDES de Notícias 12 May 2025. Translation provided by Google Translate. Access Date: 23 July 2025. https://agenciadenoticias.bndes.gov.br/infraestrutura/Com-R%24-156-mi-do-BNDES-mais-16-usinas-fotovoltaicas-entram-em-operacao-no-Brasil/

<sup>&</sup>lt;sup>122</sup> Finep e Instituto Brasileiro de Mineração (IBRAM) assinam acordo de cooperação técnica para fomentar a pesquisa, o desenvolvimento e a inovação no setor mineral, Financiadora de Estudos e Projetos (Rio de Janeiro) 14 May 2025. Translation provided by Google Translate. Access Date: 16 May 2025. http://www.finep.gov.br/noticias/todas-noticias/6962-finep-e-instituto-brasileiro-de-mineracao-ibram-acordo-de-cooperacao-tecnica-para-fomentar-a-pesquisa-o-desenvolvimento-e-a-inovacao-no-setor-mineral

 <sup>123</sup> Alexandre Silveira assina acordo com a China para aumentar exportações do etanol brasileiro, Ministério de Minas e Energia (Brasília) 13 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/alexandre-silveira-assina-acordo-com-a-china-para-aumentar-exportacoes-do-etanol-brasileiro
 124 Silveira assina plano de ação com governo chinês para desenvolver a mineração sustentável, Ministério de Minas e Energia (Brasília) 13 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/silveira-assina-plano-de-acao-com-governo-chines-para-desenvolver-a-mineracao-sustentavel
 125 Ministério de Minas e Energia (Brasília) 13 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025.
 126 Brasil reforça parceria estratégica com a França nas áreas de energia, mineração e transição energética, Ministério de Minas e Energia (Brasília) 5 June 2025. Translation provided by Google Translate. Access Date: 4 July 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/brasil-reforca-parceria-estrategica-com-a-franca-nas-areas-de-energia-mineracao-e-transicao-energetica

On 6 June 2025, Minister Silveira signed a declaration of intent with the French Ministry of Economy, Finance and Industrial and Digital Sovereignty to deepen bilateral cooperation on low-carbon hydrogen. The partnership supports green reindustrialization and technological innovation through the exchange of information.

On 17 June 2025, the Ministry of Science, Technology and Innovation and Finep signed a project contract to develop and test critical technologies for nuclear microreactors. The BRL30 million financial subsidy will advance capabilities in nuclear technology through the construction of a 100 watts Critical Unit, safety and performance testing and the development of new reactor materials.

On 3 July 2025, President Lula da Silva signed the Mercado Común del Sur (MERCOSUR) Presidential Declaration on Energy Integration and Security in MERCOSUR during the 66th MERCOSUR Summit in Buenos Aires. <sup>129</sup> The declaration reaffirmed Argentina's commitment to advancing regional energy integration and emphasized the importance of a fair and inclusive energy transition, regional interconnections and regulatory harmonization to strengthen energy security and support industrial development.

On 5 July 2025, Minister Silveira and China's CGN Energy International signed a letter of intent to cooperate on clean energy, mineral sector modernization and the sustainable use of nuclear resources. The agreement includes joint research, development and innovation in energy generation, storage, digitalization and sustainable resource management.

On 7 July 2025, Minister Santos announced the establishment of a "China-Brazil Center for Cooperation in Artificial Intelligence." <sup>131</sup>

On 8 July 2025, the Ministry of Mines and Energy and India's Ministry of New and Renewable Energies signed a memorandum of understanding to expand bilateral cooperation in renewable energy. The agreement outlines joint efforts in solar, wind, bioenergy, energy storage and low-emission hydrogen.

On 10 July 2025, Ministry of Science, Technology and Innovation and Softex announced a training program for microelectronics. Participants will learn about integrated circuits and chip implementation for microelectronics and semiconductors.

<sup>127</sup> MME assina acordo com a França para ampliar uso de hidrogênio de baixa emissão de carbono, Ministério de Minas e Energia (Brasília) 6 June 2025. Translation provided by Google Translate. Access Date: 23 July 2025, https://www.gov.br/mme/pt-

<sup>(</sup>Brasília) 6 June 2025. Translation provided by Google Translate. Access Date: 23 July 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/mme-assina-acordo-com-a-franca-para-ampliar-uso-de-hidrogenio-de-baixa-emissao-de-carbono 128 MCTI e FINEP investem R\$ 30 milhões para projeto de microrreator nuclear, Ministério de Ciência, Tecnologia e Inovação

<sup>128</sup> MCTI e FINEP investem R\$ 30 milhões para projeto de microrreator nuclear, Ministério de Ciência, Tecnologia e Inovação (Brasília) 17 June 2025. Translation provided by Google Translate. Access Date: 23 July 2025. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2025/06/mcti-e-finep-investem-r-30-milhoes-para-projeto-de-microrreator-nuclear

<sup>129</sup> Declaración Presidencial sobre Integración y Seguridad Energética en el MERCOSUR, Ministerio de Relaciones Exteriores, Commercio Internacional y Culto (Buenos Aires) 3 July 2025. Translation provided by Google Translate. Access Date: 6 October 2025. https://www.cancilleria.gob.ar/es/actualidad/noticias/declaracion-presidencial-sobre-integracion-y-seguridad-energetica-en-el-mercosur

https://www.cancilleria.gob.ar/es/actualidad/noticias/declaracion-presidencial-sobre-integracion-y-seguridad-energetica-en-el-mercosur <sup>130</sup> Silveira assina acordos com gigante chinesa para promover transição energética e cooperação no setor mineral, Ministério de Minas e Energia (Brasília) 5 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025.

https://www.gov.br/mme/pt-br/assuntos/noticias/silveira-assina-acordos-com-gigante-chinesa-para-promover-transicao-energetica-e-cooperacao-no-setor-mineral

 <sup>131</sup> Ciência e tecnologia para o desenvolvimento econômico e social do BRICS, Ministério de Ciência, Tecnologia e Inovação (Brasília) 7 July 2025. Translation provided by Google Translate. Access Date: 26 August 2025. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2025/07/ciencia-e-tecnologia-para-o-desenvolvimento-economico-e-social-do-brics
 132 Brasil e Índia firmam acordo para ampliar cooperação em energias renováveis, Ministério de Minas e Energia (Brasília) 9 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://www.gov.br/mme/pt-

br/assuntos/noticias/brasil-e-india-firmam-acordo-para-ampliar-cooperacao-em-energias-renovaveis

<sup>133</sup> MCTI e Softex lançam Programa CI Expert para capacitar profissionais em microeletrônica, Ministério da Ciência, Tecnologia e Inovação (Brasília) 11 July 2025. Translation provided by Google Translate. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2025/07/mcti-e-softex-lancam-programa-ci-expert-para-capacitar-profissionais-em-microeletronica Access Date: 26 August 2025.

On 28 July 2025, BNDES approved BRL1 billion in financing for the construction of the Draco Solar Complex in Minas Gerais. <sup>134</sup> The project will produce enough energy to power 569,000 homes.

On 11 August 2025, BNDES approved BRL625 million in financing for the construction of a new corn ethanol plant.<sup>135</sup> The project aims to reduce the equivalent of 380,000 tons of carbon dioxide per year.

On 25 August 2025, Minister Silveira and Canadian Minister of International Trade Maninder Sidhu discussed a Memorandum of Understanding between Ministry of Mines and Energy and Natural Resources Canada. <sup>136</sup> The memorandum will outline cooperation on critical minerals and renewable energy with the creation of a working group.

On 26 August 2025, Secretary for Oil, Natural Gas and Biofuels Pietro Mendes met with Saudi Arabian officials to discuss the implementation of the Action Plan for Energy Cooperation.<sup>137</sup> Brazil and Saudi Arabia agreed to create technical working groups to further explore initiatives and collaboration hydrogen and energy supply chains.

On 1 September 2025, Brazil and MERCOSUL approved the 2025-2026 Work Plan for mining and geology. 138 The plan includes research of mineral capabilities of Brazil and MERCOSUL members, cooperation in research and extraction of mineral resources, shaping integrated regulatory frameworks and public policy proposals for mining and critical minerals supply chain.

On 3 September 2025, Minister Silveira published a resolution which promises an investment of over BRL500 million for energy development in the Amazon.<sup>139</sup> A majority of projects are solar energy and storage projects, including "hybridization of thermal power plants with solar photovoltaic energy and battery storage systems."

On 4 September 2025, BNDES announced an allocation of USD950 million for the promotion of decarbonization and transition projects.<sup>140</sup> The funding package will advance innovations relating to green energy and incentivize green technological development.

<sup>&</sup>lt;sup>134</sup> BNDES aprova R\$ 1 bi para Atlas Renewable Energy construir 11 usinas fotovoltaicas em MG, Agência BNDES de Notícias (Rio de Janeiro) 28 July 2025. Translation provided by Google Translate. Access Date: 13 August 2025.

https://agencia denoticias.bndes.gov.br/infraestrutura/BNDES-aprova-R\$-1-bi-para-Atlas-Renewable-Energy-construir-11-usinas-fotovoltaicas-em-MG/

<sup>&</sup>lt;sup>135</sup> Com R\$ 625 milhões, BNDES financia planta de etanol de milho da São Martinho em Goiás, Agência BNDES de Notícias (Rio de Janeiro) 11 August 2025. Translation provided by Google Translate. Access Date: 17 August 2025.

https://agencia denoticias.bndes.gov.br/agro/Com-R%24-625-milhoes-BNDES-financia-planta-de-etanol-de-milho-da-Sao-Martinho-em-Goias/

<sup>&</sup>lt;sup>136</sup> Brasil e Canadá avançam em parceria estratégica nos setores de energia e mineração, Ministério de Minas e Energia (Brasília) 25 August 2025. Translation provided by Google Translate. Access Date: 16 October 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/brasil-e-canada-avancam-em-parceria-estrategica-nos-setores-de-energia-e-mineracao

<sup>&</sup>lt;sup>137</sup> Brasil e Arábia Saudita dão início a plano de ação para cooperação energética, Ministério de Minas e Energia (Brasília) 26 August 2025. Translation provided by Google Translate. Access Date: 17 October 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/brasil-e-arabia-saudita-dao-inicio-a-plano-de-acao-para-cooperacao-energetica

<sup>&</sup>lt;sup>138</sup> Mercosul une forças para avançar em mineração estratégica e transição energética, Ministério de Minas e Energia (Brasília) 1 September 2025. Translation provided by Google Translate. Access Date: 17 October 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/mercosul-une-forcas-para-avancar-em-mineracao-estrategica-e-transicao-energetica

<sup>139</sup> MME anuncia aprovação de projetos para reduzir custos de energia na Amazônia Legal, Ministério de Minas e Energia (Brasília) 3 September 2025. Translation provided by Google Translate. Access Date: 17 October 2025.

https://www.gov.br/mme/pt-br/assuntos/noticias/mme-anuncia-aprovacao-de-projetos-para-reduzir-custos-de-energia-na-amazonia-legal

<sup>&</sup>lt;sup>140</sup> BNDES destina US\$ 950 milhões para inovação verde e transição ecológica, Notícas ESG (Brasília) 4 September 2025.
Translation provided by Google Translate. Access Date: 9 October 2025. https://esgnews.com/pt/bndes-compromete-950-milh%C3%B5es-para-inova%C3%A7%C3%A3o-verde-e-transi%C3%A7%C3%A3o-ecol%C3%B3gica/

On 23 September 2025, Minister Silveira announced BRL4.4 billion for energy infrastructure and the Agreste Solar Complex.<sup>141</sup>

On 2 October 2025, BNDES and the Export-Import Bank of China established an investment fund of approximately BRL5.7 billion.<sup>142</sup> The fund aims to promote bilateral sustainable development and its target sectors include green development and mining.

Brazil has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Brazil has taken strong action towards the combined welfare target by diversifying its supply chains for energy transitions and focusing on reliable, sustainable and responsible supply chains through domestic and international actions. Recent initiatives include advancing bilateral cooperation with France in the low-carbon hydrogen sector, supporting the domestic development of nuclear microreactors, signing agreements with India to expand renewable energy generation and low-emission hydrogen and approving financing for green energy projects. It has also advanced supply chains for critical minerals and materials beneficiated at source, semiconductors and energy transition technologies.

Thus, Brazil receives a score of +1.

Analyst: Arash Aslan-Beigi

## Canada: +1

Canada has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 21 November 2024, Minister of Energy and Natural Resources Jonathan Wilkinson announced CAD2.1 million in funding for the Qikiqtani Inuit Association to "purchase heavy equipment simulators dedicated to the Pond Inlet Research and Training Centre," support training Inuit Nunavummiut individuals in the natural resources industry and build meaningful partnerships with Nunavut residents. As mining is one of Nunavut's biggest private sector industries, this action will help strengthen crucial critical minerals supply chains and help build a more resilient and sustainable sector.

On 26 November 2024, Member of Parliament for Northwest Territories Michael McLeod announced a CAD2 million investment for geothermal energy development in the Northwest Territories. The funding aims to facilitate a just clean energy transition for communities, particularly through promoting geothermal energy as a low-carbon alternative.

<sup>&</sup>lt;sup>141</sup> Silveira anuncia renovação de contrato da Neoenergia PE com R\$ 6,1 bilhões em investimentos, Ministério de Minas e Energia (Brasília) 23 September 2025. Translation provided by Google Translate. Access Date: 17 October 2025.

https://www.gov.br/mme/pt-br/assuntos/noticias/mme-anuncia-aprovacao-de-projetos-para-reduzir-custos-de-energia-na-amazonia-legal

<sup>&</sup>lt;sup>142</sup> BNDES e banco chinês estruturam fundo de até US\$ 1 bilhão para investimentos no mercado de capitais, Agência BNDES de Notícias (Brasília) 2 October 2025. Translation provided by Google Translate. Access Date: 9 October 2025. https://agenciadenoticias.bndes.gov.br/bndes/BNDES-e-banco-chines-estruturam-fundo-de-ate-US%24-1-bilhao-para-investimentos-no-mercado-de-capitais/

<sup>&</sup>lt;sup>143</sup> Government of Canada Supports Increased Indigenous Participation in the Natural Resources Economy in Nunavut, Natural Resources Canada (Pond Inlet) 21 November 2024. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/11/government-of-canada-supports-increased-indigenous-participation-in-the-natural-resources-economy-in-nunavut.html

<sup>&</sup>lt;sup>144</sup> The Government of Canada Invests in Geothermal Energy in Northern Canada, Natural Resources Canada (Yellowknife) 26 November 2024. Access Date: 11 July 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/11/the-government-of-canada-invests-in-geothermal-energy-in-northern-canada.html

On 28 November 2024, Minister Wilkinson announced CAD7.5 million in funding for five clean energy technology projects that aim to support the energy transition in British Columbia. This includes CAD2.5 million for British Columbia Biocarbon Ltd., CAD1.8 million for Arca Climate Technologies Inc. and CAD1.5 million for the University of British Columbia.

On 2 December 2024, Canada's Minister of Export Promotion, International Trade and Economic Development of Canada Mary Ng and Indonesia's Minister of Trade Budi Santoso jointly announced the conclusion of negotiations on a comprehensive economic partnership agreement and committed to signing it in 2025. The agreement includes commitments to cooperate on critical minerals, with an emphasis on developing secure and resilient critical mineral supply and value chains.

On 5 December 2025, Minister Wilkinson announced the transfer of CAD265 million to clean electricity projects in Saskatchewan.<sup>147</sup> The funds will primarily go towards SaskPower to build and improve power lines, battery storage systems and solar power generation.

On 8 December 2024, Minister of Environment and Climate Change Steven Guilbeault and Minister of Public Safety, Democratic Institutions and Intergovernmental Affairs Dominic LeBlanc announced over CAD1 billion in investments to support New Brunswick's supply chain and ensure energy transitions are reliable and affordable. These investments include up to CAD1 billion for Indigenous-led wind projects, CAD25 million for the New Brunswick and Mi'kmaq First Nations' "25-megawatt Neweg Energy wind project" and CAD25 million to support pre-development for NB Power's plan to increase small modular reactor capacity by 600 megawatts. This action will support the reliability and sustainability of the supply chain and clean energy technologies.

On 13 December 2024, Member of Parliament George Chahal announced CAD215 million in funding for nine Albertan clean energy projects including a focus on solar, wind and grid infrastructure upgrades.<sup>149</sup> These projects will support reliable, affordable and responsible supply chains for energy transitions, increasing the clean energy capacity with for an additional 170,000 homes.

On 13 December 2024, Minister Wilkinson and the United States announced a co-investment for the Canadian mining company Fireweed Metals Corp. to support the pre-development of a "transmission line between Faro and Ross River." The pre-development phase will include responsible management through consultations

<sup>&</sup>lt;sup>145</sup> Government of Canada Takes Strides to Advance Decarbonization of Heavy-Emitting Industries in British Columbia, Natural Resources Canada (Squamish) 28 November 2024. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/11/government-of-canada-takes-strides-to-advance-decarbonization-of-heavy-emitting-industries-in-british-columbia0.html

<sup>&</sup>lt;sup>146</sup> Joint statement by the Government of the Republic of Indonesia and the Government of Canada on the conclusion of the negotiations of the Indonesia – Canada Comprehensive Economic Partnership Agreement, Government of Canada (Jakarta) 2 December 2024. Access date: 10 May 2025. https://www.international.gc.ca/country\_news-pays\_nouvelles/2024-12-03-indonesia-indonesia-aspx?lang=eng

<sup>&</sup>lt;sup>147</sup> Powering Canada's Future: Federal measures helping build Saskatchewan's 21st century electricity grid, Environment and Climate Change Canada (Regina) 5 December 2025. Access Date: 7 July 2025. https://www.canada.ca/en/environment-climate-change/news/2024/12/powering-canadas-future-federal-measures-helping-build-saskatchewans-21st-century-electricity-grid.html

<sup>&</sup>lt;sup>148</sup> Powering Canada's Future: Ensuring Access to Affordable, Reliable and Clean Electricity in New Brunswick, Natural Resources Canada (Dieppe) 8 December 2024. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/12/powering-canadas-future-ensuring-access-to-affordable-reliable-and-clean-electricity-in-new-brunswick.html

 <sup>149</sup> Powering Canada's Future: More Renewable, Affordable and Reliable Power for Albertans, Natural Resources Canada (Calgary) 13 December 2024. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/12/powering-canadas-future-more-renewable-affordable-and-reliable-power-for-albertans.html
 150 Canada and United States Co-Invest to Unlock Critical Minerals Development in Yukon, Natural Resources Canada (Ottawa) 13
 December 2024. Access Date: 4 May 2025. Canada and United States Co-Invest to Unlock Critical Minerals Development in Yukon

with First Nations groups. Natural Resources Canada will provide CAD12.9 million for this initiative through the Critical Minerals Infrastructure Fund alongside USD15.8 million from the United States.

On 19 December 2024, Member of Parliament Brendan Hanley announced CAD1.4 million in funding from the Oil to Heat Pump Affordability program and CAD287,000 from the Low Carbon Economy Fund to help reduce home energy costs for low and middle-income residents in Yukon. This funding will enable maximum rebates of CAD24,000 and a CAD250 one-time payment to individuals to homeowners that "add highefficiency heat pumps in homes currently heated with oil." This action will support supply chains for energy transitions by increasing the demand for clean energy technologies.

On 20 December 2024, Minister Wilkinson announced an investment of up to CAD20 million for Foran Mining Corporation to build a hydro transmission line. This will support the electrification of the McIlvenna Bay mine as part of Canada's efforts to support a responsible supply chain for energy transitions.

On 20 December 2024, Minister Wilkinson allocated up to CAD10 million for Torngat Metals' predevelopment activities regarding the construction of a 170-kilometre access road to transport rare earth elements from Nunavik, Quebec to Labrador.<sup>153</sup> This will help strengthen critical minerals supply chains and support energy transitions as rare earth elements are vital for clean energy.

On 7 January 2025, Member of Parliament Marcus Powlowski announced over CAD11 million to strengthen Canada's clean and alternative energy sectors. <sup>154</sup> This funding will be divided between eight projects to support reliable and sustainable supply chains for the energy transition.

On 6 February 2025, Minister Wilkinson announced CAD43.5 million for critical minerals projects in Quebec.<sup>155</sup> The funding will support six projects focused on the development and transportation of critical minerals. Up to CAD39.8 million will be invested for these initiatives alongside CAD3.7 million for the recovery of lithium from "spodumene ore."

On 12 February 2025, Parliamentary Secretary Marc Serré announced CAD14.2 million for carbon capture and storage. <sup>156</sup> This supports investment in energy transition technologies.

can ada/news/2025/02/can ada-invests-in-cutting-edge-carbon-capture-and-storage-to-drive-clean-energy-innovation 0. html

<sup>&</sup>lt;sup>151</sup> New Investments to Help Yukoners Reduce Energy Costs and Stay Warm, Natural Resources Canada (Whitehorse) 19 December 2024. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/12/new-investments-to-help-yukoners-reduce-energy-costs-and-stay-warm.html

<sup>&</sup>lt;sup>152</sup> Canada Invests in Infrastructure Upgrades to Support Critical Minerals Development in Saskatchewan, Natural Resources Canada (Saskatoon) 20 December 2024. Access Date: 4 May 2025.

<sup>&</sup>lt;sup>153</sup> Canada to Unlock Critical Minerals Rare Earth Development in Northern Quebec and Labrador With New Funding, Natural Resources Canada (Montreal) 20 December 2024. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2024/12/canada-to-unlock-critical-minerals-rare-earth-development-in-northern-quebec-and-labrador-with-new-funding.html

<sup>&</sup>lt;sup>154</sup> Federal Government Invests in Made-in-Canada Technologies to Advance Clean Fuels Sector, Natural Resources Canada (Fort Frances) 7 January 2025. Access Date: 4 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/01/federal-government-invests-in-made-in-canada-technologies-to-advance-clean-fuels-sector0.html

<sup>&</sup>lt;sup>155</sup> Canada Invests in Quebec's Critical Minerals Sector to Create Jobs and a Strong Economy, Natural Resources Canada (Montreal) 6 February 2025. Access Date: 16 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/02/canada-invests-in-quebecs-critical-minerals-sector-to-create-jobs-and-a-strong-economy0.html <sup>156</sup> Canada Invests in Cutting-Edge Carbon Capture and Storage to Drive Clean Energy Innovation, Natural Resources Canada (Toronto) 12 February 2025. Access Date: 15 May 2025. https://www.canada.ca/en/natural-resources-canada/natural-resour

On 13 February 2025, Minister Wilkinson announced that Canada has joined the Global Offshore Wind Alliance in addition to the Governments of Nova Scotia and Newfoundland and Labrador.<sup>157</sup> This action demonstrates Canada's commitment towards offshore wind energy generation as part of the energy transition.

On 24 February 2025, Canada announced CAD500,000 in funding for Phase Two of the Global Initiative for Transitioning Remote Communities to Renewable Energy. In partnership with the International Renewable Energy Agency, phase two will focus on helping remote communities develop ways to transition towards reliable, sustainable and affordable clean energy.

On 3 March 2025, Minister Wilkinson announced the extension of the 15 per cent Mineral Exploration Tax Credit and CAD500 million funding for the Critical Minerals Infrastructure Fund. This funding will be given to projects that develop "energy and transportation infrastructure" to increase access to Canadian critical minerals.

On 5 March 2025, Minister Wilkinson and Argentina's Secretary of Mining Luis Lucero of signed an agreement to collaborate on critical minerals and mining sustainability. <sup>160</sup> This partnership aims to facilitate sustainable investment in the mining sector and support global supply chain integration.

On 5 March 2025, Minister Wilkinson announced several investments for nuclear energy as part of Canada's commitment towards the clean energy transition and facilitating a low-carbon economy. This includes a CAD304 million agreement with AtkinsRéalis to develop a "natural uranium—fuelled Canadian deuterium uranium" (CANDU) nuclear reactor, CAD55 million for Ontario Power Generation's Darlington New Nuclear Project which aims to develop three new small modular reactors (SMRs) that produce no greenhouse gases during use and CAD52.4 million for other SMR and CANDU reactor projects that advance decarbonization in Saskatchewan, Alberta and Ontario.

On 18 March 2025, Natural Resources Canada announced CAD11 million to support clean energy projects in Indigenous communities. 162 This supports Canada's commitment to use responsible energy transition technologies.

<sup>&</sup>lt;sup>157</sup> Government of Canada Joins Global Efforts to Accelerate the Deployment of Offshore Wind and Help Power Canada's Economy, Natural Resources Canada (Halifax) 13 February 2025. Access Date: 23 June 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/02/government-of-canada-joins-global-efforts-to-accelerate-the-deployment-of-offshore-wind-and-help-power-canadas-economy.html

<sup>&</sup>lt;sup>158</sup> Canada Invests in Phase 2 of the Global Initiative on Transitioning Remote Communities to Renewable Energy, Natural Resources Canada (Ottawa) 24 February 2025. Access Date: 23 June 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/02/canada-invests-in-phase-2-of-the-global-initiative-on-transitioning-remote-communities-to-renewable-energy.html <sup>159</sup> Investing to Make Canada a Global Critical Minerals Superpower, Natural Resources Canada (Toronto) 3 March 2025. Access Date: 15 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/03/investing-to-make-canada-a-global-critical-minerals-superpower0.html

<sup>&</sup>lt;sup>160</sup> Economía firmó un acuerdo sobre minerales críticos con el ministerio de Recursos Naturales de Canadá, Ministerio de Economía (Buenos Aires) 5 March 2025. Translation provided by Google Translate. Access Date: 16 May 2025.

https://www.argentina.gob.ar/noticias/economia-firmo-un-acuerdo-sobre-minerales-criticos-con-el-ministerio-de-recursos-naturales <sup>161</sup> Canada Invests in the Next Generation of Canadian-Made, Clean, Affordable Nuclear Energy, Natural Resources Canada (Cambridge) 5 March 2025. Access Date: 23 June 2025. https://www.canada.ca/en/natural-resources-

canada/news/2025/03/canada-invests-in-the-next-generation-of-canadian-made-clean-affordable-nuclear-energy0.html <sup>162</sup> Government of Canada Announces Funding for Clean and Reliable Energy in First Nations and Inuit Communities, Natural Resources Canada (Thunder Bay) 18 March 2025. Access Date: 15 May 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/03/government-of-canada-announces-funding-for-clean-and-reliable-energy-in-first-nations-and-inuit-communities0.html

On 21 March 2025, Canada's Minister of Innovation, Science and Industry Anita Anand announced a CAD8 million investment for Teledyne, a specialized semiconductor manufacturer, on behalf of Canada's Strategic Innovation Fund.<sup>163</sup> The money will go towards a project to upgrade Teledyne's equipment.

On 23 May 2025, Minister of Energy and Natural Resources Tim Hodgson pledged to accelerate permitting processes for major energy projects, including renewable energy projects, to a two-year maximum decision timeline.164

On 11 June 2025, Canada announced CAD4.9 million in additional funding towards the Anahim Lake Solar Project, for a total contribution to CAD17 million. 165 This project will provide the Ukatchko First Nation with access to renewable energy.

On 17 June 2025, Prime Minister Mark Carney announced CAD80.3 million in federal funding to expand critical mineral supply chains.<sup>166</sup> CAD50.3 million of this funding will support Canadian research and development initiatives.

On 17 June 2025, the G7 launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit, under Canada's G7 Presidency. 167 It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 22 June 2025, Canada and the European Union signed a Security and Defence Partnership to boost defence cooperation and launched talks on Canada's access to the EUR150 billion SAFE procurement instrument. 168 They also agreed to enhance critical raw materials trade with Canada and announced the EU-Canada Industrial Policy Dialogue to further strengthen supply chains in critical sectors.

On 23 June 2025, the Canadian Infrastructure Bank announced a CAD55 million loan to Torngat Metals, a Canadian mining company, to support the development of the Strange Lake rare earth minerals project in Nunavik, Quebec. 169 The funds will go towards improvements to existing infrastructure, preparations for an open pit mine and establishing utility connections. The mine is anticipated to contain high amounts of dysprosium and terbium, which are critical minerals for electric vehicle motors and wind turbine generators.

On 3 July 2025, the National Research Council of Canada, Quebec's MiQro Innovation Collaborative Centre and the United Kingdom's Compound Semiconductor Applications Catapult signed a memorandum of

<sup>&</sup>lt;sup>163</sup> Canada to invest in Teledyne to further advance Canada's semiconductor industry, Innovation, Science, and Economic Development Canada (Ottawa) 21 March 2025. Access Date: 14 August 2025. https://www.canada.ca/en/innovation-scienceeconomic-development/news/2025/03/canada-to-invest-in-teledyne-to-further-advance-canadas-semiconductor-industry. html<sup>164</sup> Speech: Minister Tim Hodgson at the Calgary Chamber of Commerce, Natural Resources Canada (Ottawa) 23 May 2025. Access Date: 7 July 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/05/speech-minister-tim-hodgson-atthe-calgary-chamber-of-commerce.html

<sup>&</sup>lt;sup>165</sup> Government of Canada Invests in Landmark Solar Project in Anahim Lake, Natural Resources Canada (Anahim Lake) 11 June 2025. Access Date: 11 June 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/06/government-of-canadainvests-in-landmark-solar-project-in-anahim-lake.html

<sup>&</sup>lt;sup>166</sup> Prime Minister Carney concludes 2025 G7 Leaders' Summit, Office of the Prime Minister of Canada (Ottawa) 17 June 2025. Access Date: 12 October 2025. https://www.pm.gc.ca/en/news/news-releases/2025/06/17/prime-minister-carney-concludes-

<sup>&</sup>lt;sup>167</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>168</sup> Statement by President von der Leyen at the joint press conference with President Costa and Prime Minister Carney of Canada, European Commission (Brussels) 22 June 2025. Access Date: 12 August 2025.

https://ec.europa.eu/commission/presscorner/detail/en/statement 25 1596

<sup>169</sup> CIB's \$55 million loan to Torngat Metals strengthens Canada's critical minerals sector, Canadian Infrastructure Bank (Toronto) 23 June 2025. Access Date: 14 August 2025. https://cib-bic.ca/en/medias/articles/cibs-55-million-loan-to-torngat-metalsstrengthens-canadas-critical-minerals-sector

understanding to bolster semiconductor supply chains in G7 countries and improve their resiliency. 170 This memorandum will synthesize Canada and the United Kingdom's respective abilities to design, fabricate and package semiconductors.

On 4 July 2025, Minister Hodgson announced investments of CAD21.5 million in carbon capture, utilization and storage technologies.<sup>171</sup> These investments support the decarbonization of the Canadian energy industry.

On 8 July 2025, Minister of Housing and Infrastructure and Minister responsible for Pacific Economic Development Canada Gregor Robertson, Warden of the County of Simcoe and Mayor of the Township of Ramara Basil Clarke and President and Chief Executive Officer of the Canadian Urban Transit Research and Innovation Consortium Josipa Petrunic announced a joint investment of CAD221,116 to support Simcoe County in transitioning to zero emissions technologies.<sup>172</sup> The federal government's contribution will be provided through the Zero Emission Transit Fund.

On 11 July 2025, Minister Wilkinson announced nearly CAD16 million in federal funding under the Energy Innovation Program to support renewable energy, carbon capture and grid modernization projects in Nova Scotia, Prince Edward Island, and New Brunswick. 173 The funding will modernize electricity grids, expand wind and solar capacity and support clean energy initiatives in Indigenous, rural, and remote communities.

On 14 July 2025, Minister Hodgson announced a new initiative in partnership with the Northwest Territories to apply artificial intelligence and digital scanning to historic drill cores from the Slave Geological Province in the Northwest Territories.<sup>174</sup> The initiative will help identify new areas with high critical-minerals potential.

On 7 August 2025, Minister Hodgson announced a CAD8.2 million investment in collaboration with Northcliff Resources, a Canadian mining company, to develop a tungsten-molybdenum deposit in New Brunswick. 175 This contribution will go toward the project's feasibility study update and engineering design. Tungsten and molybdenum are key minerals in battery production and renewable energy systems, helping this action affirm Canada's commitment to critical mineral supply chains.

On 8 August 2025, Canada's Parliamentary Secretary to the Minister of International Trade and to the Secretary of State for International Development Yasir Naqvi announced a CAD2.5 million investment from the Energy

canada/news/2025/08/government-of-canada-invests-in-new-brunswick-to-strengthen-critical-mineral-supply-chains.html

<sup>&</sup>lt;sup>170</sup> Strategic partnership strengthens the Canadian and United Kingdom semiconductor supply chains essential for growing AI compute capacity, National Research Council of Canada (Ottawa) 3 July 2025. Access Date: 6 July 2025.

https://www.canada.ca/en/national-research-council/news/2025/07/canada-and-uk-partner-to-build-a-stronger-semiconductorsupply-chain.html

<sup>&</sup>lt;sup>171</sup> Canada Invests in Carbon Capture and Storage in Alberta, Natural Resources Canada (Calgary) 4 July 2025. Access Date: 7 July 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/07/canada-invests-in-carbon-capture-and-storage-in-

<sup>&</sup>lt;sup>172</sup> Supporting the transition to zero-emission public transit, Housing, Infrastructure and Communities Canada (County of Simcoe) 8 July 2025. Access Date: 11 August 2025. https://www.canada.ca/en/housing-infrastructurecommunities/news/2025/07/supporting-the-transition-to-zero-emission-public-transit.html

<sup>&</sup>lt;sup>173</sup> Government of Canada Invests in Renewable Energy, Carbon Capture and Grid Modernization in the Maritimes, Natural Resources Canada (Charlottetown) 11 July 2025. Access Date: 23 July 2025. https://www.canada.ca/en/natural-resourcescan ada/news/2025/07/government-of-can ada-invests-in-renewable-energy-carbon-capture-and-grid-modernization-in-the-energy-carbon-capture-and-grid-modernization-capture-and-grid-modernizatmaritimes.html

<sup>&</sup>lt;sup>174</sup> Canada and the Northwest Territories Partner on Innovative, AI-Based Core Scanning Initiative to Support Critical Minerals Development, Natural Resources Canada (Charlottetown) 14 July 2025. Access Date: 23 July 2025.

https://www.canada.ca/en/natural-resources-canada/news/2025/07/canada-and-the-northwest-territories-partner-oninnovative-ai-based-core-scanning-initiative-to-support-critical-minerals-development.html

<sup>&</sup>lt;sup>175</sup> Government of Canada Invests in New Brunswick to Strengthen Critical Mineral Supply Chains, Natural Resources Canada (Ottawa) 7 August 2025. Access Date: 7 August 2025. https://www.canada.ca/en/natural-resources-

Innovation Program in TerraFixing to develop carbon capture technology. 176 TerraFixing will use these funds to advance direct air capture technology for cold climates.

On 13 August 2025, Parliamentary Secretary to the Minister of Energy and Natural Resources Claude Guay announced over CAD33 million for projects related to the zero-emissions vehicles transition.<sup>177</sup> This includes funding for projects developing new technologies for medium and heavy-duty trucks.

On 15 August 2025, Minister Hodgson announced CAD13 million of funding for five projects to support the modernization of the Province of Ontario's electricity grid. <sup>178</sup> In addition to supporting the distribution of clean energy, these projects improve Ontario's clean energy storage capabilities.

On 25 August 2025, Minister of International Trade Maninder Sidhu and Brazilian Minister of Mines and Energy Alexandre Silveira discussed a Memorandum of Understanding between Ministry of Mines and Natural Resources Canada.<sup>179</sup> The memorandum will outline cooperation on critical minerals and renewable energy with the creation of a working group.

On 26 August 2025, Minister Hodgson and Germany's Minister for Economic Affairs and Energy Katherine Reiche signed a joint declaration to deepen cooperation on critical mineral supply chains. <sup>180</sup> The agreement includes collaboration on processing technologies and the signing of three memorandums of understanding between relevant German and Canadian companies.

On 8 September 2025, Minister Hodgson announced CAD5.8 million in investments for carbon capture and storage (CCS) projects in British Columbia. 181 The investment consists of CAD1.3 million to Svante to establish new testing facilities, CAD2 million to Anodyne Chemistries Inc to improve industrial processes that produce key chemical commodities and CAD2.4 million to Agora Energy Technologies Ltd to develop CCS processes using impure flue gas.

On 12 September 2025, Parliamentary Secretary to the Minister of Northern and Arctic Affairs Brendan Hanley announced CAD13.5 million in government funding for the Kluane N'tsi Wind Energy Project.<sup>182</sup> The funding will help support the 900 kilowatts turbine's integration into the grid and its associated battery storage.

<sup>&</sup>lt;sup>176</sup> Canada Invests in Carbon Capture and Storage in Ottawa, Natural Resources Canada (Ottawa) 8 August 2025. Access Date: 14 August 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/08/canada-invests-in-carbon-capture-and-storage-in-ottawa.html

<sup>&</sup>lt;sup>177</sup> Backgrounder: Canada accelerates transition to zero-emissions vehicles, Natural Resources Canada (Ottawa) 13 August 2025. Access Date: 24 August 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/08/backgrounder-canada-accelerates-transition-to-zero-emissions-vehicles.html

<sup>&</sup>lt;sup>178</sup> Government of Canada Invests to Modernize Ontario's Electricity Grid – Ensuring More Reliable Power for Ontarians, Natural Resources Canada (Ottawa) 15 August 2025. Access Date: 12 October 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/08/government-of-canada-invests-to-modernize-ontarios-electricity-grid--ensuring-more-reliable-power-for-ontarians.html

<sup>&</sup>lt;sup>179</sup> Brasil e Canadá avançam em parceria estratégica nos setores de energia e mineração, Ministério de Minas e Energia (Brasília) 25 August 2025. Translation provided by Google Translate. Access Date: 16 October 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/brasil-e-canada-avancam-em-parceria-estrategica-nos-setores-de-energia-e-mineracao

<sup>&</sup>lt;sup>180</sup> Versorgungssicherheit bei Kritischen Rohstoffen: Deutschland und Kanada vertiefen Zusammenarbeit, Bundesministerium für Wirtschaft und Energie (Berlin) 26 August 2025. Translation provided by Google Translate. Access Date: 12 October 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/08/20250826-versorgungssicherheitbei-kritischen-rohstoffen-deutschland-und-kanada-vertiefen-zusammenarbeit.html

<sup>&</sup>lt;sup>181</sup> Canada Invests in Innovative Carbon Capture and Storage Projects in British Columbia, Natural Resources Canada (Ottawa) 8 September 2025. Access Date: 12 October 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/09/canada-invests-in-innovative-carbon-capture-and-storage-projects-in-british-columbia.html

<sup>&</sup>lt;sup>182</sup> Indigenous-Owned Wind Power Strengthens Energy Security in the North, Natural Resources Canada (Ottawa) 12 September 2025. Access Date: 12 October 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/09/indigenous-owned-wind-power-strengthens-energy-security-in-the-north.html

On 24 September 2025, Prime Minister Carney and President of Indonesia Prabowo Subianto announced the signing of the Indonesia-Canada Comprehensive Economic Partnership Agreement, strengthening trade ties in the critical minerals and renewable energy sectors. The agreement also included the signing of an Memorandum of Understanding between Export Development Canada and the Indonesia Investment Authority, Indonesia's sovereign wealth fund to explore strategic investments in clean energy technologies.

On 29 September 2025, Minister Hodgson announced a CAD40 million investment in Hitachi Energy Canada, a clean energy equipment company.<sup>184</sup> The investment will support the expansion of the company's Quebec transformer manufacturing facility and the establishment of a high-voltage direct current simulation centre.

On 3 October 2025, Minister Hodgson announced a CAD22 million investment to support eight Canadian battery innovation projects.<sup>185</sup> These funds aim to improve energy storage performance while bolstering the security and heightening the competitiveness of Canada's energy supply chains.

On 4 October 2025, Minister Hodgson announced CAD730,000 thousand for Arianne Phosphate Inc to research and develop a local phosphorus supply for lithium-iron-phosphate batteries.<sup>186</sup>

On 6 October 2025, Minister Hodgson announced a CAD3 million critical minerals development and Indigenous participation grants program for Indigenous organizations or non-Indigenous organizations partnered with Indigenous communities.<sup>187</sup> The aim of the program is to ensure Indigenous voice are participating in critical mineral development projects and to support responsible critical mineral supply chains.

Canada has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Canada has taken strong action towards the combined welfare target of supporting reliable, diversified, sustainable and responsibly supply chains for energy transitions through investments in clean energy projects and mining transportation projects. It has also taken strong action to strengthen supply chains for critical minerals and clean energy technologies through recent investments in clean energy projects in the Maritime provinces, including grid modernization, renewable energy expansion and carbon capture. Additionally, Canada has invested in carbon capture technology through the Energy Innovation Program, supported the development of a project for key minerals in battery production and financed the Strange Lake rare earth minerals project.

Thus, Canada receives a score of +1.

Analysts: Henri Hopkins, Ana Grace Rans Kolakovic and Erfan Ehsan

https://www.canada.ca/en/natural-resources-canada/news/2025/10/call-for-proposals-supporting-indigenous-engagement-and-participation-in-clean-energy-and-infrastructure-for-critical-minerals.html

G20 Research Group, 18 November 2025

<sup>&</sup>lt;sup>183</sup> Joint statement on the bilateral meeting between Prime Minister of Canada Mark Carney and the President of Republic of Indonesia Prabowo Subianto, Office of the Prime Minister of Canada (Ottawa) 24 September 2025. Access Date: 12 October 2025. https://www.pm.gc.ca/en/news/statements/2025/09/24/joint-statement-bilateral-meeting-between-prime-minister-canada-mark-carney

<sup>&</sup>lt;sup>184</sup> Government of Canada expands investment in critical clean technology manufacturing and clean energy, Innovation, Science and Economic Development Canada (Ottawa) 29 September 2025. Access Date: 12 October 2025.

https://www.canada.ca/en/innovation-science-economic-development/news/2025/09/government-of-canada-expands-investment-in-critical-clean-technology-manufacturing-and-clean-energy.html

<sup>&</sup>lt;sup>185</sup> Canada advances battery innovation with made-in-Canada technology, Natural Resources Canada (Ottawa) 3 October 2025. Access Date: 12 October 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/10/canada-advances-battery-innovation-with-made-in-canada-technology0.html

<sup>&</sup>lt;sup>186</sup> Canada invests to strengthen critical minerals supply chains in Quebec, Natural Resources Canada (Saguenay) 4 October 2025. Access Date: 17 October 2025. https://www.canada.ca/en/natural-resources-canada/news/2025/10/canada-invests-to-strengthen-critical-minerals-supply-chains-in-quebec.html

<sup>&</sup>lt;sup>187</sup> Call for proposals: Supporting Indigenous engagement and participation in clean energy and infrastructure for critical minerals, Natural Resources Canada (Ottawa) 6 October 2025. Access Date: 17 October 2025.

#### China: +1

China has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 29 November 2024, China's Sinoma EC International Investment and Uzbekistan's Ministry of Investment, Industry and Trade signed an investment agreement for a solar power plant in Uzbekistan. The agreement also includes the construction of an energy storage plant.

On 30 November 2024, the Electricity Council released a new bluebook that promises to establish a framework for a national unified power market by 2029.<sup>189</sup> The plan includes the inclusion of hydropower and nuclear power in the market. In addition, it claims that 50 per cent of renewable energy will be integrated by 2025.

On 6 February 2025, China and Pakistan released a joint statement on cooperation on geological surveys for mining. <sup>190</sup> The governments shared their support of Chinese investment in Pakistan's mining industry and offshore oil and gas projects.

On 17 February 2025, the Ministry of Industry and Information Technology shared a new action plan dedicated to the energy storage manufacturing sector.<sup>191</sup> This includes upgrading lithium batteries, new technological innovations and energy storage methods.

On 27 February 2025, China and Laos celebrated the launch ceremony of the China-Laos power interconnection project.<sup>192</sup> This project will advance the transmission of clean electricity between China and Laos. The project is part of the larger China-Laos Economic Corridor and will strengthen energy cooperation.

On 11 March 2025, the National People's Congress (NPC) adopted the "2025 National Economic and Social Development Plan." The plan highlights expansion of artificial intelligence sector, energy storage, electronic manufacturing, electric vehicle batteries, photovoltaic industries and green development. 194

On 11 March 2025, the NPC approved the "Report on the Work of the Standing Committee of the National People's Congress," which presents the Standing Committee's work in 2024 and plans for 2025. The Standing Committee in 2025 will formulate an atomic energy law and conduct research in "artificial intelligence, the

<sup>&</sup>lt;sup>188</sup> Sinoma EC International will build a solar power plant in Uzbekistan, the Government Portal of the Republic of Uzbekistan (Toshkent) 29 November 2024. Access Date: 29 March 2025. https://gov.uz/en/miit/news/view/28981

<sup>&</sup>lt;sup>189</sup> China on track for unified power market, the State Council People's Republic of China (Beijing) 30 November 2024. Access Date: 29 March 2025. https://english.www.gov.cn/news/202411/30/content WS674a7eacc6d0868f4e8ed8de.html

<sup>&</sup>lt;sup>190</sup> Full Text: Joint Statement between the People's Republic of China and the Islamic Republic of Pakistan, the State Council People's Republic of China (Beijing) 6 February 2025. Access Date: 29 March 2025.

https://english.www.gov.cn/news/202502/06/content\_WS67a46355c6d0868f4e8ef66f.html

<sup>191</sup> Govt policy moves from past week, the State Council People's Republic of China (Beijing) 27 February 2025. Access Date: 29 March 2025. https://english.www.gov.cn/policies/policywatch/202502/27/content\_WS67bfc56cc6d0868f4e8f0088.html

<sup>&</sup>lt;sup>192</sup> Construction begins on Lao section of China-Laos 500 kV power interconnection project, Belt and Road Portal (Vientiane) 28 February 2025. Access Date: 29 March 2025. https://eng.yidaiyilu.gov.cn/p/01FAKKRM.html

<sup>193</sup> 第十四届全国人民代表大会第三次会议关于2024年国民经济和社会发展计划执行情况与2025年国民经济和社会发展计划的决议,中华人民共和国中央人民政府 (Beijing) 11 March 2025. Translation provided by Google Translate. Access Date: 26 August 2025. https://www.gov.cn/yaowen/liebiao/202503/content\_7013026.htm

<sup>&</sup>lt;sup>194</sup> 两会受权发布 | 关于2024年国民经济和社会发展计划执行情况与2025年国民经济和社会发展计划草案的报告,中华人民共和国中央人民政府 (Beijing) 13 March 2025. Translation provided by Google Translate. Access Date: 26 August 2025. http://www.news.cn/20250313/781d40a20ce241e293ed5fe2bc75b011/c.html

<sup>&</sup>lt;sup>195</sup> China releases full text of NPC Standing Committee work report, National People's Congress of the People's Republic of China (Beijing) 17 March 2025. Access Date: 26 August 2025. http://en.npc.gov.cn.cdurl.cn/2025-03/17/c\_1078853.htm

digital economy, big data, autonomous driving, the low-altitude economy and aerospace to create new legislation.<sup>196</sup>

On 27 March 2025, the Ministry of Ecology and Environment announced that steel, cement and electrolytic aluminum industries will be included in the carbon trading market.<sup>197</sup> This will allow for the promotion of the green transition within major industries, which covers 60 per cent of China's total carbon emissions.

On 12 April 2025, Vice Minister of Industry and Information Technology Xin Guobin and the United Kingdom Minister of State for Trade Policy and Economic Security Douglas Alexander discussed deepening China-UK industrial cooperation for artificial intelligence, digital economy and green energy.<sup>198</sup> The talks demonstrate a step in strengthening cooperation for energy transition technologies.

On 18 April 2025, Minister of Industry and Information Technology Li Leheng and the United Arab Emirates Minister of Industry and Advanced Technology Sultan Al Jaber furthered cooperation in renewable energy, artificial intelligence, technical equipment and photovoltaic projects.<sup>199</sup> This cooperation enhances China's commitment to diversified and reliable supply chains for the energy transition.

On 29 April 2025, President Xi Jinping visited the Shanghai "Model Space" where he highlighted the importance of funding technological innovation, artificial intelligence and enhancing China's position as a global leader.<sup>200</sup>

On 11 May 2025, China's Windey Energy Technology Group, SENAI CIMATEC and Brazil's Minister of Mines and Energy Alexandre Silveira signed a Memorandum of Understanding to develop energy storage, advance wind energy and green hydrogen in Brazil, promote renewable energy in rural agricultural areas and promote renewable energy within the electrical grid.<sup>201</sup> The two-year partnership ultimately aims to advance renewable energy and low-carbon technologies.

On 13 May 2025, the National Energy Administration and Minister Silveira signed an agreement to enable Brazil to access China's ethanol market.<sup>202</sup> This partnership is focused on bioethanol and low-carbon ethanol and involves the creation of a Bilateral Working Group on Ethanol and Sustainable Fuels to develop innovative uses for ethanol. This includes its potential to replace gasoline for transportation vehicles.

<sup>&</sup>lt;sup>196</sup> Report on the Work of the Standing Committee of the National People's Congress, National People's Congress of the People's Republic of China (Beijing) 8 March 2025. Access Date: 26 August 2025.

http://en.npc.gov.cn.cdurl.cn/pdf/ReportonworkofNPCS tanding Committee 2024. docx

<sup>197</sup> Three additional industries added to carbon trading market, the State Council People's Republic of China (Beijing) 27 March 2025. Access Date: 29 March 2025. https://english.www.gov.cn/news/202503/27/content\_WS67e508a1c6d0868f4e8f13a1.html 198 辛国斌会见英国商业贸易部国务大臣道格拉斯·亚历山大,国际合作司、办公厅、工信微报 (Beijing) 12 April 2025. Translation provided by Google Translate. Access Date: 18 May 2025.

https://www.miit.gov.cn/xwfb/bldhd/art/2025/art 5cf485364cd24447aca9634f21fb57ef.html

<sup>&</sup>lt;sup>199</sup> 李乐成会见阿联酋工业与先进技术部部长苏尔坦, 国际合作司、办公厅、工信微报(Beijing) 18 April 2025. Translation provided by Google Translate. Access Date: 18 May 2025.

https://www.miit.gov.cn/xwfb/bldhd/art/2025/art\_17fce8041daa479394ba069465632cd4.html

<sup>&</sup>lt;sup>200</sup> 习近平在上海考察时强调:加快建成具有全球影响力的科技创新高地,新华社 (Shanghai) 29 April 2025. Translation provided by Google Translate. Access Date: 18 May 2025.

https://www.miit.gov.cn/xwfb/szyw/art/2025/art 559a1af7f4e84eb99867da5f5b59bf2f.html

<sup>&</sup>lt;sup>201</sup> Ministro Alexandre Silveira assina acordo com a China para impulsionar energias renováveis e tecnologias de baixo carbono, Ministério de Minas e Energia (Brasília) 12 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/ministro-alexandre-silveira-assina-acordo-com-a-china-para-impulsionar-energias-renovaveis-e-tecnologias-de-baixo-carbono

<sup>&</sup>lt;sup>202</sup> Alexandre Silveira assina acordo com a China para aumentar exportações do etanol brasileiro, Ministério de Minas e Energia (Brasília) 13 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/alexandre-silveira-assina-acordo-com-a-china-para-aumentar-exportacoes-do-etanol-brasileiro

On 13 May 2025, the National Development and Reform Commission and Minister Silveira signed an agreement to advance sustainable development in mining.<sup>203</sup> Aiming to support the energy transition, this partnership includes periodic meetings, workforce training and the future creation of the China-Brazil Mining Investment Alliance.

On 23 May 2025, Foreign Minister Wang Yi and Dutch Foreign Minister Caspar Veldkamp agreed to deepen cooperation in multiple sectors, including maintaining close communication on semiconductor technology.<sup>204</sup>

On 28 May 2025, China, the Association of Southeast Asian Nations (ASEAN), China and the Gulf Cooperation Council issued a joint statement committing to diversify and secure global supply chains for critical energy transition minerals and to enhance cooperation in renewable energy, hydrogen, ammonia and next-generation solar and wind technologies.<sup>205</sup>

On 28 May 2025, the Ministry of Commerce, the China Semiconductor Industry Association and the European Union Chamber of Commerce in China met alongside over 40 semiconductor enterprises from Europe and China to strengthen cooperation in the sector and promote stable, secure supply chains.<sup>206</sup>

On 20 June 2025, China began constructing the Ganqmod–Gashuun Sukhait cross-border railway with Mongolia, which will transport 30 million tonnes of cargo annually.<sup>207</sup> The project enhances the transport of mineral and energy resources between the countries.

On 27 June 2025, Premier Li Qiang met with Prime Minister of Senegal Ousmane Sonko in Beijing to enhance bilateral cooperation, including in agricultural product processing, industrial parks, new energy, digital economy and information security.<sup>208</sup> This reflects China's action to strengthen supply chains for energy transition technologies by expanding collaboration on new energy projects, as well as potential action toward critical minerals through planned cooperation in energy and mineral resources.

On 4 July 2025, the Ministry of Industry and Information Technology held a symposium focused on the development of the photovoltaics industry.<sup>209</sup> Issues discussed included price competition and technological innovation.

On 5 July 2025, CGN Energy International and Brazil's Minister of Mines and Energy Alexandre Silveira signed a letter of intent to cooperate on clean energy, mineral sector modernization and the sustainable use of nuclear

<sup>&</sup>lt;sup>203</sup> Silveira assina plano de ação com governo chinês para desenvolver a mineração sustentável, Ministério de Minas e Energia (Brasília) 13 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/silveira-assina-plano-de-acao-com-governo-chines-para-desenvolver-a-mineracao-sustentavel

<sup>&</sup>lt;sup>204</sup> Chinese, Dutch FMs hold talks, reach six-point consensus, Xinhua (Beijing) 23 May 2025. Access Date: 12 August 2025. https://english.www.gov.cn/news/202505/23/content\_WS682feb61c6d0868f4e8f2c57.html

<sup>&</sup>lt;sup>205</sup> Full Text: Joint Statement of the ASEAN-China-GCC Summit, Xinhua (Kuala Lumpur) 28 May 2025. Access Date: 12 August 2025. https://english.www.gov.cn/news/202505/28/content\_WS6836d4f8c6d0868f4e8f2ef8.html

<sup>&</sup>lt;sup>206</sup> Chinese, European enterprises vow to deepen semiconductor ties, The State Council People's Republic of China (Beijing) Access Date: 17 July 2025. https://english.www.gov.cn/news/202505/28/content\_WS6836add3c6d0868f4e8f2ee2.html <sup>207</sup> China and neighboring countries expand cross-broader railways for greater cooperation, The State Council People's Republic

of China (Beijing) 20 June 2025. Access Date: 12 August 2025.

https://english.www.gov.cn/news/202506/20/content\_WS6854c0a8c6d0868f4e8f37bb.html

<sup>&</sup>lt;sup>208</sup> Chinese premier meets Senegal's counterpart, The State Council People's Republic of China (Beijing) 27 June 2025. Access Date: 12 August 2025. https://english.www.gov.cn/news/202506/27/content\_WS685e6f61c6d0868f4e8f3b47.html

<sup>&</sup>lt;sup>209</sup> China to accelerate high-quality development of photovoltaics sector, The State Council People's Republic of China (Beijing) Access Date: 17 July 2025. https://english.www.gov.cn/news/202507/04/content WS68670d01c6d0868f4e8f3d10.html

resources.<sup>210</sup> The agreement includes joint research, development and innovation in energy generation, storage, digitalization and sustainable resource management.

On 12 September 2025, the National Development and Reform Commission and National Energy Administration announced a CNY250 billion plan to support the development of China's energy storage capabilities.<sup>211</sup>

On 26 September 2025, Vice Premier Ding Xuexiang and Russian Deputy Prime Minister Alexander Novak led the 22nd China-Russia Energy Cooperation Committee Meeting. <sup>212</sup> Both members agreed to deepen energy cooperation and partner on energy projects. The Vice Premier highlighted "renewable energy, hydrogen energy and energy storage" as key areas for further cooperation.

On 28 September 2025, Ministry of Industry and Information Technology announced a new plan develop China's non-ferrous metals industry.<sup>213</sup> It includes measures to support scrap metal and recycling initiatives for critical minerals.

On 2 October 2025, the Export-Import Bank of China and Brazilian National Bank for Economic and Social Development established an investment fund of approximately BRL5.7 billion.<sup>214</sup> The fund aims to promote bilateral sustainable development and its target sectors include green development and mining.

On 14 October 2025, China and Iceland released a Joint Statement on Further Strengthening Cooperation on Geothermal Energy and Green Transition.<sup>215</sup> The statement proposes Chinese and Icelandic governments and industries cooperation to further grow geothermal energy, green industries and energy transition supply chains.

On 15 October 2025, the National Development and Reform Commission unveiled a three-year plan to increase the number electric vehicles (EV) charging stations by over 20 million.<sup>216</sup> The government aims to upgrade current facilities and create EV infrastructure in rural areas.

China has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. China has taken strong action towards the combined welfare target and to support supply chains for energy transition technologies through projects for energy storage and renewable

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<sup>&</sup>lt;sup>210</sup> Silveira assina acordos com gigante chinesa para promover transição energética e cooperação no setor mineral, Ministério de Minas e Energia (Brasília) 5 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025.

https://www.gov.br/mme/pt-br/assuntos/noticias/silveira-assina-acordos-com-gigante-chinesa-para-promover-transicao-energetica-e-cooperacao-no-setor-mineral

<sup>&</sup>lt;sup>211</sup> China unveils three-year action plan to boost new-type energy storage, State Council of the People's Republic of China (Beijing) 14 September 2025. Access Date: 17 October 2025.

 $https://english.www.gov.cn/news/202509/12/content\_WS68c3ccbec6d00fa19f7a263f.html$ 

<sup>&</sup>lt;sup>212</sup> China, Russia pledge joint efforts to elevate energy cooperation, State Council of the People's Republic of China (Beijing) 26 September 2025. Access Date: 17 October 2025.

https://english.www.gov.cn/news/202509/27/content WS68d72a54c6d00ca5f9a067b4.html

<sup>&</sup>lt;sup>213</sup> China unveils plan to support growth of non-ferrous metals industry, State Council of the People's Republic of China (Beijing) 28 September 2025. Access Date: 17 October 2025.

https://english.www.gov.cn/news/202509/28/content\_WS68d92363c6d00ca5f9a06832.html

<sup>&</sup>lt;sup>214</sup> BNDES e banco chinês estruturam fundo de até US\$ 1 bilhão para investimentos no mercado de capitais, Agência BNDES de Notícias (Brasília) 2 October 2025. Translation provided by Google Translate. Access Date: 9 October 2025.

https://agenciadenoticias.bndes.gov.br/bndes/BNDES-e-banco-chines-estruturam-fundo-de-ate-US%24-1-bilhao-para-investimentos-no-mercado-de-capitais/

<sup>&</sup>lt;sup>215</sup> Full text: Joint Statement Between the People's Republic of China and Iceland on Further Strengthening Cooperation on Geothermal Energy and Green Transition, State Council of the People's Republic of China (Beijing) 14 October 2025. Access Date: 17 October 2025. https://english.www.gov.cn/news/202510/14/content\_WS68ee0aa1c6d00ca5f9a06c6b.html

<sup>&</sup>lt;sup>216</sup> China unveils three-year plan to enhance EV charging infrastructure, State Council of the People's Republic of China (Beijing) 15 October 2025. Access Date: 17 October 2025.

https://english.www.gov.cn/news/202510/15/content WS68ef9871c6d00ca5f9a06d46.html

energy including investing in a solar power plant and energy storage plant in Uzbekistan, cooperating for clean electricity between China and Laos and partnering with Brazil, cooperation with Dutch officials and European semiconductor leaders. In addition, China has invested in critical mineral transport infrastructure with Mongolia and developed critical mineral supply chain agreements with ASEAN and Brazil.

Thus, China receives a score of +1.

Analyst: Michelle Kim

### France: +1

France has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 20 November 2024, Proparco and the German Investment and Development Company announced a EUR115 million green loan to support Turkish power producer Enerjisa Enerji Üretim A.Ş. in its clean energy transition. This financing will enable Enerjisa to develop nine onshore wind power plants with a combined capacity of 750" megawatts (MW), helping to advance renewable energy capacity in the country. Proparco will provide EUR75 million for this project with EUR40 million provided by the German Investment and Development Company.

On 1 December 2024, France's Inter-Ministerial delegate for Critical Ores and Metals Benjamin Gallezot and Nigeria's Minister of Solid Minerals Dele Alake signed a Memorandum of Understanding on critical minerals.<sup>218</sup> The memorandum includes joint projects to diversify and secure the critical minerals supply chain, promote sustainable mining and decarbonize the energy sector in both countries.

On 27 December 2024, the Ministry of the Economy announced the results of a competitive tender for the construction and operation of two floating offshore wind farms in the Mediterranean.<sup>219</sup> Two winning bids were selected to develop 250 MW projects off the coast of Narbonais and Golfe de Fos.

On 14 January 2025, the Ministry of the Economy, Finance and Industrial and Digital Sovereignty and Saudi Arabia's Minister of Mineral Resources Bandar Alkhorayef and Vice Minister of Industry and Mineral Resources for Mining Affairs Khalid Al-Mudaifer signed a declaration of intent to cooperate for mineral resources development.<sup>220</sup> Formalized at the Future Minerals Forum, this collaboration will support the diversification of Saudi Arabia's critical minerals supply chains.

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<sup>&</sup>lt;sup>217</sup> En Turquie, Proparco soutient Enerjisa dans sa stratégie verte, Proparco (Paris) 20 November 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.proparco.fr/fr/actualites/en-turquie-proparco-soutient-enerjisa-dans-sa-strategie-verte

<sup>&</sup>lt;sup>218</sup> Nigeria, France sign MOU on critical minerals, Premium Times (Abuja) 1 December 2024. Access Date: 23 June 2025. https://www.premiumtimesng.com/news/top-news/758254-nigeria-france-sign-mou-on-critical-minerals.html?tztc=1 <sup>219</sup> Construction et l'exploitation de deux parcs éoliens en mer flottants : les deux lauréats de l'appel d'offres désignés, Ministère de l'Économie, des Finances et de la Souveraineté Industrielle et Numérique (Paris) 27 December 2024. Translation provided by Google Translate. Access Date: 16 April 2025. https://presse.economie.gouv.fr/construction-et-lexploitation-de-deux-parcs-eoliens-en-mer-flottants-les-deux-laureats-de-lappel-doffres-designes/

<sup>&</sup>lt;sup>220</sup> Saudi Arabia Strikes Mining Agreements with Several Governments at Fourth Future Minerals Forum, Saudi Press Agency (Riyadh) 14 January 2025. Access Date: 11 August 2025. https://www.spa.gov.sa/en/N2242671

On 16 January 2025, the Ministry of the Economy announced its selection of a winning tender to develop a biomethane production facility and reiterated its commitment to accelerating national biomethane production.<sup>221</sup> The facility will produce 36 gigawatt hours of energy per year.

On 23 January 2025, Proparco announced EUR500,000 in funding for Netis, a telecommunications company developing hydrogen-based electricity production equipment.<sup>222</sup> This funding will enable Netis to test this clean energy solution which aims to reduce the carbon footprint.

On 5 February 2025, the French Development Agency (AFD), European Union, Indonesian Ministry of Energy and Mineral Resources and the National Electricity Company launched the 2025-2030 Indonesia Energy Transition Facility, under the Just Energy Transition Partnership Framework.<sup>223</sup> This project will focus on developing and implementing renewable energy and transmission projects and ensuring appropriate public policies for the energy transition. The AFD will provide EUR4.1 million for this initiative and the EU will provide EUR10.6 million.

On 10 February 2025, the AFD and Watt for Change Foundation signed a three-year partnership agreement whereby France will provide EUR860,000 in funding to support access to energy in Benin, Mauritania and Madagascar.<sup>224</sup> The funding will be divided amongst French associations aiming to advance projects for solar pumping, clean cooking methods and other needs.

On 14 February 2025, France signed a new strategic sector contract for the "New Energy Systems" industry, covering the period 2024–2027. Under this initiative, France is partnering with industry actors to develop industries related to the energy transition, with plans to study heat recovery technologies, energy flexibility and alternative fuels will be supported by a EUR50 billion commitment.

On 2 March 2025, France initiated a public consultation on the third Multiannual Energy Program for the 2025–2035 period, which remained open until 5 April 2025. The draft plan sets ambitious targets for offshore wind and marine renewable energy development, aiming to reduce dependence on fossil fuels and transition to a decarbonized energy mix.

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<sup>&</sup>lt;sup>221</sup> Résultats de l'appel d'offres « biométhane injecté » et lancement d'une concertation sur la mise en œuvre du dispositif de certificats de production de biogaz, Ministère de l'Économie, des Finances et de la Souveraineté Industrielle et Numérique (Paris) 16 January 2025. Translation provided by Analyst. Access Date: 16 April 2025. https://presse.economie.gouv.fr/resultats-de-lappel-doffres-biomethane-injecte-et-lancement-dune-concertation-sur-la-mise-en-oeuvre-du-dispositif-de-certificats-de-production-de-biogaz/

<sup>&</sup>lt;sup>222</sup> Avec le soutien de Proparco, NETIS expérimente une solution de production d'énergie à base d'hydrogène dédiée aux acteurs télécoms en Afrique subsaharienne, Proparco (Paris) 23 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.proparco.fr/fr/actualites/avec-le-soutien-de-proparco-netis-experimente-une-solution-de-production-denergie-base

<sup>&</sup>lt;sup>223</sup> La France et l'UE renforcent leur partenariat avec l'Indonésie pour accélérer la transition énergétique, Agence Française de Développement (Paris) 5 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.afd.fr/fr/actualites/communique-de-presse/la-france-et-lue-renforcent-leur-partenariat-avec-lindonesie-pour-accelerer-la-transition-energetique

<sup>&</sup>lt;sup>224</sup> La Fondation Watt For Change et l'Agence Française de Développement (AFD) s'engagent pour financer trois projets de développement en Afrique grâce aux énergies vertes, Agence Française de Développement (Paris) 10 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.afd.fr/fr/actualites/communique-de-presse/la-fondation-watt-change-et-lagence-française-de-developpement-afd-sengagent-pour-financer-trois-projets-de-developpement-en-afrique-grace-aux-energies-vertes

Nouveaux systèmes énergétiques: un nouveau contrat stratégique de filière au service du développement d'industries clefs pour la transition, Ministère de l'Économie, des Finances et de la Souveraineté Industrielle et Numérique (Paris) 14 February 2025.
 Translation provided by Google Translate. Access Date: 16 April 2025. https://presse.economie.gouv.fr/nouveaux-systemes-energetiques-un-nouveau-contrat-strategique-de-filiere-au-service-du-developpement-dindustries-clefs-pour-la-transition/
 France defines its energy roadmap until 2035: Offshores wind and the transition to a decarbonized mix, Strategic Energy Europe (Paris) 12 March 2025. Translation provided by Google Translate. Access Date: 5 May 2025. https://strategicenergy.eu/france-defines-its-energy-roadmap-until-2035-offshore-wind-and-the-transition-to-a-decarbonized-mix/

On 12 March 2025, France joined Austria, Belgium, Finland, Germany, Italy, Poland, Spain and the Netherlands to form the Semiconductor Coalition to strengthen Europe's semiconductor ecosystem.<sup>227</sup> It commits to expanding production capacity, research and workforce to improve strategic autonomy.

On 17 March 2025, France and Japan announced joint support for a heavy rare earth refining project in Lacq, France, through the participation of Iwatani Corporation and the Japan Organization for Metals and Energy Security.<sup>228</sup> The facility will produce dysprosium and terbium, meeting an estimated 20 per cent of Japan's future demand. Japan committed approximately EUR100 million and France EUR106 million in funding, with both governments also pledging to cooperate on securing raw material supply from producing countries.

On 15 April 2025, France published an updated version of its National Hydrogen Strategy.<sup>229</sup> New measures include a EUR4 billion support mechanism for low-carbon hydrogen production, government support for the development of hydrogen technologies across the supply chain, support for the deployment of hydrogenpowered vehicles and support for studies on synthetic fuel. France also announced that it will support two energy and industry sector decarbonization projects and a value chain development project aimed at producing low-carbon hydrogen.

On 2 May 2025, Proparco, the German Investment and Development Company and Standard Chartered announced USD60 million in joint financing for Indonesia's Saguling floating solar photovoltaic power plant under the Just Energy Transition Partnership.<sup>230</sup> Once complete, the plant will support the energy transition by decreased Indonesia's carbon emissions by 63,100 tonnes per year and increasing solar electricity generation in the country by 13 per cent.

On 12 May 2025, the AFD Group and Office Chérifien des Phosphates (OCP) Group announced a EUR350 million financing agreement to support the OCP Group in transitioning towards 100 per cent renewable energy by 2027.<sup>231</sup> Additionally, this funding will enable the group to produce and promote decarbonized fertilizers, develop green hydrogen and green ammonia and increase clean energy and non-conventional water production. This partnership aims to support Morocco's low-carbon transition and promote sustainable agriculture in Africa.

On 5 June 2025, President Emmanuel Macron met with Brazilian Minister of Mines and Energy Alexandre Silveira to expand on cooperation in clean energy, critical minerals and the energy transition.<sup>232</sup> The meeting aimed to reinforce the countries' joint commitment to sustainable development and investment in low-carbon technologies.

On 6 June 2025, the Ministry of Economy, Finance and Industrial and Digital Sovereignty signed a declaration of intent with the Brazilian Ministry of Mines and Energy to deepen bilateral cooperation on low-carbon

<sup>&</sup>lt;sup>227</sup> Strengthening Europe's semiconductor future, European Commission (Brussels) 12 March 2025. Access Date: 10 October 2025. https://digital-strategy.ec.europa.eu/en/news/strengthening-europes-semiconductor-future

<sup>&</sup>lt;sup>228</sup> The Japanese and French Governments Work Together to Support a Heavy Rare Earth Project in France, Ministry of Economy, Trade and Industry (Tokyo) 17 March 2025. Access Date: 11 July 2025. https://www.meti.go.jp/english/press/2025/0317 002.html 229 Stratégie nationale hydrogène (SNH II): Le Gouvernement publie sa mise à jour, Ministère de l'Économie, des Finances et de la Souveraineté Industrielle et Numérique (Paris) 15 April 2025. Translation provided by Google Translate. Access Date: 16 April  $2025.\ https://presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-sa-mise-a-jour/presse.economie.gouv.fr/strategie-nationale-hydrogene-snh-ii-le-gouvernement-publie-gouvernement-p$ <sup>230</sup> Le premier projet solaire du JETP Indonésien mobilise 60 millions de dollars US, Proparco (Paris) 2 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.proparco.fr/fr/actualites/le-premier-projet-solaire-dujetp-indonesien-mobilise-60-millions-de-dollars-us

<sup>&</sup>lt;sup>231</sup> OCP Group and AFD Group formalize their strategic partnership in support of Morocco's low-carbon transition and the development of sustainable and inclusive agriculture, OCP Group (Casablanca) 12 May 2025. Access Date: 23 June 2025. https://www.ocpgroup.ma/press-release-article/ocp-group-and-afd-group-formalize-their-strategic-partnership-support <sup>232</sup> Brasil reforça parceria estratégica com a França nas áreas de energia, mineração e transição energética, Ministério de Minas e Energia (Brasília) 5 June 2025. Translation provided by Google Translate. Access Date: 4 July 2025. https://www.gov.br/mme/ptbr/assuntos/noticias/brasil-reforca-parceria-estrategica-com-a-franca-nas-areas-de-energia-mineracao-e-transicao-energetica

hydrogen.<sup>233</sup> The partnership supports green reindustrialization and technological innovation through the exchange of information.

On 10 June 2025, Minister for Industry and Energy Marc Ferracci and Minister of Economy Eric Lombard signed the second strategic contract for the nuclear sector.<sup>234</sup> Covering the period from 2025 to 2028, the contract outlines 17 projects to boost industrial performance, invest in fuel cycle plants and encourage supply chain localization.

On 17 June 2025, the G7, including France, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>235</sup> It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 27 June 2025, the AFD, Banque des Territoires and Ecological Transition Agency signed an agreement to strengthen cooperation on energy and ecological transitions in the Réunion region.<sup>236</sup> The partnership prioritizes sustainable mobility, energy-efficient buildings, renewable electricity diversification, climate adaptation and circular economy initiatives.

On 28 June 2025, French Minister Delegate for Foreign Trade and French Nationals Abroad Laurent Saint-Martin signed a Memorandum of Understanding with Argentina's Mining Secretary Luis Lucero aimed at developing critical minerals including lithium.<sup>237</sup> The bilateral agreement aims to promote financing and investment for mining projects.

On 30 June 2025, Minister of Foreign Trade Laurent Saint Martin and Argentinian Secretary of Mining Luis Lucero signed a joint declaration of intent on critical minerals to advance joint mining and industrial projects.<sup>238</sup> The declaration aims to promote sustainable mining activities and build resilient, diversified supply chains to support the energy transition.

On 11 July 2025, Minister of Industry and Energy Marc Ferracci launched a call for projects to produce emission-free vehicles and their components in France.<sup>239</sup> The objective of the call for projects is to encourage investment in the automotive sector.

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<sup>&</sup>lt;sup>233</sup> MME assina acordo com a França para ampliar uso de hidrogênio de baixa emissão de carbono, Ministério de Minas e Energia (Brasília) 6 June 2025. Translation provided by Google Translate. Access Date: 23 July 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/mme-assina-acordo-com-a-franca-para-ampliar-uso-de-hidrogenio-de-baixa-emissao-de-carbono <sup>234</sup> Discours de Marc Ferracci – signature du contrat stratégique de filière nucléaire, Ministère de l'Économie, des Finances et de la Souveraineté industrielle et numérique & Ministère de la Transition écologique (Paris) 10 June 2025. Translation provided by analyst. Access Date: 4 July 2025. https://presse.economie.gouv.fr/discours-de-marc-ferracci-signature-du-contrat-strategique-de-filiere-nucleaire-palais-des-congres-de-massy-le-10-juin-2025/

<sup>&</sup>lt;sup>235</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>236</sup> L'ADEME, l'AFD et la Banque des Territoires partenaires pour renforcer leur soutien aux transitions énergétiques et écologiques à La Réunion, Banque des Territoires (Paris) 27 June 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://www.afd.fr/fr/commmuniques-de-presse/lademe-lafd-et-la-banque-des-territoires-partenaires-pour-renforcer-leur

<sup>&</sup>lt;sup>237</sup> France and Argentina sign agreement on critical minerals, Buenos Aires Times (Buenos Aires) 28 June 2025. Access Date: 12 August 2025. https://www.batimes.com.ar/news/argentina/argentina-signs-agreement-with-france-on-critical-minerals.phtml <sup>238</sup> Economía firmó declaración de intención con Francia por minerales críticos, Ministerio de Economía (Buenos Aires) 30 June 2025. Translation provided by Google Translate. Access Date: 6 July 2025. https://www.argentina.gob.ar/noticias/economia-firmo-declaracion-de-intencion-con-francia-por-minerales-criticos

<sup>&</sup>lt;sup>239</sup> France 2030 : lancement des appels à projets « Soutien aux projets d'investissements pour produire en France les véhicules routiers de demain et leurs composants » et « CORAM 2025 », Ministère de l'Économie, des Finances et de la Souveraineté industrielle et numérique (Paris) 11 July 2025. Translation provided by Google Translate. Access Date: 24 August 2025. https://presse.economie.gouv.fr/france-2030-lancement-des-appels-a-projets-soutien-aux-projets-dinvestissements-pour-produire-en-france-les-vehicules-routiers-de-demain-et-leurs-composants-et-coram-2025/

On 29 August 2025, President Emmanuel Macron and German Chancellor Frederich Merz held a joint press conference, pledging to harmonize their energy policies and further coordinate their electricity grids.<sup>240</sup> The conference also established the Franco-German Economic Agenda, which outlines further collaboration related to semiconductors and clean energy supply chains.

On 8 September 2025, the AFD, European Union and Ethiopia signed a EUR120 million loan and grant agreement to support Ethiopia's green and digital transition.<sup>241</sup> The funding will go towards renewable generation, electricity infrastructure and training schemes.

France has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. France has taken strong action towards the combined welfare target through the New Energy Systems contract, funding for access to energy projects in Benin, Mauritania and Madagascar and new measures announced via the updated National Hydrogen Strategy. It has also supported supply chains for energy transition technologies and critical minerals through its partnership with Nigeria to diversify critical minerals, funding for Indonesia's clean energy transition and solar plant, funding for Netis and green loan to Energisa.

Thus, France receives a score of +1.

Analyst: Eszter Réti

## Germany: +1

Germany has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 20 November 2024, the German Investment and Development Company and France's Proparco announced a EUR115 million green loan to support Turkish power producer Enerjisa Enerji Üretim A.Ş. in its clean energy transition.<sup>242</sup> This financing will enable Enerjisa "to develop nine onshore wind power plants with a combined capacity of 750" megawatts (MW), helping to advance renewable energy capacity in the country. Proparco will provide EUR75 million for this project with EUR40 million provided by the German Investment and Development Company.

On 28 November 2025, Germany pledged EUR200 million in loans to South Africa to finance the energy transition.<sup>243</sup> The funds will be used to support the expansion of solar and wind power in South Africa by increasing the demand for skilled workers.

<sup>241</sup> European Union, France and Ethiopia Sign €120 Million Flagship Agreement to Modernise Power and Digital Infrastructure, Agence Française de Développement (Paris) 8 September 2025. Access Date: 18 October 2025. https://www.afd.fr/en/press-releases/european-union-france-and-ethiopia-sign-eu120-million-flagship-agreement-modernise

<sup>&</sup>lt;sup>240</sup> Freiheit, Sicherheit und Wohlstand gemeinsam sichern, Die Bundesregierung (Berlin) 29 August 2025. Translation provided by Google Translate. Access Date: 12 October 2025. https://www.bundesregierung.de/breg-de/aktuelles/pressekonferenz-merz-macron-toulon-2382296

<sup>&</sup>lt;sup>242</sup> En Turquie, Proparco soutient Enerjisa dans sa stratégie verte, Proparco (Paris) 20 November 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.proparco.fr/fr/actualites/en-turquie-proparco-soutient-enerjisa-dans-sa-strategie-verte

<sup>&</sup>lt;sup>243</sup> Germany remains important partner for South Africa's socially just energy transition, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Berlin) 28 November 2024. Access Date: 7 July 2025. https://www.bmz.de/en/news/archive-press-releases/germany-supports-south-africas-socially-just-energy-transition-239574

On 4 December 2024, Federal Cabinet adopted the National Circular Economy Strategy which aims to secure raw materials, such as critical minerals, supply chains.<sup>244</sup> One tactic is to increase recycling capacity, which would enable the creation of "secondary raw materials."

On 11 December 2024, the Federal Cabinet approved amendments to the 2023 Renewable Energy Sources Act to increase flexibility for use and funding for biogas plants.<sup>245</sup> This aims to ensure the full potential of bioenergy.

On 20 December 2024, the Ministry for Economic Affairs and Climate Protection announced the provision of EUR37.875 million to Berlin and Lower Saxony to support onshore and offshore wind energy infrastructure projects.<sup>246</sup>

On 2 January 2025, the government-owned KfW Development Bank, announced a EUR100 million loan to Chile's economic development agency to bolster Chile's green hydrogen economy, on behalf of the Ministry for Economic Affairs and Climate Action.<sup>247</sup> This funding will be used for the production and use of green hydrogen across Chile's entire value chain. This loan is part of the European Global Gateway Renewable Hydrogen Funding platform which finances public and private investments for renewable hydrogen.

On 21 January 2025, Germany, Italy, Austria, Algeria and Tunisia signed a Joint Declaration of Intent to develop the Southern Hydrogen Corridor.<sup>248</sup> This initiative aims to establish a 3,500-4,000-kilometre pipeline transporting renewable hydrogen from North Africa to Europe and is expected to deliver up to 163 terawatthours of hydrogen annually to Europe.

On 3 February 2025, Minister of Finance Jörg Kukies met with Saudi Minister of Energy Abdulaziz bin Salman to discuss cooperation in the energy sector and particularly clean hydrogen.<sup>249</sup> Following the meeting, the Ministers witnessed the signing of the "Saudi-German Green Hydrogen Bridge" Memorandum of Understanding between ACWA Power and SEFE, under which the companies will jointly develop projects for the development and export of green hydrogen from Saudi Arabia to Europe.

On 12 February 2025, Germany announced joint initiatives with the African Development Bank to accelerate energy access across Africa.<sup>250</sup> The initiatives include increasing funding for renewable energy projects and supporting regional power integration programs.

<sup>245</sup> Die Bundesregierung hat heute die Anderungen energierechtlicher Vorschriften beschlossen, Bundesministerium für Wirtschaft und Energie (Berlin) 11 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2024/12/20241211-aenderungen-energierechtlicher-vorschriften.html

<sup>249</sup> Saudi Energy Minister and German Finance Minister Witness Signing of the 'Saudi-German Green Hydrogen Bridge' MoU between ACWA Power and SEFE, Saudi Press Agency (Riyadh) 3 February 2025. Access Date: 20 May 2025. https://www.spa.gov.sa/en/N2254675

 <sup>&</sup>lt;sup>244</sup> Federal Cabinet adopts National Circular Economy Strategy, Federal Ministry for the Environment, Nature Conservation,
 Nuclear Safety and Consumer Protection (Berlin) 4 December 2024. Access Date: 26 August 2025.
 https://www.bundesumweltministerium.de/en/pressrelease/federal-cabinet-adopts-national-circular-economy-strategy
 <sup>245</sup> Die Bundesregierung hat heute die Änderungen energierechtlicher Vorschriften beschlossen, Bundesministerium für

<sup>&</sup>lt;sup>246</sup> Gemeinschaftsaufgabe Regionale Wirtschaftsförderung: BMWK sichert Finanzierung wichtiger Investitionsvorhaben in Berlin und Niedersachsen, Bundesministerium für Wirtschaft und Energie (Berlin) 20 December 2024. Translation provided by Google Translate. Access Date: 7 July 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2024/12/20241220-regionale-wirtschaftsfoerderung-berlin-und-niedersachsen.html

<sup>&</sup>lt;sup>247</sup> Leveraging extraordinary potential for green hydrogen: KfW supports Chile in mobilising private investment, KfW (Frankfurt) 2 January 2025. Access Date: 14 August 2025. https://www.kfw.de/About-KfW/Newsroom/Latest-News/Pressemitteilungen-Details\_833344.html

<sup>&</sup>lt;sup>248</sup> Joint political declaration of intent to develop the Southern Hydrogen Corridor, Bundesministerium für Wirtschaft und Energie (Rome) 21 January 2025. Access Date: 16 April 2025. https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2025/01/20250121-joint-political-declaration-of-intent-develop-southern-hydrogen-corridor.html

<sup>&</sup>lt;sup>250</sup> African Development Bank and Germany announce major initiatives on energy access and private sector development, African Development Bank (Abidjan) 12 February 2025. Access Date: 21 May 2025. https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-and-germany-announce-major-initiatives-energy-access-private-sector-development-80896

On 13 February 2025, the Ministry for Economic Cooperation and Development announced funding to support green hydrogen production in Morocco, through its PtX Development Fund.<sup>251</sup> PtX will provide a EUR30 million grant to support the construction of a green hydrogen plant which is expected to reduce carbon emissions by 300,000 tonnes per year by producing 100,000 tonnes of green ammonia to be used for climate-friendly fertilizers.

On 19 February 2025, Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Climate Action Stefan Wenzel met with Japanese State Minister of Economy, Trade and Industry Ogushi Masaki to exchange views on Japan-Germany energy cooperation. The discussion addressed the strengthening of the supply chain for clean energy technologies, renewable energy collaboration and decarbonization of the liquified natural gas value chain.

On 12 March 2025, Germany joined Austria, Belgium, Finland, France, Italy, Poland, Spain and the Netherlands to form the Semiconductor Coalition to strengthen Europe's semiconductor ecosystem.<sup>252</sup> It commits to expanding production capacity, research and workforce to improve strategic autonomy.

On 25 March 2025, the Ministry for Economic Affairs and Energy announced that the KfW Development Group is providing EUR172 million in financing as the first installment for the construction of a hydrogen core network.<sup>253</sup> Once complete, the network will extend 9,040 kilometres and support a climate-neutral transition.

On 11 April 2025, the Ministry for Economic Affairs and Climate Protection announced the opening of a green hydrogen plant to produce carbon dioxide-free iron in Namibia.<sup>254</sup> The plant will reduce 20,000 tonnes of carbon emissions per year and produce 15,000 tonnes of green iron per year. Germany provided EUR13 million for this project.

On 29 April 2025, DEG, the German Investment and Development Company, Proparco and Standard Charter announced USD60 million in funding for ACWA Power and Indonesia Power Renewables' floating solar photovoltaic project.<sup>255</sup> As the first solar initiative under the Just Energy Transition Partnership, it will reduce Indonesia's annual carbon dioxide levels and boost solar power capacity, supporting diversified supply chains and sustainable development.

On 2 May 2025, the German Investment and Development Company, Proparco and Standard Chartered announced USD60 million in joint financing for Indonesia's Saguling floating solar photovoltaic power plant under the Just Energy Transition Partnership.<sup>256</sup> Once complete, the plant will support the energy transition by

<sup>&</sup>lt;sup>251</sup> Deutschland unterstützt Einstieg in grüne Wasserstoffproduktion in Marokko mit Investition in nachhaltige Düngerherstellung, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Berlin) 13 February 2025. Translation provided by Google Translate. Access Date: 16 April 2025. https://www.bmz.de/de/aktuelles/archiv-aktuelle-meldungen/einstieg-gruene-wasserstoffproduktion-marokko-247346

<sup>&</sup>lt;sup>252</sup> Strengthening Europe's semiconductor future, European Commission (Brussels) 12 March 2025. Access Date: 10 October 2025. https://digital-strategy.ec.europa.eu/en/news/strengthening-europes-semiconductor-future

<sup>&</sup>lt;sup>253</sup> Finanzierung des Wasserstoff-Kernnetzes: Die erste Auszahlung an die Wasserstoff-Kernnetzbetreiber aus dem Amortisationskonto ist erfolgt, Bundesministerium für Wirtschaft und Energie (Berlin) 23 March 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/ DE/Pressemitteilungen/2025/20250324-finanzierung-des-wasserstoff-kernnetzes-erste-auszahlung-ist-erfolgt.html <sup>254</sup> Vom Bundesministerium für Wirtschaft und Klimaschutz gefördertes Wasserstoffprojekt Oshivela/Hylron in Namibia eröffnet, Bundesministerium für Wirtschaft und Energie (Berlin) 11 April 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/20250411-vombundesministerium-fuer-wirtschaft-und-klimaschutz-gefoerdertes-wasserstoffprojekt-oshivela-hylronin-namibia-eroeffnet.html <sup>255</sup> DEG finanziert erstmals schwimmendes Solarvorhaben in Indonesien, DEG (Cologne) 29 April 2025. Translation provided by Google Translate. Access Date: 14 August 2025. https://www.deginvest.de/Newsroom/News/News-Details\_847553.html <sup>256</sup> Le premier projet solaire du JETP Indonésien mobilise 60 millions de dollars US, Proparco (Paris) 2 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.proparco.fr/fr/actualites/le-premier-projet-solaire-dujetp-indonesien-mobilise-60-millions-de-dollars-us

decreased Indonesia's carbon emissions by 63,100 tonnes per year and increasing solar electricity generation in the country by 13 per cent.

On 7 May 2025, KfW announced EUR27 million in financing to Siemens, a German electronics company and Pakistan's National Grid Company to build a transformer substation in Pakistan's Gharo Wind Corridor.<sup>257</sup> The substation will enable the energy created from the wind corridor to be fed into power grids.

On 12 June 2025, Minister of Trade, Industry and Competition Parks Tau gave an address at the Green Hydrogen summit held in Cape Town.<sup>258</sup> Minister Tau announced EUR23 million from the German government's KfW development bank to be used in funding catalytic green hydrogen projects.

On 17 June 2025, the G7, including Germany, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>259</sup> It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 24 June 2025, the Federal Cabinet approved a legislative draft to implement elements of the EU Renewable Energy Directive and streamline approval procedures for onshore wind energy projects. <sup>260</sup> The draft introduces permit simplifications in designated wind energy areas, replacing temporary measures under the EU Emergency Regulation which are set to expire. It also amends the Federal Immission Control Act, Water Resources Act and Wind Energy Area Requirements Act to accelerate approvals.

On 30 June 2025, Indonesia's Ministry of Finance and Germany's KfW Development Bank announced the signing of EUR200 million loan agreement to bolster Indonesia's Affordable and Sustainable Energy Transition Program (ASET).<sup>261</sup> These funds will help Indonesia achieve ASET's two pillars: the improvement of policy and regulatory frameworks for a clean energy transition, and the strengthening of the financial sustainability and governance of the energy sector.

On 3 July 2025, Germany announced the allocation of EUR400 million over the next four years to support climate-friendly shipping and ports.<sup>262</sup> Through the Climate and Transformation Fund, this funding aims to modernize Germany's ports and help develop them into energy hubs, enhancing the sustainability and resiliency of maritime transport.

On 10 July 2025, the European Investment Bank, German Corporation for International Cooperation and United Nations Development Programme announced a multi-part initiative to support the energy, transport

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<sup>&</sup>lt;sup>257</sup> Saubere Energie für Pakistan mit deutscher Spitzentechnologie, KfW (Frankfurt) 10 July 2025. Translation provided by Google Translate. Access Date: 14 August 2025. https://www.kfw-entwicklungsbank.de/%C3%9Cber-uns/News/News-Details 857280.html

<sup>&</sup>lt;sup>258</sup> Trade, Industry and Competition on implementation of Green Hydrogen Commercialisation Strategy, South African Government (Cape Town) 12 July 2025. Access Date: 11 August 2025. https://www.gov.za/news/media-statements/trade-industry-and-competition-implementation-green-hydrogen

<sup>&</sup>lt;sup>259</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>260</sup> Kabinett beschließt Formulierungshilfe für die Fraktionen CDU/CSU und SPD zur besseren Flächen-Steuerung und erleichterten Genehmigung von Windenergieanlangen an Land, Bundesministerium für Wirtschaft und Energie (Berlin) 24 June 2025. Translation provided by Google Translate. Access Date: 7 July 2025.

https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/20250624-kabinett-beschliesstformulierungshilfe-fuer-die-fraktionen-cdu-csu-und-spd.html

<sup>&</sup>lt;sup>261</sup> Germany and Indonesia sign EUR 200 million agreement to advance the Just Energy Transition, Embassy of the Federal Republic of Germany Jakarta (Jakarta) 30 June 2025. Access Date: 14 August 2025. https://jakarta.diplo.de/id-en/jetp-juni-2725664

<sup>&</sup>lt;sup>262</sup> 400 Millionen Euro für klimafreundliche Schifffahrt und Häfen, Bundesministerium für Wirtschaft und Klimaschutz (Berlin) 3 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/07/20250703-zitat-400-millionen-euro-fuer-klimafreundliche-schifffahrt-und-haefen.html

and business sectors in Ukraine.<sup>263</sup> This includes a EUR20 million grant through Germany's International Climate Initiative fund to integrate its Renewable Energy Solutions programme in Ukrainian cities. In partnership with the EIB, this programme will support the implementation of solar panels, batteries and heat pumps in public buildings. Additionally, Germany will allocate EUR19.6 million through the fund's Just Transition and Just Resilience for Ukraine Programme to address the socio-economic impacts of the transition away from coal.

On 11 July 2025, the Federal Council approved legislation to implement RED III (EU Directive 2023/2413), enacting faster approval procedures for renewable energy projects including wind, solar, geothermal and heat-pump technologies.<sup>264</sup> The law seeks to facilitate the expansion of renewable energies.

On 17 July 2025, Germany and the United Kingdom signed the Treaty on Friendship and Bilateral Cooperation, agreeing to implement 17 joint projects under its Implementation Plan. Of these, two focus on advancing energy cooperation. The North Sea Energy Infrastructure Project commits both countries to develop offshore hybrid interconnection between the UK and Germany by the mid-2030s and the Strategic Science and Technology Partnership outlines collaboration on developing technologies such as quantum, AI, semiconductors, advanced connectivity and sustainable energy solutions.

On 22 July 2025, the Ministry for Economic Affairs and Energy announced EUR103.6 million in financing for two lithium projects in Rhineland-Palatinate and Hesse.<sup>266</sup> The projects will extract lithium from the area and process it for commercial use.

On 26 August 2025, Minister for Economic Affairs and Energy Katherina Reiche and Canada's Minister of Energy and Natural Resources Timothy Hodgson signed a joint declaration to deepen cooperation on critical mineral supply chains.<sup>267</sup> The agreement includes collaboration on processing technologies and the signing of three memorandums of understanding between relevant German and Canadian companies.

On 29 August 2025, Chancellor Frederich Merz and France's President Emmanuel Macron held a joint press conference, pledging to harmonize their energy policies and further coordinate their electricity grids.<sup>268</sup> The conference also established the Franco-German Economic Agenda, which outlines further collaboration related to semiconductors and clean energy supply chains.

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<sup>&</sup>lt;sup>263</sup> EU expands support for Ukraine with new financing of almost €600 million for energy, transport and business resilience, European Investment Bank (Luxembourg) 10 July 2025. Access Date: 26 August 2025. https://www.eib.org/en/press/all/2025-282-eu-expands-support-for-ukraine-with-new-financing-of-almost-eur600-million-for-energy-transport-and-business-resilience <sup>264</sup> Bundesrat beschließt Gesetz zur Umsetzung der RED III und ebnet schnelleren Genehmigungsverfahren bei erneuerbaren Energien den Weg, Bundesministerium für Wirtschaft und Klimaschutz (Berlin) 11 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025.

https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/07/20250711-bundesrat-beschliesstgesetz-umsetzung-red-iii-schnellere-genehmigungsverfahren-erneuerbare-energien.html

<sup>&</sup>lt;sup>265</sup> Friendship and Bilateral Cooperation Treaty: the 17 projects the UK and Germany will deliver together, British Embassy Berlin (Berlin) 17 July 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/friendship-and-bilateral-cooperation-treaty-the-17-projects-the-uk-and-germany-will-deliver-together

<sup>&</sup>lt;sup>266</sup> Der Bund unterstützt gemeinsam mit Rheinland-Pflaz und Hessen zwei strategisch wichtige Investitionsvorhaben zur Lithiumgewinnung in Deutschland, Bundesministerium für Wirtschaft und Energie (Berlin) 22 July 2025. Translation provided by Google Translate. Access Date: 14 August 2025.

https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/07/20250722-bund-unterstuetzt-mit-rheinland-pfalz-und-hessen-zwei-investitionsvorhaben-zur-lithiumgewinnung-in-deutschland.html

<sup>&</sup>lt;sup>267</sup> Versorgungssicherheit bei Kritischen Rohstoffen: Deutschland und Kanada vertiefen Zusammenarbeit, Bundesministerium für Wirtschaft und Energie (Berlin) 26 August 2025. Translation provided by Google Translate. Access Date: 12 October 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/08/20250826-versorgungssicherheitbei-kritischen-rohstoffen-deutschland-und-kanada-vertiefen-zusammenarbeit.html

<sup>&</sup>lt;sup>268</sup> Freiheit, Sicherheit und Wohlstand gemeinsam sichern, Die Bundesregierung (Berlin) 29 August 2025. Translation provided by Google Translate. Access Date: 12 October 2025. https://www.bundesregierung.de/breg-de/aktuelles/pressekonferenz-merz-macron-toulon-2382296

On 8 September 2025, the European Union and African Union launched two flagship programs aimed at accelerating the African Union's just transition, namely the Continental Energy Program in Africa funded by the European Union and Engaging for Africa's Green Energy Transition funded by Germany's Ministry for Economic Cooperation and Development.<sup>269</sup>

On 10 September 2025, the Federal Cabinet approved the Standortfördergesetz Act.<sup>270</sup> The Act aims to incentivize private investment in renewable energy and its associated infrastructure through targeted tax incentives and cutting financial bureaucracy.

On 2 October 2025, a law to establish a EUR500 billion special fund for climate neutrality and infrastructure projects was published in the Federal Law Gazette.<sup>271</sup> EUR100 billion of the funds will be directly transferred to Germany's climate transformation fund, which financially supports clean energy projects and their related infrastructures.

Germany has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Germany has taken steps to support reliable, diversified, sustainable and responsible supply chains for energy transitions by strengthening supply chains for renewable hydrogen and advancing cross-border energy infrastructure through the North Sea Energy Infrastructure Project. Additionally, under the Strategic Science and Technology Partnership with the UK, Germany has agreed to collaborate on developing advanced technologies, including semiconductors, sustainable energy solutions and battery technologies, aimed at enhancing supply chain resilience. It has also taken strong action towards strengthening its supply chains in critical minerals through a project for lithium.

Thus, Germany receives a score of +1.

Analyst: Henri Hopkins

### India: +1

India has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and energy transition technologies.

On 6 December 2024, India's International Solar Alliance and the United States Agency for International Development signed a Memorandum of Understanding (MoU) to advance grid interconnection.<sup>272</sup> This partnership seeks to expand the use of renewable energy and strengthen energy interconnections across regions, supporting the development of a unified grid. These initiatives will enhance the sustainability and reliability of energy transition technologies.

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<sup>&</sup>lt;sup>269</sup> Africa Climate Summit: Major energy programmes launched as African Union and European Union celebrate 25 years of partnership, Delegation of the European Union to the African Union (Addis Ababa) 10 September 2025. Access Date: 30 September 2025. https://www.eeas.europa.eu/delegations/african-union-au/africa-climate-summit-major-energy-programmes-launched-african-union-and-european-union-celebrate-25\_en?s=43

<sup>&</sup>lt;sup>270</sup> Bundesregierung beschließt Standortfördergesetz: Impulse für mehr private Investitionen und neue Arbeitsplätze, Bundesministerium der Finanzen (Berlin) 10 September 2025. Access Date: Translation provided by Google Translate. 12 October 2025. https://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2025/09/2025-09-10standortfoerdergesetz-beschlossen.html

 <sup>271</sup> Investitionsoffensive für das ganze Land, Die Bundesregierung (Berlin) 2 October 2025. Translation provided by Google Translate. Access Date: 12 October 2025. https://www.bundesregierung.de/breg-de/aktuelles/sondervermoegen-2356240
 272 The United States Agency for International Development and International Solar Alliance Sign MOU to Advance Grid Interconnection, U.S. Embassy and Consulates in India (New Delhi) 6 December 2024. Access Date: 29 March 2025. https://in.usembassy.gov/the-united-states-agency-for-international-development-and-international-solar-alliance-sign-mou-to-advance-grid-interconnection

On 20 January 2025, the Ministry of Mines and the Government of Odisha hosted the third National Mines Ministers' Conference at Konark, Odisha.<sup>273</sup> The conference focused on fostering collaboration to ensure efficient, safe and eco-friendly mining operations countrywide aligning with the 2030 Sustainable Development Goals.

On 29 January 2025, the Cabinet approved the launch of the National Critical Mineral Mission with an expenditure of INR163 billion and an expected investment of INR18 billion by Public Sector Undertakings, for a period of seven years from 2024-25 to 2030-31.<sup>274</sup> The mission aims to build a resilient value chain for critical mineral resources vital to green technologies, encompassing all stages including exploration, processing and recycling. This will enhance the sustainability and responsibility of supply chains for critical minerals.

On 1 February 2025, Minister of Finance Nirmala Sitharaman proposed amendments to the Atomic Energy Act and the Civil Liability for Nuclear Damage Act to encourage private and foreign investment in India's nuclear sector.<sup>275</sup> These legislative changes aim to facilitate the development of small modular nuclear reactors, contributing to the diversification and reliability of India's energy supply chains.

On 1 February 2025, the Ministry of Finance announced a National Manufacturing Mission to boost domestic manufacturing including Clean Tech sectors such as solar photovoltaic cells, electric vehicle batteries, electrolyzers, wind turbines and grid-scale batteries.<sup>276</sup> The Mission aims to improve domestic value addition, support technology access and strengthen the ecosystem for key renewable energy components.

On 4 February 2025, Minister of Coal and Mines Kishan Reddy met with Saudi Arabia's Minister of Industry and Mineral Resources Bandar Ibrahim Alkhorayef to discuss cooperation for critical minerals.<sup>277</sup> The ministers discussed the need for reliable critical minerals supply chains and discussed potential cooperation for critical minerals to support the energy transition.

On 13 February 2025, Minister of Petroleum and Natural Gas Hardeep Singh Puri announced several MoUs signed by India to advance energy security and sustainable and diversified supply chains for energy and the oil and gas sector.<sup>278</sup> These include an MoU between India's International Oil and Natural Gas Corporation and Petrobras to advance oil and gas projects focused on low-carbon solutions and diversifying the sector in Brazil, India and other developing countries and an MoU for "hydrocarbon exploration in India's deep and ultra-deep offshore basins."

On 13 February 2025, United States President Donald Trump hosted Prime Minister Narendra Modi for an Official Working Visit in Washington D.C. where a Strategic Mineral Recovery initiative was launched. The initiative is a new US-India cooperative program to recover and process critical minerals including lithium, cobalt and rare earths from heavy industries like aluminum, coal mining and oil and gas.<sup>279</sup> President Trump

<sup>&</sup>lt;sup>273</sup> 3rd National Mines Ministers' Conference held at Konark, Odisha today, Press Information Bureau (New Delhi) 20 January 2025. Access Date: 29 March 2025. https://pib.gov.in/PressReleaselframePage.aspx?PRID=2094308

<sup>&</sup>lt;sup>274</sup> Cabinet approves launch of National Mineral Exploration Mission, Press Information Bureau (New Delhi) 29 January 2025. Access Date: 29 March 2025. https://pib.gov.in/PressReleaselframePage.aspx?PRID=2097309

<sup>&</sup>lt;sup>275</sup> Union Budget 2025 calls for 'active private partnership' in guarded nuclear sector, Hindustan Times (New Delhi) 1 February 2025. Access Date: 19 May 2025. https://www.hindustantimes.com/business/union-budget-2025-calls-for-active-private-partnership-in-guarded-nuclear-sector-101738405796088.html

<sup>&</sup>lt;sup>276</sup> "National Manufacturing Mission" to Cover Small, Medium and Large Industries for Furthering "Make In India" Announced in Union Budget 2025-26, Ministry of Finance (New Delhi) 1 February 2025. Access Date: 12 July 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2098392

 <sup>277</sup> Union Minister Shri G. Kishan Reddy Meets Saudi Minister to Strengthen Cooperation in Critical Minerals Sector, Ministry of Mines (New Delhi) 4 February 2025. Access Date: 23 June 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2099793
 278 India Strengthens Global Energy Partnerships at India Energy Week 2025, Ministry of Petroleum and Natural Gas (New Delhi)
 13 February 2025. Access Date: 23 June 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2102887

<sup>&</sup>lt;sup>279</sup> India-U.S. Bilateral Relations Brief, Embassy of India, Washington, D.C. (Washington D.C.) March 2025. Access Date: 19 May 2025. https://indianembassyusa.gov.in/pdf/menu/Brief\_Bilateral\_March\_2025.pdf

and Prime Minister Modi also re-committed to the US-India Energy Security Partnership, including in oil, gas and civil nuclear energy.

On 15 February 2025, Minister of State for Coal and Mines Satish Chandra Dubey met with Sri Lanka's Minister of Industry and Entrepreneurship Development Sunil Handunnetti to discuss the finalization of a MoU on cooperation in the mineral resources. Their discussion included Sri Lanka's graphite and beach sand mineral resources, India's National Critical Mineral Mission and the energy transition.

On 19 February 2025, Minister Reddy met with the Governor of Caramarca, Argentina Raúl Alejandro Jalil in New Delhi to discuss lithium and mineral cooperation.<sup>281</sup> During the meeting, an MoU was signed between the Mineral Exploration and Consultancy Limited and the Catamarca provincial government to accelerate lithium exploration projects, enhance resource security and create new opportunities for Indian companies in the Latin American mining sector.

On 25 March 2025, the fifth India–Africa Strategic Dialogue convened to explore synergies between India's Critical Minerals Mission and the African Green Minerals Strategy.<sup>282</sup> Building on momentum from India's G20 presidency and the African Union's inclusion as a permanent member, the dialogue emphasized the importance of equitable partnerships. One session highlighted the need for India and African nations to integrate social responsibility into critical mineral extraction.

On 1 April 2025, Prime Minister Modi issued a joint statement with Chile's President Gabriel Boric to accelerate collaboration in exploration, mining and processing along with research and development to promote investment across the entire critical mineral value chain for mutual benefit.<sup>283</sup> This is aimed at strengthening the critical mineral supply chain as Chile is the world's largest producer of copper and second-largest producer of lithium. This supports the combined welfare target of a reliable supply chain for energy transition.

On 8 April 2025, the Ministry of Coal signed two Coal Mine Development and Production Agreements with Marwatola-II and Namchik West, respectively.<sup>284</sup> These agreements aim to advance domestic coal production and self-reliance by exploring coal mines.

On 25 April 2025, the Council of Scientific and Industrial Research's Institute of Minerals and Materials Technology signed two Joint Declarations of Intent with Russia's State Research and Design Institute of the Rare Metal Industry and the National University of Science and Technology MISIS.<sup>285</sup> Both agreements are focused on collaboration for critical mineral technologies.

On 14 May 2025, the Cabinet approved the establishment of a sixth semiconductor manufacturing unit under the India Semiconductor Mission, a joint venture between HCL and Foxconn.<sup>286</sup> The project contributes to strengthening domestic semiconductor production and supply chain resilience.

<sup>&</sup>lt;sup>280</sup> India and Sri Lanka Strengthen Ties in Critical Minerals, Exploration, and Mining, Ministry of Mines (New Delhi) 15 February 2025. Access Date: 19 May 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2103502

India and Argentina Strengthen Cooperation in Lithium Exploration and Mining with a MoU, Ministry of Mines (New Delhi) 19 February 2025. Access Date: 19 May 2025. https://mines.gov.in/admin/storage/ckeditor/Press\_Release\_Press\_Information\_Bureau\_1740394343.pdf
 India and Africa: Partnership in the Next Decade, Manohar Parrikar Institute for Defence Studies and Analyses (New Delhi) 25 March 2025. Access Date: 19 May 2025. https://www.idsa.in/wp-content/uploads/2025/03/Booklet-5th-IASD-25-26-March-2025.pdf
 India - Chile Joint Statement, Prime Minister's Office (New Delhi) 1 April 2025. Access Date: 19 May 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2117396

<sup>&</sup>lt;sup>284</sup> Ministry of Coal Executes Agreements for Two More Commercial Coal Mines, Advancing India's Energy Security and Employment Goals, Ministry of Coal (New Delhi) 8 April 2025. Access Date: 23 June 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2120151

<sup>&</sup>lt;sup>285</sup> CSIR-IMMT Signs Joint Declarations of Intent with Russia's Giredmet, Rosatom, Moscow and National University of Science and Technology, Moscow to Advance Critical Mineral Technologies, Ministry of Science and Technology (New Delhi) 25 April 2025. Access Date: 23 June 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2124199

<sup>&</sup>lt;sup>286</sup> Cabinet approves semiconductor unit in Uttar Pradesh, Cabinet (New Delhi) 14 May 2025. Access Date: 1 July 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2128604

On 17 June 2025, the G7 launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit, welcoming India's endorsement of the plan.<sup>287</sup> The Action Plan supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia and Korea.

On 20 June 2025, the Ministry of New and Renewable Energy launched a city accelerator program under the world's largest domestic rooftop solar scheme to provide technical support, streamline subnational policy frameworks and build institutional capacity.<sup>288</sup> The first phase will target 30 cities and will inform energy transition decision making for future roll outs.

On 21 June 2025, the Ministry of New and Renewable Energy launched the Innovative Projects Start-Up Challenge with a total prize pool of INR23 million to accelerate rooftop solar and distributed renewable energy innovation nationwide.<sup>289</sup>

On 1 July 2025, the Minister of External Affairs Subrahmanyam Jaishankar attended the Japan-Australia-India-US (Quad) Foreign Ministers' Meeting in Washington D.C. along with United States Secretary of State Marco Rubio, Australian Minister for Foreign Affairs Penny Wong and Japanese Minister for Foreign Affairs Iwaya Takeshi.<sup>290</sup> The Quad Foreign Ministers issued a Joint Statement and Fact Sheet announcing the launch of the Quad Critical Minerals Initiative which aims to secure and diversify reliable supply chains for critical minerals, including through electronic waste recovery and re-processing, while coordinating with private sector partners to facilitate investment.<sup>291</sup>

On 4 July 2025, Minister Reddy launched India's Copper Vision Document at the International Conference on Sustainable and Responsible Mining in Hyderabad.<sup>292</sup> The document focuses on India's future plans for the production and refinement of copper and outlines plans to increase smelting and refining capacity by five tonnes by 2030 and secure overseas mineral assets through partnerships.

On 6 July 2025, India adopted the Rio de Janeiro Declaration at the BRICS meeting which emphasized the need for equitable energy transition and just supply chains for critical minerals.<sup>293</sup> This will serve as a foundation for the BRICS Energy Cooperation 2025-2030 roadmap to help catalyze cooperation towards concessional finance programs to bridge funding gaps for energy transition projects.

G20 Research Group, 18 November 2025

<sup>&</sup>lt;sup>287</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>288</sup> Launch of the City Accelerator Program to Boost Rooftop Solar Adoption in Indian Cities, Ministry of New and Renewable Energy (New Delhi) 20 June 2025. Access Date: 2 July 2025 https://www.pib.gov.in/newsite/pmreleases.aspx?mincode=28 <sup>289</sup> MNRE Launches ₹ 2.3 Crore Innovative Projects Start-Up Challenge to Accelerate Rooftop Solar and Distributed Renewable Energy Innovations, Ministry of New and Renewable Energy (New Delhi) 21 June 2025. Access Date: 25 July 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2138223

<sup>&</sup>lt;sup>290</sup> Japan-Australia-India-U.S. (Quad) Foreign Ministers' Meeting, Ministry of Foreign Affairs Japan (Tokyo) 2 July 2025. Access Date: 3 August 2025. https://www.mofa.go.jp/fp/nsp/pageite\_000001\_01097.html

<sup>&</sup>lt;sup>291</sup> Factsheet: 2025 Quad Foreign Ministers' Meeting in Washington D.C. (July 01, 2025), Ministry of External Affairs (New Delhi) 2 July 2025. Access Date: 3 July 2025. https://www.mea.gov.in/bilateral-

documents.htm?dtl/39734/Factsheet++2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025

<sup>&</sup>lt;sup>292</sup> Union Minister Shri G. Kishan Reddy Releases Copper Vision Document to Strengthen India's Clean Energy Infrastructure, Ministry of Mines (New Delhi) 4 July 2025. Access Date: 25 July 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2142191

<sup>&</sup>lt;sup>293</sup> Rio de Janeiro Declaration- Strengthening Global South Cooperation for a More Inclusive and Sustainable Governance, Ministry of External Affairs (Rio de Janeiro) 6 July 2025. Access date: 8 October 2025. https://www.mea.gov.in/bilateral-documents.htm?dtl%2F39770%2FRio\_de\_Janeiro\_Declaration\_Strengthening\_Global\_South\_Cooperation\_for\_a\_More\_Inclusive and Sustainable Governance

On 8 July 2025, the Ministry of New and Renewable Energies and Brazil's Ministry of Mines and Energy signed a memorandum of understanding to expand bilateral cooperation in renewable energy.<sup>294</sup> The agreement outlines joint efforts in solar, wind, bioenergy, energy storage and low-emission hydrogen.

On 24 July 2025, Prime Minister Modi and UK Prime Minister Keir Starmer met and endorsed the new India-UK Vision 2035.<sup>295</sup> It builds on the finalized Trade Deal to develop a transformative climate partnership by enhancing the India-UK Nuclear Cooperation Agreement to include small modular reactors, exchanging best practices and advancing joint work on renewables, energy storage and carbon capture.

On 29 July 2025, the Department of Promotion of Industry and Internal Trade under the Ministry of Commerce and Industry signed an MoU with Ather Energy, an Indian Electric Vehicle (EV) manufacturer to promote clean transportation.<sup>296</sup> The partnership will enable infrastructure support in EV value chain, joint innovation programs and mentorship for startups, aligning with India's overall energy decarbonization efforts.

On 1 August 2025, the Ministry of Mines recognized seven Centres of Excellence (CoE) under the National Critical Mineral Missions.<sup>297</sup> This will improve research and development for critical minerals, with each CoE operating as a consortium mandated to include a minimum of two industry partners and two academic partners.

On 12 August 2025, the Union Cabinet approved four new semiconductor projects in the states of Odisha, Punjab and Andhra Pradesh under the India Semiconductor Mission, with an expected INR46 billion investment.<sup>298</sup> This approval will strengthen semiconductor supply chains, especially by enabling India's first commercial compound fab manufacturing and glass-based substrate semiconductor packaging unit.

On 3 September 2025, the Union Cabinet approved an INR1.5 billion incentive scheme to extract critical mineral from e-waste and battery waste.<sup>299</sup> This step to develop capacity for critical mineral recycling from secondary sources will diversify supply chains by opening a new source and building domestic capacity.

On 19 September 2025, Oil India Limited and Hindustan Copper Limited signed a Memorandum of Understanding to collaborate on critical minerals extraction, including copper.<sup>300</sup>

India has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. India has taken strong action to advance the welfare target of reliable, diversified, sustainable and responsibly supply chains for energy transitions and critical minerals through partnerships for grid integration, MoUs for diversified supply chains, the National Critical Mineral Mission and two Coal Mine Development and Production Agreements. Additional measures include the launch of the Quad Critical Minerals Initiative, establishment of a new semiconductor manufacturing unit under the India Semiconductor Mission, the National Manufacturing Mission to boost clean tech manufacturing and the release of the Copper Vision Document to expand domestic refining capacity.

(New Delhi) 19 September 2025. Access Date: 17 October 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2168488

<sup>&</sup>lt;sup>294</sup> Brasil e Índia firmam acordo para ampliar cooperação em energias renováveis, Ministério de Minas e Energia (Brasília) 9 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://www.gov.br/mme/ptbr/assuntos/noticias/brasil-e-india-firmam-acordo-para-ampliar-cooperacao-em-energias-renovaveis <sup>295</sup> India-UK Vision 2035, Ministry of External Affairs (London) 24 July 2025. Access Date: 20 August 2025.

https://www.mea.gov.in/bilateral-documents.htm?dtl/39846/INDIAUK\_VISION\_2035

<sup>&</sup>lt;sup>296</sup> DPIIT signs MoU with Ather Energy to strengthen EV manufacturing and clean mobility ecosystem, Ministry of Commerce and Industry (New Delhi) 29 July 2025. Access Date: 20 August 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2149532 <sup>297</sup> Mines Ministry Recognizes Seven Centres of Excellence to work under the National Critical Mineral Mission, Ministry of Mines (New Delhi) 01 August 2025. Access Date: 19 August 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2151287 <sup>298</sup> Cabinet approves semiconductor manufacturing units in ODISHA, PUNJAB and ANDHRA PRADESH with an outlay of Rs.4600 crore, Cabinet (New Delhi) 12 August 2025. Access Date: 17 August 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2155456 <sup>299</sup> Cabinet approves Rs.1,500 crore Incentive Scheme to promote Critical Mineral Recycling in the country, Cabinet (New Delhi) 3 September 2025. Access date: 8 October 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2163454 <sup>300</sup> HCL and OIL Sign MoU for Collaboration in Exploration and Development of Critical and Strategic Minerals, Ministry of Mines

Thus, India receives a score of +1.

Analyst: Ajay Gokul Sivanandam

## Indonesia: +1

Indonesia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 21 November 2024, the Indonesian Semiconductor Ecosystem Preparation Task Force and Arizona State University signed a Memorandum of Understanding (MoU) to develop a joint semiconductor workforce acceleration program and supply chain policy initiatives.<sup>301</sup> Minister for Economic Affairs Airlangga Hartarto noted that the MoU will help encourage the growth and resilience of semiconductor supply chains.

On 2 December 2024, Minister of Trade Budi Santoso and Canada's Minister of Export Promotion, International Trade and Economic Development Mary Ng jointly announced the conclusion of negotiations on a comprehensive economic partnership agreement and committed to signing it in 2025.<sup>302</sup> The agreement includes commitments to cooperate on critical minerals, with an emphasis on developing secure and resilient critical mineral supply and value chains.

On 3 December 2024, Minister of Energy and Mineral Resources Bahlil Lahadalia announced that Indonesia is accelerating its use of nuclear energy as part of its commitment to diversify energy.<sup>303</sup> This action contributes to Indonesia's target of 23 per cent renewable energy by 2025 and ultimate goal to achieve a net zero energy sector.

On 20 December 2024, the Ministry of Energy and Mineral Resources unveiled regulations to support the development of Carbon Capture and Storage (CCS) technology.<sup>304</sup> These regulations unlock various opportunities and incentives to enhance Indonesia's position as a regional hub for carbon storage.

On 3 January 2025, Minister Lahadalia announced that Indonesia's has modified its biofuel regulations to require diesel fuel to include 40 per cent palm oil-based biofuel instead of 35 per cent, as of 1 January 2025.<sup>305</sup> This regulation aims to reduce foreign imports of diesel while supporting the net zero transition by reducing carbon emissions by 41.46 million tonnes per year.

On 12 February 2025, the Ministry of Energy and Mineral Resources announced cooperation with the Ministry of Energy and Natural Resources of Türkiye to accelerate clean energy development in Indonesia, including

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<sup>&</sup>lt;sup>301</sup> Bangun Ekosistem Industri Semikonduktor di Indonesia, Menko Airlangga Dorong Kerja Sama dengan Arizona State University, Ministry for Economic Affairs (Washington D.C.) 22 November 2024. Translation provided by Google Translate. Access date: 10 May 2025. https://www.ekon.go.id/publikasi/detail/6070/bangun-ekosistem-industri-semikonduktor-di-indonesia-menko-airlangga-dorong-kerja-sama-dengan-arizona-state-university

<sup>&</sup>lt;sup>302</sup> Joint statement by the Government of the Republic of Indonesia and the Government of Canada on the conclusion of the negotiations of the Indonesia – Canada Comprehensive Economic Partnership Agreement, Government of Canada (Jakarta) 2 December 2024. Access date: 10 May 2025. https://www.international.gc.ca/country\_news-pays\_nouvelles/2024-12-03-indonesia-indonesia-aspx?lang=eng

<sup>&</sup>lt;sup>303</sup> Menteri ESDM Pastikan Nuklir Jadi Bagian Diversifikasi Energi, Kementerian Energi dan Sumber Daya Mineral (Jakarta) 3 December 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.esdm.go.id/en/mediacenter/news-archives/menteri-esdm-pastikan-nuklir-jadi-bagian-diversifikasi-energi

<sup>&</sup>lt;sup>304</sup> Upstream oil & gas sector welcomes newly established CCS regulation, Indonesia Business Post (Jakarta) 7 January 2025. Access date: 16 April 2025. https://indonesiabusinesspost.com/3448/investment-and-risk/upstream-oil-gas-sector-welcomes-newly-established-ccs-regulation

<sup>&</sup>lt;sup>305</sup> Wujudkan Ketahanan Energi dan Kurangi Impor, Menteri ESDM: Mandatori B40 Berlaku 1 Januari 2025, Kementerian Energi dan Sumber Daya Mineral (Jakarta) 3 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.esdm.go.id/en/media-center/news-archives/wujudkan-ketahanan-energi-dan-kurangi-impor-menteri-esdm-mandatori-b40-berlaku-1-januari-2025

the signing of a Memorandum of Understanding (MoU).306 This collaboration will bolster Indonesia's commitment to clean power generation.

On 18 February 2025, the Ministry of Energy and Mineral Resources announced the ratification of a new mineral law that aims to enhance energy security and supporting the mining sector.<sup>307</sup> The law contains provisions to prioritize domestic coal needs and ensure appropriate mining governance.

On 18 February 2025, National Economic Council Chairman Luhut Panjaitan announced that Indonesia's sovereign wealth fund Danantara is in talks with the United Arab Emirates to establish a joint venture to develop 10 gigawatts of renewable energy. 308 This venture will bolster Indonesia's commitment to the energy transition and sustainability.

On 17 April 2025, Indonesia and Saudi Arabia signed several MoUs aimed at increasing cooperation in the mining sector.<sup>309</sup> The agreements will foster collaboration in areas including "mineral exploration, geological surveying, sustainable mining practices, mineral production and processing and the development of modern technologies for the mining and metallurgical industries."

On 6 April 2025, Minister Lahadalia announced that he has asked Indonesian company PT Perusahaan Listrik Negara to build a Geothermal Power Plant in Maluku.<sup>310</sup> The plant is expected to have a 40 megawatts capacity, supporting clean energy and access to energy for the country.

On 26 May 2025, Minister Lahadalia announced the 2025-2034 Electricity Supply Business Plan for PT Perusahaan Listrik Negara.311 The plan, aligned with the National Energy Policy and National Electricity General Plan, aims to build 42.6 gigawatts (GW) of new renewable energy generation capacity and 10.3GW of further energy storage capacity by 2034. Planned projects include large-scale solar, wind, geothermal, hydro, bioenergy and two small nuclear reactors, prioritizing electrification in underdeveloped villages in particularly remote areas.

On 28 May 2025, Hydrogène de France Energy signed a MoU with Perusahaan Listrik Negara and PT Sarana Multi Infrastrucktur, Indonesia's state-owned electricity operator and infrastructure financing company, respectively.312 The agreement aims to help identify needed financing mechanisms to support 23 green

https://hdf-energy.com/en/investors/regulated-information/?ID=ACTUS-0-92007&CLIENT=ACTUS-0-455

<sup>306</sup> Disaksikan Presiden Prabowo dan Presiden Erdogan, Menteri Bahlil Teken Kerja Sama di Sektor Energi, Ministry of Energy and Natural Resources (Jakarta) 12 February 2025. Translation provided by Google Translate. Access date: 10 May 2025. https://www.esdm.go.id/en/media-center/news-archives/disaksikan-presiden-prabowo-dan-presiden-erdogan-menteri-bahlilteken-kerja-sama-di-sektor-energi

<sup>&</sup>lt;sup>307</sup> RUU Minerba Resmi Disahkan Menjadi Undang-Undang, Kementerian Energi dan Sumber Daya Mineral (Jakarta) 18 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.esdm.go.id/en/media-center/newsarchives/ruu-minerba-resmi-disahkan-menjadi-undang-undang

<sup>308</sup> Danatara to partner with UAE to develop 10 GW renewable energy, Luhut says, The Jakarta Post (Jakarta) 18 February 2025. Access date: 16 April 2025. https://www.thejakartapost.com/business/2025/02/18/danantara-to-partner-with-uae-to-develop-10-gw-renewable-energyluhut-says.html

<sup>&</sup>lt;sup>309</sup> Saudi Arabia, Indonesia sign key agreements to boost trade and mining cooperation, Arab News (Riyadh) 17 April 2025. Access Date: 20 May 2025. https://www.arabnews.com/node/2597430/business-economy

<sup>310</sup> Menteri Bahlil Minta PLN Bangun Pembangkit Geotermal 40 MW di Maluku, Kementerian Energi dan Sumber Daya Mineral (Jakarta) 6 April 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.esdm.go.id/en/mediacenter/news-archives/menteri-bahlil-minta-pln-bangun-pembangkit-geotermal-40-mw-di-maluku

<sup>311</sup> Menteri ESDM Umumkan RUPTL PLN 2025–2034, Serap Lebih dari 1,7 Juta Tenaga Kerja Baru, Kementerian Energi dan Sumber Daya Mineral (Jakarta) 26 May 2025. Translation provided by Google Translate. Access Date: 7 July 2025. https://www.esdm.go.id/id/media-center/arsip-berita/menteri-esdm-umumkan-ruptl-pln-2025-2034-serap-lebih-dari-17-jutatenaga-kerja-baru

<sup>312</sup> Indonesia: HDF Energy Signs Two Major Agreements to Accelerate the Deployment of its Renewstable® Power Plants in the Presence of Emmanuel Macron and Prabowo Subianto, HDF Energy (Blanquefort) 3 June 2025. Access Date: 7 July 2025.

hydrogen power plant projects being developed by Hydrogène de France in Indonesia, representing a total investment of EUR2.3 billion.

On 28 May 2025, Danatara Indonesia and the Indonesia Investment Authority, two Indonesian sovereign wealth funds, signed a MoU with Eramet, a French mining company, regarding the management and processing of nickel for electric vehicle batteries.<sup>313</sup> This action strengthens Indonesia's commitment to critical mineral supply chains.

On 13 June 2025, Minister Lahadalia and Singapore's Minister of Manpower Tan See Leng signed three MoUs on Cross-Border Electricity Trade, Carbon Capture and Storage and the development of a Sustainable Industrial Zone.<sup>314</sup> The agreements commit both countries to enabling clean electricity flows, advancing cross-border carbon capture and storage projects and fostering renewable energy-linked industrial development.

On 30 June 2025, Indonesian government-owned PT Aneka Tambang and the Indonesia Battery Corporation announced the beginning of construction on a USD6 billion battery complex in West Java with CATL, a Chinese battery manufacturer.<sup>315</sup> The complex full support the full battery value chain, including mineral mining, processing battery production and recycling, yielding an initial annual production capacity of 6.9GW hours.

On 30 June 2025, Indonesia's Ministry of Finance and Germany's KfW Development Bank announced the signing of EUR200 million loan agreement to bolster Indonesia's Affordable and Sustainable Energy Transition Program (ASET).<sup>316</sup> These funds aim to ensure energy security and will help Indonesia achieve ASET's two pillars: the improvement of policy and regulatory frameworks for a clean energy transition and the strengthening of the financial sustainability and governance of the energy sector.

On 2 July 2025, Indonesia and Saudi Arabia agreed to enhance cooperation in developing and sustaining energy supply chains, developing renewable energy and energy storage and developing carbon capture and storage technologies.<sup>317</sup> The agreement entails encouraging collaborative research, technology transfer, encouraging private sector joint ventures and expertise exchange in the aforementioned areas.

On 15 August 2025, Indonesia's President Prabowo Subianto announced IDR402.4 million in financial support for energy security, as part of Indonesia's 2026 state budget.<sup>318</sup> The financial support includes new electricity provision for villages, new renewable energy development, as well as subsidies and tax incentives for energy.

<sup>&</sup>lt;sup>313</sup> Supporting Nickel Downstream Industry in Indonesia, Danantara Indonesia and INA Announce Strategic Partnership with Eramet, Indonesia Investment Authority (Jakarta) 28 May 2025. Access Date: 7 July 2025. https://www.ina.go.id/press-release/supporting-nickel-downstream-industry-in-indonesia-danantara-indonesia-and-ina-announce-strategic-partnership-with-eramet?file=en

<sup>&</sup>lt;sup>314</sup> Singapore and Indonesia sign Three Memoranda of Understanding with Indonesia on Cross-Border Electricity Trade, Carbon Capture and Storage, and Sustainable Industrial Zone, Ministry of Trade and Industry Singapore (Jakarta) 13 June 2025. Access Date: 7 July 2025. https://www.mti.gov.sg/Newsroom/Press-Releases/2025/06/Singapore-and-Indonesia-sign-Three-Memoranda-of-Understanding-with-Indonesia-on-Cross-Border

<sup>315</sup> ANTAM - IBC Establish Integrated EV Industry Ecosystem with CBL, PT Aneka Tambang (Jakarta) 4 July 2025. Access Date: 7 July 2025. https://www.antam.com/en/news-and-events/article/antam---ibc-establish-integrated-ev-industry-ecosystem-with-cbl 316 Germany and Indonesia sign EUR 200 million agreement to advance the Just Energy Transition, Embassy of the Federal Republic of Germany Jakarta (Jakarta) 30 June 2025. Access Date: 14 August 2025. https://jakarta.diplo.de/id-en/jetp-juni-2725664

<sup>&</sup>lt;sup>317</sup> Joint Statement Issued at Conclusion of Indonesian President's Visit to the Kingdom, Saudi Press Agency (Jeddah) 2 July 2025. Access Date: 7 July 2025. https://www.spa.gov.sa/en/N2351128

<sup>&</sup>lt;sup>318</sup> Address of the President of the Republic of Indonesia on the Presentation of the Government Statement on the Bill on the State Budget for the 2026 Fiscal Year and its Financial Note Before the Plenary Session of the House Of Representatives of the Republic of Indonesia, Jakarta, 15 August 2025, Cabinet Secretariat of the Republic of Indonesia (Jakarta). 15 August 2025. Access Date: 15 August 2025. https://setkab.go.id/en/address-of-the-president-of-the-republic-of-indonesia-on-the-presentation-of-the-government-statement-on-the-bill-on-the-state-budget-for-the-2026-fiscal-year-and-its-financial-note-before-the-plenar/

On 4 September 2025, PT Pertamina, an Indonesian state-owned energy company, and the HyET Group, a Dutch renewable energy technology company, signed a Memorandum of Understanding to explore technologies in green hydrogen.<sup>319</sup> The companies will develop technologies that convert geothermal energy into green hydrogen, bolster Indonesia's photovoltaic manufacturing capacities and increase reliable energy access for Indonesia's outer islands.

On 9 September 2025, PT Pertamina announced the beginning of the construction of the Ulubelu Green Hydrogen Pilot Plant.<sup>320</sup> The plant is the first in the world to combine anion exchange membrane electrolyzer technology with geothermal energy.

On 23 September 2025, Indonesia and the European Union agreed to a Comprehensive Economic Partnership Agreement (CEPA), including provisions related to clean energy.<sup>321</sup> The CEPA eliminates tariff and non-tariff barriers for clean energy technologies and infrastructures between the two members.

On 24 September 2025, President Subianto and Canadian Prime Minister Mark Carney announced the signing of the Indonesia-Canada Comprehensive Economic Partnership Agreement, strengthening trade ties in the critical minerals and renewable energy sectors.<sup>322</sup> The agreement also included the signing of an MoU between Export Development Canada and the Indonesia Investment Authority, Indonesia's sovereign wealth fund to explore strategic investments in clean energy technologies.

Indonesia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Through investments in renewable energy sources, Indonesia has taken steps to support reliable, diversified, sustainable and responsible supply chains for energy transitions. It has taken action to strengthen supply chains for energy transition technologies through regulatory reform, critical minerals and materials beneficiated at source via its agreement with Canada and semiconductors through its partnership with Arizona State University. Additional actions, including the Electricity Supply Business Plan and three agreements with Singapore on clean energy and industrial decarbonisation, further demonstrate its commitment to building a resilient, low-carbon energy future.

Thus, Indonesia receives a score of +1.

Analyst: Henri Hopkins

# Italy: +1

Italy has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

<sup>&</sup>lt;sup>319</sup> HyET Group Signs MoU with Pertamina to Develop Green Hydrogen, E-Fuels and Renewable Energy Solutions in Indonesia, HyET Hydrogen (Arnhem) 4 September 2025. Access Date: 12 October 2025. https://hyethydrogen.com/news/hyet-group-signs-mou-with-pertamina-to-develop-green-hydrogen-e-fuels-and-renewable-energy-solutions-in-indonesia/

<sup>&</sup>lt;sup>320</sup> Pertamina Resmikan Groundbreaking Pilot Plant Green Hydrogen di Ulubelu, PT Pertamina (Jakarta) 9 September 2025. Translation provided by Google Translate. Access Date: 12 October 2025. https://www.pertamina.com/news/pertamina-resmikan-groundbreaking-pilot-plant-green-hydrogen-di-ulubelu

<sup>&</sup>lt;sup>321</sup> Key elements of the EU-Indonesia Trade Agreement and Investment Protection Agreement, European Commission (Brussels) 23 September 2025. Access Date: 12 October 2025. https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/indonesia/eu-indonesia-agreements/key-elements-eu-indonesia-trade-agreement-and-investment-protection-agreement\_en

<sup>&</sup>lt;sup>322</sup> Joint statement on the bilateral meeting between Prime Minister of Canada Mark Carney and the President of Republic of Indonesia Prabowo Subianto, Office of the Prime Minister of Canada (Ottawa) 24 September 2025. Access Date: 12 October 2025. https://www.pm.gc.ca/en/news/statements/2025/09/24/joint-statement-bilateral-meeting-between-prime-minister-canada-mark-carney

On 26 November 2024, the Ministry of the Environment and Energy Security presented the National Hydrogen Strategy which focuses on low-carbon hydrogen and decarbonization.<sup>323</sup> The strategy focuses on achieving net zero by 2050 through a transition towards renewable energy, development of Carbon Capture Storage, biofuel, biomethane, hydrogen and potentially nuclear.

On 13 December 2024, Prime Minister Giorgia Meloni chaired the closing meeting of the Italian G7 Presidency.<sup>324</sup> During the meeting, she reiterated Italy's commitment to green energy development through the Energy for Growth in Africa initiative. The program supports the implementation of infrastructure for the production and distribution of renewable energy, contributing to the expansion of energy transition technologies.

On 31 December 2024, the Ministry of the Environment and Energy Security opened a call for research, development and technological innovation project proposals aimed at supporting the supply chain for critical and strategic raw minerals.<sup>325</sup> Selected projects will receive a total of EUR21 million in funding to support the transition to clean technologies.

On 1 January 2025, Minister of Environment and Energy Security Gilberto Pichetto Fratin attended the Future Minerals Forum in Riyadh.<sup>326</sup> He underscored Italy's priority of establishing secure and sustainable access to critical raw materials. His remarks focused on international cooperation and domestic policy to ensure responsible development of critical minerals and materials, especially for clean energy supply chains.

On 14 January 2025, Minister Pichetto and Minister of Energy of Saudi Arabia, Abdulaziz Bin Salman Al-Saud signed a Memorandum of Understanding for energy.<sup>327</sup> The countries will collaborate to advance the energy transition and energy security through the advancement of renewable energy, decreasing methane emissions, carbon capture and storage and supporting supply chain projects in developing countries.

On 15 January 2025, Prime Minister Meloni visited Abu Dhabi and participated in the signing of a trilateral agreement between Italy, the United Arab Emirates and Albania for the development and export of renewable electricity from Albania to Italy.<sup>328</sup> The agreement involves the construction of an undersea power cable, contributing to regional integration and strengthening Italy's infrastructure for clean energy.

On 21 January 2025, Italy, Germany, Austria, Algeria and Tunisia signed a Joint Declaration of Intent to develop the Southern Hydrogen Corridor.<sup>329</sup> This initiative aims to establish a 3,500-4,000-kilometre pipeline

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<sup>323</sup> Idrogeno: presentata la Strategia Nazionale, più scenari per la sua diffusione, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 26 November 2024. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.mase.gov.it/portale/-/idrogeno-presentata-la-strategia-nazionale-piu-scenari-per-la-sua-diffusione 324 President Meloni chairs G7 leaders' meeting: focus on Ukraine, Middle East, Venezuela and handover, Governo Italiano (Rome) 13 December 2024. Access Date: 8 May 2025. https://www.governo.it/en/articolo/president-meloni-chairs-g7-leaders-meeting-focus-ukraine-middle-east-venezuela-and-handover

<sup>&</sup>lt;sup>325</sup> Mission Innovation 2.0: avviso MASE da 21 milioni su Materie Prime Critiche e Materie Prime Strategiche, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 13 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.mase.gov.it/portale/-/mission-innovation-2.0-avviso-mase-da-21-milioni-su-materie-prime-critiche-e-materie-prime-strategiche.

<sup>&</sup>lt;sup>326</sup> Materie prime critiche, il ministro Pichetto a Riad per il Future Minerals Forum, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 13 January 2025. Translation provided by Google Translate. Access Date: 8 May 2025. https://www.mase.gov.it/comunicati/materie-prime-critiche-il-ministro-pichetto-riad-il-future-minerals-forum

<sup>&</sup>lt;sup>327</sup> Energia: firmato a Riad un memorandum tra Italia e Arabia Saudita, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 14 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.mase.gov.it/portale/-/energia-firmato-a-riad-un-memorandum-tra-italia-e-arabia-saudita

<sup>&</sup>lt;sup>328</sup> President Meloni visits United Arab Emirates, Governo Italiano (Rome) 15 January 2025. Access Date: 8 May 2025. https://www.governo.it/en/articolo/president-meloni-visits-united-arab-emirates/27489

<sup>&</sup>lt;sup>329</sup> Joint political declaration of intent to develop the Southern Hydrogen Corridor, Bundesministerium für Wirtschaft und Energie (Rome) 21 January 2025. Access Date: 16 April 2025. https://www.bmwk.de/Redaktion/EN/Pressemitteilungen/2025/01/20250121-joint-political-declaration-of-intent-develop-southern-hydrogen-corridor.html

transporting renewable hydrogen from North Africa to Europe and is expected to deliver up to 163 terawatthours of hydrogen annually to Europe.

On 27 January 2025, Prime Minister Meloni conducted an official visit to Saudi Arabia, where she met with government officials to strengthen bilateral cooperation on clean energy technologies.<sup>330</sup> Discussions focused on the development and deployment of renewable energy systems, in line with Italy's broader strategy of enhancing energy transition partnerships.

On 21 February 2025, the Ministry of the Environment and Energy Security announced EUR38 million in funding for innovative renewable energy projects in Italy, 331 These include projects that combine energy plants with carbon storage facilities and projects that encourage "self-consumption of energy."

On 24 February 2025, Minister Pichetto signed two strategic agreements with the United Arab Emirates. 332 The first agreement supports bilateral cooperation on hydrogen, decarbonization and renewable energy. The second outlines collaboration in the field of critical minerals, with a focus on ethical extraction and sustainable development, reinforcing responsible supply chains for energy transitions.

On 13 March 2025, the Ministry of the Environment and Energy Security announced that it will provide EUR232 million for energy sustainability in Italian cities beginning on 8 April 2025. 333 This will support projects to advance renewable energy, reduce consumption and finance "photovoltaic and solar thermal systems, heat pumps, relamping systems, high-efficiency fixtures and hybrid solutions."

On 28 March 2025, Italy and Kenya signed a Memorandum of Understanding focused on energy transition projects, specifically hydrogen and biofuels.334

On 7 April 2025, the Ministry of Environment and Energy Security and Research on the Energy System announced a call for project proposals aimed at technological innovation for renewable energy and clean hydrogen.335 Selected projects will receive a total of EUR200 million for "non-programmable renewable sources, flexibility and energy storage, data and digitalization of networks, electrolysers and networks, biohydrogen and biofuels."

On 27 May 2025, Prime Minister Meloni announced that Italy will strengthen supply chains for critical raw materials, semiconductors and energy transition technologies. 336 She confirmed a EUR3 billion Silicon Box

https://www.governo.it/it/articolo/intervento-del-presidente-meloni-allassemblea-di-confindustria/28828

<sup>330</sup> President Meloni visits Saudi Arabia, Governo Italiano (Rome) 27 January 2025. Access Date: 8 May 2025. https://www.governo.it/en/articolo/president-meloni-visits-saudi-arabia/27547

<sup>331</sup> Energia: da MASE 38 milioni a Regioni per "progetti esemplari" su rinnovabili, anche CER, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 21 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.mase.gov.it/portale/-/energia-da-mase-38-milioni-a-regioni-per-progetti-esemplari-su-rinnovabili-anche-cer 332 Italia – Emirati: Pichetto sigla due accordi strategici in settore energetico e minerali critici, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 24 February 2025. Translation provided by Google Translate. Access Date: 8 May 2025. https://www.mase.gov.it/comunicati/italia-emirati-pichetto-sigla-due-accordi-strategici-settore-energetico-e-minerali 333 Energia: MASE, 232 milioni per i comuni con l'avviso C.S.E. 2025, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 13 March 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.mase.gov.it/portale/-/energia-mase-232-milioni-per-i-comuni-con-l-avviso-c.s.e.-2025

<sup>334</sup> Mase: Barbaro, a Berlino siglato protocollo con il Kenya per idrogeno verde e biocarburanti sostenibili, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 28 March 2025. Translation provided by Google Translate. Access Date: 13 July 2025. https://www.mase.gov.it/portale/-/mase-barbaro-a-berlino-siglato-protocollo-con-il-kenya-per-idrogeno-verde-ebiocarburanti-sostenibili?p | back url=%2Fportale%2Farchivio-notizie-1%3Fdelta%3D30%26start%3D3

<sup>335</sup> Mission Innovation 2.0: cinque bandi MASE da 200 milioni per ricerca e innovazione, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 7 April 2025. Translation provided by Google Translate. Access Date: 23 June 2025.

https://www.mase.gov.it/portale/-/mission-innovation-2.0-cinque-bandi-mase-da-200-milioni-per-ricerca-e-innovazione-

<sup>336</sup> Intervento del Presidente Meloni all'Assemblea di Confindustria, Ministero dell'Ambiente e della Sicurezza Energetic (Rome) 27 May 2025. Translation provided by Google Translate. Access Date: 12 August 2025.

semiconductor plant, a EUR40 billion United Arab Emirates investment targeting critical raw materials and energy projects and initiatives in renewables and nuclear power.

On 29 May 2025, Italy and Uzbekistan signed a EUR100 million agreement to support Uzbekistan's green transition.<sup>337</sup> Italy will financially support the decarbonization of Uzbekistan's energy sector as well as environmental sustainability across sectors.

On 10 June 2025, Cassa Depositi e Prestiti, Italy's development bank, issued a EUR500 million Green Bond.<sup>338</sup> The proceeds will be invested in sustainability, renewable energy and infrastructure projects.

On 17 June 2025, the G7, including Italy, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>339</sup> It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 20 June 2025, Cassa Depositi e Prestiti signed a EUR250 million loan agreement with the Africa Finance Corporation to support sustainable infrastructure projects in Africa.<sup>340</sup> The loan supports renewable energy, supply chain projects and continued support for the Lobito Railway Corridor.

On 15 July 2025, Italy advanced cooperation with Austria to strengthen energy transition technology supply chains.<sup>341</sup> Prime Minister Meloni highlighted joint plans for the SoutH2 Corridor to produce and transport green hydrogen from North Africa to Europe via Italy, Austria and Germany.

On 5 August 2025, Minister Pichetto decreed EUR900 million for Conto Termico 3.0 an energy efficiency incentive scheme for individual and public administration buildings.<sup>342</sup> The funds are to be invested in electric heat pumps, solar collectors, "solar photovoltaic systems with storage systems," electric vehicle charging stations and more.

<sup>&</sup>lt;sup>337</sup> Dal Fondo Italiano per il Clima nuovo accordo da 100 milioni per la transizione verde dell'economia dell'Uzbekistan, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 29 May 2025. Translation provided by Google Translate. Access Date: 13 July 2025. https://www.mase.gov.it/portale/-/dal-fondo-italiano-per-il-clima-nuovo-accordo-da-100-milioni-per-la-transizione-verde-dell-economia-dell-uzbekistan?p\_l\_back\_url=%2Fportale%2Farchivio-notizie-1

<sup>&</sup>lt;sup>338</sup> CDP issues its second Green Bond for 500 million euro. First issuance in Europe with blockchain-based reporting, Cassa Depositi e Prestiti (Rome) 10 June 2025. Access Date: 13 July 2025.

https://www.cdp.it/sitointernet/page/en/cdp\_issues\_its\_second\_green\_bond\_for\_500\_million\_euro\_first\_issuance\_in\_europe\_with blockchain based reporting?contentId=CSA51339

<sup>&</sup>lt;sup>339</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025.

https://g7.utoronto.ca/summit/2025 kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>340</sup> Cassa Depositi e Prestiti and SACE provide EUR250 Million to Africa Finance Corporation, Cassa Depositi e Prestiti (Rome) 20 June 2025. Access Date: 13 July 2025.

 $https://www.cdp.it/sitointernet/page/en/cassa\_depositi\_e\_prestiti\_and\_sace\_provide\_eur 250\_million\_to\_africa\_finance\_corporation? content Id=CSA51453$ 

<sup>&</sup>lt;sup>341</sup> Incontro Meloni – Stocker, le dichiarazioni del Presidente Meloni, Ministero dell'Ambiente e della Sicurezza Energetic (Rome) 15 July 2025. Translation provided by Google Translate. Access Date: 12 August 2025.

https://www.governo.it/it/articolo/incontro-meloni-stocker-le-dichiarazioni-del-presidente-meloni/29253

<sup>&</sup>lt;sup>342</sup> Energia: via libera al Conto Termico 3.0, più incentivi per efficienza e rinnovabili negli edifice, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 5 August 2025. Translation provided by Google Translate. Access Date: 24 August 2025.

 $https://www.mase.gov.it/portale/-/energia-via-libera-al-conto-termico-3.0-piu-incentivi-per-efficienza-e-rinnovabili-negliedifici?p\_l\_back\_url=\%2Fportale\%2Fweb\%2Fguest\%2Fcomunicati-stampa$ 

On 8 August 2025, the Ministry of the Environment and Energy Security announced a new EUR597 million incentive programs to support individuals and businesses electric vehicle purchases.<sup>343</sup> Individuals will be provided a direct discount of up to EUR11 thousand and microbusinesses up to EUR20 thousand.

On 9 September 2025, Minister of Enterprise and Made in Italy Adolfo Urso and Minister of Geology and Mineral Resources of Uzbekistan Babir Islamov held a bilateral meeting to discuss areas of cooperation.<sup>344</sup> The focus of the meeting was on cooperation in diversifying critical raw materials supply chains and the energy transition.

On 11 September 2025, Minister Urso met with United Arab Emirates Special Envoy for Business and Philanthropy Badr Jafar to discuss cooperation in Artificial intelligence, automation and manufacturing.<sup>345</sup>

On 23 September 2025, Minister Urso announced over EUR100 million to transform former industrial plants into manufacturing hubs for photovoltaic components and solar panels.<sup>346</sup> The initiative will result in jobs and a local solar supply chain.

Italy has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. It has taken strong action towards the combined welfare target and supported supply chains for energy transitions and critical minerals through a Memorandum of Understanding with the United Arab Emirates, Kenya and Albania, participation in the Southern Hydrogen Corridor, funding for critical and strategic minerals and clean energy projects and funding for energy sustainability. Additionally, Italy has created incentive structures to promote transition technologies.

Thus, Italy receives a score of +1.

Analyst: Michelle Kim

### Japan: +1

Japan has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 4 December 2024, the Ministry of Economy, Trade and Industry (METI) hosted the sixth RD20, an initiative under Japan's leadership that promotes international collaboration on research and development for carbon neutrality among G20 countries and regions.<sup>347</sup> The event brought together heads of leading research

G20 Research Group, 18 November 2025

<sup>&</sup>lt;sup>343</sup> PNRR: MASE, al via nuovi incentivi per l'acquisto di veicoli a zero emissioni per una transizione sostenibile, Ministero dell'Ambiente e della Sicurezza Energetica (Rome) 8 August 2025. Translation provided by Google Translate. Access Date: 24 August 2025. https://www.mase.gov.it/portale/-/pnrr-mase-al-via-nuovi-incentivi-per-l-acquisto-di-veicoli-a-zero-emissioni-per-una-transizione-sostenibile?p\_l\_back\_url=%2Fportale%2Fweb%2Fguest%2Fcomunicati-stampa

<sup>&</sup>lt;sup>344</sup> Italia-Uzbekistan: Urso incontra il Ministro delle Risorse Minerarie uzbeko Islamov. Rafforzata cooperazione su materie prime critiche, Ministero delle Imprese e del Made in Italy (Rome) 23 September 2025. Translation provided by Google Translate. Access Date: 9 September 2025. https://www.mimit.gov.it/it/notizie-stampa/italia-uzbekistan-urso-incontra-il-ministro-delle-risorse-minerarie-uzbeko-islamov-rafforzata-cooperazione-su-materie-prime-critiche

<sup>&</sup>lt;sup>345</sup> Italia-Eau: Urso incontra l'Inviato Speciale per gli Affari e la Filantropia Jafar. Focus su IA e informatica quantistica, Ministero delle Imprese e del Made in Italy (Rome) 23 September 2025. Translation provided by Google Translate. Access Date: 11 September 2025. https://www.mimit.gov.it/it/notizie-stampa/italia-eau-urso-incontra-linviato-speciale-per-gli-affari-e-la-filantropia-jafar-focus-su-ia-e-informatica-quantistica

<sup>&</sup>lt;sup>346</sup> Ex Whirlpool: Invitalia approva Contratto di Sviluppo da 103 mln di Italian Green Factory per reindustrializzazione area, Ministero delle Imprese e del Made in Italy (Rome) 23 September 2025. Translation provided by Google Translate. Access Date: 18 October 2025. https://www.mimit.gov.it/it/notizie-stampa/ex-whirlpool-invitalia-approva-contratto-di-sviluppo-da-103-mln-di-italian-green-factory-per-reindustrializzazione-area

<sup>&</sup>lt;sup>347</sup> RD20 2024 was Held, Ministry of Economy, Trade and Industry (Tokyo) 4 December 2024. Access Date: 2 April 2025. https://www.meti.go.jp/english/press/2024/1204 002.html

institutions and focused on enhancing low-carbon energy systems, with particular attention to cooperation on hydrogen, carbon capture and solar technologies.

On 24 December 2024, Japan and the United States agreed to strengthen cooperation in the development and deployment of advanced clean energy technologies.<sup>348</sup> This includes floating offshore wind, clean hydrogen and derivatives such as ammonia and synthetic fuels, carbon capture and recycling and small modular reactors. Japan also committed to collaborate on resilient mineral supply chains and methane emission reductions in the Indo-Pacific. Japan and the United States also co-hosted a session involving private sector representatives to boost public-private collaboration in the energy transition. Participants exchanged views on emerging clean energy markets, including synthetic methane and hydrogen, to meet the growing demand for clean electricity in the digital age.

On 27 December 2024, the Ministry of Finance released the approved a Draft Budget for fiscal year 2025, announcing JPY100 billion for mass semiconductor production and JPY31.8 billion for semiconductor design.<sup>349</sup>

On 22 January 2025, METI, the Ministry of Internal Affairs and Communications and the Digital Agency of Japan held an online meeting with the United Kingdom to discuss cooperation in digital technology. The meeting reviewed progress under the Japan-UK Digital Partnership, focusing on areas such as Beyond 5G/6G research, semiconductor supply chain resilience and the promotion of Data Free Flow with Trust.

On 27 January 2025, Prime Minister Shigeru Ishiba announced new domestic financing to support the green transformation.<sup>351</sup> This includes a supplementary budget allocating over JPY900 billion to enhance productivity and wage growth and a bill aimed at creating a carbon pricing framework to attract more than JPY150 trillion in green investment.

On 18 February 2025, Japan's Cabinet approved the Seventh Strategic Energy Plan.<sup>352</sup> The plan includes policy to increase renewable energy supply, grid development, support for hydrogen supply chains and diversification of critical minerals by advancing "marine mineral resources."

On 19 February 2025, Minister of Economy, Trade and Industry Ogushi Masaki met with German Parliamentary State Secretary Stefan Wenzel to exchange views on Japan-Germany energy cooperation.<sup>353</sup> The discussion addressed the strengthening of the supply chain for clean energy technologies, renewable energy collaboration and decarbonization of the liquified natural gas value chain.

On 21 February 2025, METI designated a sea area offshore Tomakomai, Hokkaido for exploratory drilling under Japan's Act on Carbon Dioxide Storage Business.<sup>354</sup> This designation builds on the region's previous

<sup>&</sup>lt;sup>348</sup> Results of the Japan-U.S. Clean Energy Partnership (JUCEP) Ministerial Meeting, Ministry of Economy, Trade and Industry (Tokyo) 24 December 2024. Access Date: 2 April 2025. https://www.meti.go.jp/english/press/2024/1224\_001.html

<sup>&</sup>lt;sup>349</sup> Highlights of the FY2025 Draft Budget, Ministry of Finance (Tokyo) 27 December 2024. Access Date: 11 July 2025. https://www.mof.go.jp/english/policy/budget/budget/fy2025/01.pdf

<sup>&</sup>lt;sup>350</sup> Ministerial-Level Meeting of Japan-UK Digital Partnership Held, Ministry of Economy, Trade and Industry (Tokyo) 22 January 2025. Access Date: 14 August 2025. https://www.meti.go.jp/english/press/2025/0122\_002.html

<sup>&</sup>lt;sup>351</sup> Forum for Dialogue with the Business Community, Prime Minister's Office of Japan (Tokyo) 27 January 2025. Access Date: 2 April 2025. https://japan.kantei.go.jp/103/actions/202501/27forum.html

<sup>&</sup>lt;sup>352</sup> The 7th Strategic Energy Plan, Agency of Natural Resources and Energy (Tokyo) 18 February 2025. Access Date: 11 July 2025. https://www.enecho.meti.go.jp/en/category/others/basic\_plan/pdf/7th\_outline.pdf

<sup>&</sup>lt;sup>353</sup> State Minister Ogushi Holds Meeting with Mr. Stefan Wenzel, Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Climate Action of Federal Republic of Germany, Ministry of Economy, Trade and Industry (Tokyo) 19 February 2025. Access Date: 30 June 2025. https://www.meti.go.jp/english/press/2025/0219\_001.html

<sup>&</sup>lt;sup>354</sup> Designation of A Sea Area Offshore Tomakomai City, Hokkaido Prefecture, as A Specified Area under CCS Business Act, Ministry of Economy, Trade and Industry (Tokyo) 21 February 2025. Access Date: 14 August 2025. https://www.meti.go.jp/english/press/2025/0221\_003.html

success, where approximately 300,000 tons of carbon dioxide were injected as part of Japan's first large-scale CCS demonstration project.

On 25 February 2025, METI released updates on the implementation of the Pro-Growth Carbon Pricing Concept under the Act on the Promoting Transition to the Decarbonized Growth Economic Structure.355 These updates aim to balance economic growth with emissions reduction by building a circular economy and introducing carbon pricing mechanisms.

On 27 February 2025, Deputy Director General Urata Hideyuki of the Manufacturing Industries Bureau at the Ministry of Economy, Trade and Industry and Director General Yoon-Change-Hyun from Korea's Ministry of Trade, Industry and Energy held the first Japan-Republic of Korea High-Level Dialogue on critical minerals.<sup>356</sup> Japan committed to policy coordination on critical minerals production and stockpiling through multilateral frameworks like the Minerals Security Partnership.

On 7 March 2025, the Cabinet approved a bill to amend the Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities.<sup>357</sup> The amendment aims to allow the installation of marine renewable energy facilities in Japan's Exclusive Economic Zones and to strengthen environmental research efforts, contributing to Japan's 2050 carbon neutrality goal.

On 10 March 2025, the Japan Bank for International Cooperation signed a GBP283 million loan agreement with Seagreen to connect offshore wind energy production to the UK National Grid, supporting energy transition technologies and a reliable energy supply.<sup>358</sup>

On 17 March 2025, the Japan Organization for Metals and Energy Security and Iwatani Corporation announced EUR100 million in joint financing for Caremag SAS's rare earth refining plant in France.<sup>359</sup> This funding will support the development of the plant which aims to minimize carbon emissions through the use of recycled materials, reduce water usage, diversify rare earth sources and strengthen rare earth supply chains. Caremag has also agreed to provide 50 per cent of its rare earth products to the Japan Organization and Iwatani Corporation, on a long-term basis.

On 21 March 2025, METI announced updated electricity purchase prices under the Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources.<sup>360</sup> The pricing adjustments are based on supply efficiency and profitability, promoting the expansion of renewable energy use through market mechanisms.

<sup>355</sup> Cabinet Decision on the Bill for the Act for Partially Amending the Act on the Promoting Transition to the Decarbonized Growth Economic Structure and the Act on the Promotion of Effective Utilization of Resources, Ministry of Economy, Trade and Industry (Tokyo) 25 February 2025. Access Date: 12 May 2025. https://www.meti.go.jp/english/press/2025/0225 001.html 356 First Japan-Korea High Level Dialogue in the Field of Critical Minerals Held, Ministry of Economy, Trade and Industry (Tokyo) 27 February 2025. Access Date: 30 June 2025. https://www.meti.go.jp/english/press/2025/0227\_002.html

<sup>357</sup> Cabinet Decision on the Bill for the Act for Partially Amending the Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities, Ministry of Economy, Trade and Industry (Tokyo) 7 March 2025. Access Date: 12 May 2025. https://www.meti.go.jp/english/press/2025/0307\_003.html

<sup>358</sup> Project Financing for Seagreen Offshore Electricity Transmission Project in UK, Japan Bank for International Cooperation (Tokyo) 10 March 2025. Access Date: 11 July 2025. https://www.jbic.go.jp/en/information/press/press-2024/press 00151.html 359 Equity and Debt Financing to Caremag SAS - Project participation to diversify rare earth sources -, Japan Organization for Metals and Energy Security (Tokyo) 17 March 2025. Access Date: 23 June 2025.

https://www.jogmec.go.jp/english/news/release/news 08 00035.html

<sup>360</sup> METI Sets the Surcharge Rate for FY2025, Renewable Energy Purchase Prices for FY2025 Onward, and Other Details Relating to the FIT and FIP Schemes, Ministry of Economy, Trade and Industry (Tokyo) 21 March 2025. Access Date: 12 May 2025. https://www.meti.go.jp/english/press/2025/0321 001.html

On 26 March 2025, the Japan Bank for International Cooperation signed a USD95 million loan agreement with Banco Nacional de Desenvolvimento Econômico e Social, Brazil's development bank.<sup>361</sup> This loan invests in expanding Brazil's electricity transmission and diversifies the energy supply with biofuel projects.

On 28 March 2025, Minister of Economy, Trade and Industry Muto Yoji met with Governor of Alaska Mike Dunleavy to discuss Japanese investment in energy projects in Alaska.<sup>362</sup> The meeting underscored Japan's strategic involvement in global energy initiatives and support Alaskan energy projects.

On 1 April 2025, the Japan Bank for International Cooperation signed a USD466 million loan agreement with Corporación Nacional del Cobre de Chile, Chile's mining company, to secure a stable supply of copper concentrates.<sup>363</sup> This will support a reliable and diverse supply chain for critical minerals beneficiated at the source.

On 18 April 2025, the Agency for Natural Resources and Energy announced a series of initiatives promoting the use of condensing water heaters and similar systems in the residential sector as part of a broader effort to meet new energy efficiency standards.<sup>364</sup> These efforts include cooperation between manufacturers, national government, and businesses to promote energy conservation infrastructure.

On 28 April 2025, METI participated in the Summit on the Future of Energy Security, co-hosted by the International Energy Agency and the United Kingdom.<sup>365</sup> Discussions addressed the resilience of clean energy supply chains and securing access to critical minerals, reaffirming Japan's engagement in global cooperation for energy transition resilience.

On 29 April 2025, METI signed a Memorandum of Cooperation with the Ministry of Industry and Trade of Vietnam on clean energy transitions.<sup>366</sup> The agreement reaffirmed both parties' commitment to the Asia Zero Emission Community principles and aimed to promote investment and technology exchange to support decarbonization pathways.

On 11 May 2025, Japan and the European Union held the third Digital Partnership Council to reinforce Japan and the EU's cooperation in technology.<sup>367</sup> Both members agreed to collaborate on semiconductor, artificial intelligence and 5G/6G research. This will support both members diversification of responsible semiconductor supply chains.

On 12 May 2025, Ambassador of Japan to the Democratic Republic of the Congo Hidetoshi Ogawa and the Democratic Republic of Congo's Minister for Foreign Affairs, International Cooperation and Francophonie Thérèse Kayikwamba Wagner signed and exchanged notes on increasing Japanese aid for a project to improve

<sup>&</sup>lt;sup>361</sup> Sixth Credit Line for BNDES under GREEN Operations, Japan Bank for International Cooperation (Tokyo) 26 March 2025. Access Date: 11 July 2025. https://www.jbic.go.jp/en/information/press/press-2024/press 00173.html

<sup>362</sup> Minister Muto Holds Meeting with Governor Dunleavy of the State of Alaska, Ministry of Economy, Trade and Industry (Tokyo) 28 March 2025. Access Date: 12 May 2025. https://www.meti.go.jp/english/press/2025/0328\_002.html

<sup>&</sup>lt;sup>363</sup> Loan to Corporación Nacional del Cobre de Chile, Japan Bank for International Cooperation (Tokyo) 1 April 2025. Access Date: 11 July 2025. https://www.jbic.go.jp/en/information/press/press-2025/press\_00003.html

<sup>364</sup> Report Compiled on New Energy Efficiency Standards for Gas Water Heaters, Ministry of Economy, Trade and Industry (Tokyo) 18 April 2025. Access Date: 30 June 2025. https://www.meti.go.jp/english/press/2025/0418 001.html

<sup>&</sup>lt;sup>365</sup> Summit on the Future of Energy Security Held, Ministry of Economy, Trade and Industry (Tokyo) 28 April 2025. Access Date:

<sup>12</sup> May 2025. https://www.meti.go.jp/english/press/2025/0428\_001.html

<sup>&</sup>lt;sup>366</sup> METI Signs Memorandum of Cooperation with the Ministry of Industry and Trade of the Socialist Republic of Viet Nam on the Promotion of Bilateral Cooperation Projects for Energy Transitions, Ministry of Economy, Trade and Industry (Tokyo) 29 April 2025. Access Date: 12 May 2025. https://www.meti.go.jp/english/press/2025/0429\_001.html

<sup>&</sup>lt;sup>367</sup> EU and Japan reinforce tech and digital partnership, European Commission (Brussels) 11 May 2025. Access Date: 15 May 2025. http://ec.europa.eu/commission/presscorner/detail/en/ip 25 1185

electricity access in the Mon Amba District of Kinshasa City.<sup>368</sup> JPY3.898 billion in aid will fund the renovation of a Mon Amba substation.

On 16 May 2025, Permanent Representative to the United Nations Atsuyuki Oike signed a partnership agreement for a critical minerals initiative with UN Trade and Development Secretary-General Rebeca Grynspan.<sup>369</sup> USD680,000 in funding will support Namibia, Zambia and Madagascar's economic diversification of critical mineral supply chains.<sup>370</sup>

On 19 May 2025, the Ministry of the Environment and the Ministry of Economy, Trade and Industry co-hosted the first Asia Zero Emission Community (AZEC) International Conference to Developing Carbon Markets.<sup>371</sup> The dialogue focused on supply chain emissions transparency and policy approaches to high-integrity carbon markets among AZEC partners.

On 10 June 2025, Minister of Economy, Trade and Industry Koga Yuichiro attending the signing ceremony for Memorandums of Understanding between private companies including GE Veronova, Eurus Energy and Mitsubishi Electric to expand renewable energy infrastructure and semiconductor-based electrification.<sup>372</sup> The Ministry and GE Veronova also launched a focus group to promote innovation in hydrogen, nuclear and carbon capture and storage technologies.

On 16 June 2025, Ambassador of Japan to Sierra Leone Hiroshi Yoshimoto and Sierra Leone's Minister of Foreign Affairs and International Cooperation Timothy Musa Kabba signed and exchanged notes to increase Japanese aid for an "Electricity Distribution Network Expansion Project along the Freetown Peninsula."<sup>373</sup> Over JPY2 billion in aid will fund the construction of a new substation, transmission lines and electricity grid infrastructure.

On 17 June 2025, the G7, including Japan, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>374</sup> It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

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<sup>368</sup> コンゴ民主共和国に対する無償資金協力「キンシャサ市モンアンバ地区における電力アクセス改善計画」(追加贈与)に関する書簡の署名・交換, 外務省 (Tokyo) 12 May 2025. Translation provided by Google Translate. Access Date: 20 August 2025.

https://www.mofa.go.jp/mofaj/press/release/pressit\_000001\_02122.html

<sup>&</sup>lt;sup>369</sup> UN Trade and Development and Japan partner to add value to Africa's critical minerals sector, United Nations Trade Development (Geneva) 16 May 2025. Access Date: 11 July 2025. https://unctad.org/news/un-trade-and-development-and-japan-partner-add-value-africas-critical-minerals-sector

<sup>&</sup>lt;sup>370</sup> Critical energy transition minerals: Rapid assessment of value addition and diversification capacity in Southern Africa, United Nations Trade Development (Geneva) n.d. Access Date: 11 July 2025. https://unctad.org/project/critical-energy-transition-minerals-in-southern-africa

<sup>&</sup>lt;sup>371</sup> First AZEC International Conference to Develop Carbon Markets, Ministry of Environment (Tokyo) 19 May 2025. Access Date: 30 June 2025. https://www.env.go.jp/en/press/press\_04211.html

<sup>&</sup>lt;sup>372</sup> State Minister Koga Attends a Signing Ceremony for MOUs for Collaboration Between Companies and a Launching Ceremony for a Focus Group for Public-Private Collaboration in the Energy Sector Including Wind Power and Hydrogen, Ministry of Economy, Trade and Industry (Tokyo) 10 June 2025. Access Date: 30 June 2025.

https://www.meti.go.jp/english/press/2025/0610\_002.html

<sup>&</sup>lt;sup>373</sup> シエラレオネ共和国に対する無償資金協力「フリータウン半島に沿った配電網拡張計画」に関する書簡の署名・交換, 外務省 (Tokyo) 16 June 2025. Translation provided by Google Translate. Access Date: 20 August 2025.

https://www.mofa.go.jp/mofaj/press/release/pressit\_000001\_02283.html

<sup>&</sup>lt;sup>374</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025.

https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

On 19 June 2025, Senior Deputy Minister of Education, Culture, Sports, Science and Technology Hiroshi Masuko and the United Kingdom's Minister for Climate Kerry McCarthy signed a Memorandum of Understanding for a partnership in fusion energy.<sup>375</sup>

On 1 July 2025, Minister for Foreign Affairs Iwaya Takeshi attended the Japan-Australia-India-US (Quad) Foreign Ministers' Meeting in Washington D.C. along with United States Secretary of State Marco Rubio, Australian Minister for Foreign Affairs Penny Wong and Indian Minister of External Affairs Subrahmanyam.<sup>376</sup> The Quad Foreign Ministers issued a Joint Statement and Fact Sheet announcing the launch of the Quad Critical Minerals Initiative which aims to secure and diversify reliable supply chains for critical minerals, including through electronic waste recovery and re-processing, while coordinating with private sector partners to facilitate investment.<sup>377</sup>

On 2 July 2025, METI co-hosted the Conference on battery and Critical Minerals Ecosystem in New Delhi, aiming to strengthen and diversify battery and critical mineral supply chains.<sup>378</sup> The event focused on promoting collaboration between Japanese and Indian companies in establishing an ecosystem for battery-related industries.

On 11 July 2025, the Japan Bank for International Cooperation (JBIC) signed a USD46 million loan agreement with MGC Pure Chemicals America, Inc. (MPCA).<sup>379</sup> The loan will support increased MPCA's production of "ultra-pure hydrogen peroxide and ultra-pure aqueous ammonia," two chemicals critical for the semiconductor supply chain.

On 15 July 2025, JBIC made an equity investment in TeraWatt Technology to support expansion and manufacturing of its "next-generation batteries." These batteries are a critical component of electric vehicles, energy storage and drone technology.

On 22 July 2025, the Japan Organization for Metals and Energy Security (JOGMEC) and Sumitomo Corporation announced that their joint entity, Japan Fluorite Corporation, will invest AUD11 million to partially cover Fluorite SPV's exploration and operation expenses.<sup>381</sup> Fluorite SPV is expected to produce over 100,000 "tons of chemical grade fluorite concentrate annually," which is an essential mineral for the semiconductor supply chain.

On 4 August 2025, JOGMEC and Sojitz Corporation announced a joint equity investment for research and development of gallium production, a key critical mineral, in Western Australia.<sup>382</sup> This equity investment will

<sup>&</sup>lt;sup>375</sup> UK-Japan cooperation on fusion energy: memorandum of cooperation, Department for Energy Security and Net Zero (London), 19 June 2025. Access Date: 5 July 2025. https://www.gov.uk/government/publications/uk-japan-cooperation-on-fusion-energy-memorandum-of-cooperation/uk-japan-cooperation-on-fusion-energy-memorandum-of-cooperation <sup>376</sup> Japan-Australia-India-U.S. (Quad) Foreign Ministers' Meeting, Ministry of Foreign Affairs Japan (Tokyo) 2 July 2025. Access Date: 3 August 2025. https://www.mofa.go.jp/fp/nsp/pageite\_000001\_01097.html

<sup>&</sup>lt;sup>377</sup> Factsheet: 2025 Quad Foreign Ministers' Meeting in Washington D.C. (July 01, 2025), Ministry of External Affairs (New Delhi) 2 July 2025. Access Date: 3 July 2025. https://www.mea.gov.in/bilateral-

documents.htm?dtl/39734/Factsheet++2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025

<sup>378</sup> METI Co-Hosts Conference on Battery and Critical Minerals Ecosystem in the Republic of India, Ministry of Economy, Trade and Industry (Tokyo) 2 July 2025. Access Date: 14 August 2025. https://www.meti.go.jp/english/press/2025/0703\_002.html 379 三菱瓦斯化学株式会社の米国法人が実施する半導体薬液の製造・販売事業に対する融資,株式会社国際協力銀行 (Tokyo) 11 July 2025. Translation provided by Google Translate. Access Date: 20 August 2025.

https://www.jbic.go.jp/ja/information/press/press\_2025/press\_00048.html

<sup>&</sup>lt;sup>380</sup> Equity Investment in TeraWatt Technology Inc. in the United States, Japan Bank for International Cooperation (Tokyo) 15 July 2025. Access Date: 20 August 2025. https://www.jbic.go.jp/en/information/press/press-2025/press\_00052.html

<sup>&</sup>lt;sup>381</sup> Equity investment to fluorite exploration project in Australia—Contribution to strengthening and diversifying the supply chain—, Japan Organization for Metals and Energy Security (Tokyo) 22 July 2025. Access Date: 20 August 2025. https://www.jogmec.go.jp/english/news/release/news 08 00042.html

<sup>&</sup>lt;sup>382</sup> Equity Participation in a Joint Development Study for Gallium Production in Australia - Toward the Establishment of a New Gallium Supply Chain -, Japan Organization for Metals and Energy Security (Tokyo) 4 August 2025. Access Date: 20 August 2025. https://www.jogmec.go.jp/english/news/release/news\_08\_00044.html

include feasibility studies with Alcoa of Australia Limited which operates alumina refineries that create gallium from the alumina refinement processes. This project is aimed at providing Japan and Australia with a reliable and sustainable supply of gallium for transition technologies and semiconductors supply chains.

On 6 August 2025, Ambassador of Japan to Angola Hiroaki Sano and Angola's Minister of External Relations Téte Antoónio signed and exchanged notes about an Official Development Assistance loan. The Japanese loan of JPY39.105 billion will support the "Power Transmission System Reinforcement Project in the Southern Region," expanding hydroelectricity generation for Southern Angola.

On 20 August 2025, JOGMEC and Democratic Republic of the Congo's Gecamines renewed a Memorandum of Understanding to support continued collaboration and partnership in the mining sector.<sup>384</sup>

On 22 August 2025, Minister of Economy, Trade and Industry Yoji Muto and South Africa's Minister of Trade, Industry and Competition Parks Tau, Minister of Electricity and Energy Kgosientsho Ramokgopa and Minister of Science, Technology and Innovation Blade Nzimande signed a joint declaration to promote decarbonization and cooperation.<sup>385</sup>

On 22 August 2025, South Africa, the African Union, Japan and African Union member-states released the TICAD 9 Yokohama Declaration to "[c]o-create innovative solutions with Africa." The declaration includes a statement on cooperation for enhancing artificial intelligence governance and projects. It highlights the importance of continued collaboration between Japan and Africa in energy transition technologies and clean energy projects.

On 26 August 2025, Japan and Canada held the second meeting of the dialogue on battery Supply Chains in Tokyo under their 2023 Memorandum of Cooperation.<sup>387</sup> Officials from Japan's Ministry of Economy, Trade and Industry and Canada's Department of Natural Resources agreed to advance collaboration through policy exchange, trade and investment promotion and joint research. The initiative aims to continue collaborating with research institutions and industry to advance sustainable and reliable global battery supply chains.

On 24 September 2025, JOGMEC and FPX Nickel Corp. launched a joint nickel exploration at the Awarwa mine in Newfoundland and Labrador, Canada.<sup>388</sup>

Japan has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Japan has taken several important steps toward fulfilling its G20 commitment, including passing legislation to promote marine renewable energy, advancing green growth through carbon pricing initiatives and strengthening bilateral and multilateral cooperation on clean energy transitions. It has also participated in global dialogues to enhance supply chain resilience, signed multiple agreements to expand

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<sup>&</sup>lt;sup>j</sup> (Tokyo) 6 August 2025. Translation provided by Google Translate. Access Date: 19 August 2025.

https://www.mofa.go.jp/mofaj/press/release/pressit 000001 02527.html

<sup>&</sup>lt;sup>384</sup> Strengthening Relations with African Countries through the 9th Tokyo International Conference on African Development (TICAD9), JOGMEC (Tokyo) 8 September 2025. Access Date: 17 October 2025.

https://www.jogmec.go.jp/english/news/release/news\_08\_00045.html

<sup>&</sup>lt;sup>385</sup> Minister Muto Attends the Ninth Tokyo International Conference on African Development (TICAD 9), Ministry of Economy, Trade and Industry (Tokyo) 22 August 2025. Access Date: 18 October 2025.

https://www.meti.go.jp/english/press/2025/0822 002.html

<sup>&</sup>lt;sup>386</sup> TICAD 9 Yokohama Declaration "Co-create innovative solutions with Africa", African Union (Addis Ababa) 22 August 2025. Access Date: 18 October 2025. https://au.int/en/pressreleases/20250822/ticad-9-yokohama-declaration-co-create-innovative-solutions-africa

<sup>&</sup>lt;sup>387</sup> The Second Meeting of the Dialogue based on the Japan-Canada Memorandum of Cooperation concerning Battery Supply Chains (Overview), Ministry of Foreign Affairs (Tokyo) 26 August 2025. Access Date 5 October 2025.

https://www.mofa.go.jp/press/release/pressite\_000001\_01604.html

<sup>388</sup> カナダでのニッケル共同探鉱事業を開始 一電池材料向け低炭素ニッケル資源の供給を目指す一, JOGMEC (Tokyo) 24 September 2025. Translation provided by Google Translate. Access Date: 17 October 2025.

https://www.jogmec.go.jp/news/release/news\_08\_00117.html

renewable energy infrastructure and semiconductor-based electrification, and launched new initiatives to diversify critical mineral supply chains, including through the Quad Critical Minerals Initiative and a UN partnership to support economic diversification in Africa. Japan has also updated its renewable energy procurement policies, promoted high-integrity carbon markets and taken strong action to support supply chains for rare earth elements through its funding for Caremag. Finally, through international loans and the Japan Bank for International Cooperation, Japan has funded projects to support reliable, sustainable and responsible energy supply chains worldwide.

Thus, Japan receives a score of +1.

Analyst: Maham Khokhar

### Korea: +1

Korea has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 27 November 2024, the Ministry of Trade, Industry and Energy announced plans to provide KRW14 trillion in low-interest loans throughout 2024 to support the semiconductor industry.<sup>389</sup> This initiative aims to enhance competitiveness and includes KRW1.8 trillion allocated for developing power transmission infrastructure for new chip complexes in Yongin and Pyeongtaek.

On 27 November 2024, the Ministry of Economy and Finance announced the establishment of a KRW1.4 trillion policy fund for 2025 to support the semiconductor sector.<sup>390</sup> This initiative is designed to alleviate corporate burdens related to infrastructure in semiconductor clusters by expanding tax breaks for private research and development and facility investments.

On 17 December 2024, Korea announced the allocation of KRW2.7 trillion in 2025 to develop technologies for adapting to climate change over the next decade.<sup>391</sup> This investment aims to enhance the country's resilience to climate-related challenges.

On 20 December 2024, Korea and Australia signed a new Green Economy Partnership Arrangement on Climate and Energy.<sup>392</sup> The partnership agreement includes cooperation on renewable hydrogen, critical minerals and green metals projects. This supports both members' commitments to diversified energy transition technologies and supply chains.

On 1 January 2025, Minister of Environment Kim Wansup announced that an increased budget of KRW196.3 billion will be invested to install more than 64 hydrogen charging stations, with a target of over 450 cumulative stations.<sup>393</sup> This initiative supports the adoption of hydrogen vehicles and the development of related infrastructure.

On 17 February 2025, the Ministry of Trade, Industry and Energy held the second Korea-Czech Republic Supply Chain and Energy Dialogue to enhance cooperation on sustainably operating the sources for minerals

<sup>389</sup> South Korea to roll out \$10 bln in loans next year to support chip industry, Bonik Barta (Dhaka) 27 November 2024. Access Date: 19 March 2025. https://en.bonikbarta.com/technology/RxMDvFn2tgfnSH6a

<sup>&</sup>lt;sup>390</sup> KRW 1.4T policy fund in 2025 to support semiconductor sector, Government of Korea (Seoul) 28 November 2024. Access Date: 19 March 2025. https://www.korea.net/NewsFocus/policies/view?articleId=262459

<sup>&</sup>lt;sup>391</sup> Korea to invest in climate change adaptation projects, Government of Korea (Seoul) 6 February 2025. Access Date: 5 May 2025. https://www.korea.net/NewsFocus/polices/view?articleld=263466

<sup>&</sup>lt;sup>392</sup> Australia and the Republic of Korea Strengthen Cooperation on Climate and Energy, Department of Climate Change, Energy, the Environment and Water (Canberra) 19 December 2024. Access Date: 16 May 2025.

http://dcceew.gov.au/about/news/australia-republic-korea-strengthen-cooperation-climate-energy

<sup>&</sup>lt;sup>393</sup> Gov't to spend W50B to build hydrogen infrastructure, Government of Korea (Seoul) 8 February 2025. Access Date: 5 May 2025. https://www.korea.net/Government/Briefing-Room/Press-Releases/view?artcleld=1718330&insttCode=A260112&type=N

essential for semiconductors.<sup>394</sup> The meeting focused on deepening bilateral cooperation in nuclear energy and critical mineral supply chain resilience.

On 18 February 2025, Korea held the inaugural Core Mineral Investment Council meeting between private companies and the government.<sup>395</sup> The council will use KRW50 billion Supply Chain Stabilization Fund to fund mineral projects.

On 21 February 2025, Korea outlined a new energy mix plan for 2038, which includes constructing two large nuclear power plants and one small modular reactor.<sup>396</sup> The country aims to increase its nuclear power generation and boost renewable energy, targeting an average of seven gigawatts annually until 2030. Overall, carbon-free power generation, including nuclear and renewables is expected to reach 70 per cent by 2038.

On 24 February 2025, the Ministry of Land, Infrastructure and Transport announced the increase of the hydrogen fuel subsidy for buses to KRW5000 per kilogram.<sup>397</sup> This initiative encourages the adoption of fuelcell vehicles in public transportation by lessening the cost gap between hydrogen buses and electric buses.

On 27 February 2025, Director General Yoon-Change-Hyun from the Ministry of Trade, Industry and Energy and Deputy Director General Urata Hideyuki of the Manufacturing Industries Bureau at Japan's Ministry of Economy, Trade and Industry held the First Japan-Republic of Korea High-Level Dialogue on critical minerals. Korea committed to policy coordination on critical minerals production and stockpiling through multilateral frameworks like the Minerals Security Partnership.

On 21 March 2025, Korea's Ambassador to Thailand Yong-min Park and Thailand's Minister of Higher Education, Science, Research, and Innovation Supamas Isarabhakdi signed the Korea-Thailand Nuclear Cooperation Agreement.<sup>398</sup> The agreement includes cooperation on the development and construction of nuclear energy projects as well as sharing technology, equipment and training.

On 25 March 2025, the Ministry of Economy and Finance released the Guidelines for the 2026 Budget Proposal.<sup>399</sup> The proposal outlines four key pillars for the 2026 budget, including pillar two "Enhancing Industrial Competitiveness" and pillar three "Building a Sustainable Future by Bolstering Economic and Social Fundamentals." The Ministry aims to invest in semiconductors, artificial intelligence, stable supply chains and developments in "carbon-free energy."

<sup>&</sup>lt;sup>394</sup> Korea and Czech Republic hold 2nd Supply Chain and Energy Dialogue (SCED), Ministry of Trade, Industry and Energy (Seoul) 17 February 2025. Access Date: 6 July 2025. https://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=7849&type=O&insttCode=

<sup>395</sup> 범부처 역량 결집, 핵심광물 투자 지원, 산업통상자원부 (Seoul) 18 February 2025. Translation provided by DeepL. Access Date:

https://www.motie.go.kr/kor/article/ATCL3f49a5a8c/170161/view?mno=&pageIndex=1&rowPageC=0&displayAuthor=&searchCategory=0&schClear=on&startDtD=&endDtD=&searchCondition=1&searchKeyword=#

<sup>&</sup>lt;sup>396</sup> South Korea confirms need for new reactors, World Nuclear News (London) 21 February 2025. Access Date: 5 May 2025. https://www.world-nuclear-news.org/articles/south-korea-confirms-need-for-new-reactors

<sup>&</sup>lt;sup>397</sup> Fuel Subsidy for Hydrogen Buses to Increase from March 1st, Ministry of Land, Infrastructure and Transport (Sejong) 24 February 2025. Access Date: 6 July 2025.

https://www.molit.go.kr/english/USR/BORD0201/m\_28286/DTL.jsp?id=eng0301&cate=&mode=view&idx=3266&key=&search=&search\_regdate\_s=&search\_regdate\_e=&order=&desc=asc&srch\_prc\_stts=&item\_num=0&search\_dept\_id=&search\_dept\_nm=&srch\_usr\_nm=N&srch\_usr\_titl=N&srch\_usr\_ctnt=N&srch\_mng\_nm=N&old\_dept\_nm=&search\_gbn=&search\_section=&source=&search1=&lcmspage=5

<sup>&</sup>lt;sup>398</sup> "Korea-Thailand Nuclear Cooperation Agreement" Signed, Ministry of Foreign Affairs (Bangkok) 21 March 2025. Access Date: 12 July 2025. https://www.mofa.go.kr/eng/brd/m\_5676/view.do?seq=322771&page=11

<sup>&</sup>lt;sup>399</sup> Guidelines for the 2026 Budget Proposal, Ministry of Economy and Finance (Sejong) 25 March 2025. Access Date: 26 August 2025. https://english.moef.go.kr/pc/selectTbPressCenterDtl.do?boardCd=N0001&seq=6122

On 15 April 2025, Korea announced an expanded support package for its semiconductor industry, increasing total aid to KRW33 trillion, up from the previous KRW26 trillion.<sup>400</sup> Financial assistance specifically for the chips sector will also increase to KRW20 trillion, from KRW17 trillion.

On 17 June 2025, the G7 launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit, welcoming Korea's endorsement of the plan.<sup>401</sup> The Action Plan supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by India and Australia.

On 12 August 2025, MOTIE signed an MoU with Vietnam's Ministry of Industry and Trade to promote cooperation in renewable energy. 402 The countries plan to cooperate renewable energy projects, nuclear power technical assistance for the beneficiation of critical minerals in Vietnam.

On 8 September 2025, Deputy Minister for Trade Jong-won Park met Saskatchewan's Minister of Trade and Export Development Warren Kaeding in Seoul.<sup>403</sup> The parties discussed cooperation in the critical minerals and energy sectors.

On 17 September 2025, MOTIE hosted the Korea-South Africa Insight Forum in Yangjae-Dong.<sup>404</sup> The participants discussed areas for cooperation including supply chain, energy, and critical minerals.

On 23 September 2025, Minister of Trade, Industry and Energy Jung-kwan Kim attended the 95th Saudi National Day celebration at the Saudi embassy in Seoul.<sup>405</sup> Minister Kim pledged to increase cooperation in several areas including semiconductors.

Korea has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. It has taken strong action to support reliable, diversified, sustainable and responsible supply chains for energy transitions by providing subsidies, partnering with Peru in cooperation for the critical minerals sector and providing low-interest semiconductor loans. Regular allocation of funds to increasing capacity for clean energy and supporting domestic industries underscore Korea's alignment to their G20 commitments.

Thus, Korea receives a score of +1.

Analyst: Eszter Réti

<sup>&</sup>lt;sup>400</sup> South Korea announces over \$23 billion for chip sector as Trump tariffs on semiconductor imports loom, CNBC (New Jersey) 14 April 2025. Access Date: 5 May 2025. https://www.cnbc.com/2025/04/15/south-korea-announces-over-23-billion-for-chip-sector-as-trump-tariffs-on-semiconductor-imports-loom-.html

<sup>&</sup>lt;sup>401</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>402</sup> Korea and Vietnam to Strengthen Industrial Cooperation for Supply Chains and Energy Transition, Ministry of Trade, Industry and Energy (Seoul) 12 August 2025. Access Date: 24 August 2025. https://www.korea.net/Government/Briefing-Room/Press-Releases/view?articleId=8180&type=O&insttCode=A110412&categoryId=109&language=A020101&pageIndex=1&gov=

<sup>&</sup>lt;sup>403</sup> Korea discusses enhanced industrial and energy cooperation with Saskatchewan, Canada, MOTIR 8 September 2025. Access Date: 20 October 2025. https://english.motir.go.kr/eng/article/EATCLdfa319ada/2334/view?pageIndex=4&bbsCdN=2

<sup>&</sup>lt;sup>404</sup> Press Release: Korea-South Africa Insight Forum cohosted by MOTIE and South African Embassy to ROK, MOTIR 17 September 2025. Access Date: 19 October 2025.

https://english.motir.go.kr/eng/article/EATCLdfa319ada/2337/view?pageIndex=4&bbsCdN=2

<sup>&</sup>lt;sup>405</sup> Korea and Saudi Arabia strengthen "Rafiq" (Companion) partnership, MOTIR (Seoul) 23 September 2025. Access Date: 19 October 2025. https://english.motir.go.kr/eng/article/EATCLdfa319ada/2341/view?pageIndex=3&bbsCdN=2

### Mexico: +1

Mexico has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 6 January 2025, President Claudia Sheinbaum launched Olinia, a manufacturer of mini electric vehicles. 406 The government is partnering with academic institutions and private companies to develop the technology and support regional manufacturers to develop affordable electric vehicles. The government will allocate MXN25 million to the National Polytechnic Institute and the National Institute of Technology of Mexico in 2025 for this initiative.

On 13 January 2025, President Sheinbaum announced "Plan Mexico" which entails USD277 billion in investment for various industries. 407 In part, Plan Mexico is focused on developing a domestic semiconductor industry.408

On 23 February 2025, the Federal Electricity Commission and the National Institute of Indigenous Peoples announced an investment of MXN421 million for off-grid solar and grid extensions for Indigenous households.409

On 12 March 2025, the Secretariat of Energy announced the approval of Secondary Laws to consolidate the country's energy sovereignty, restoring the public nature of Petróleos Mexicanos (PEMEX) and the Federal Electricity Commission as state-owned enterprises. 410 The approved legislation introduces the concept of energy justice, creates the National Energy Commission, and implements measures such as fuel traceability and a simplified tax regime for PEMEX to promote a reliable, sustainable, and socially equitable energy sector.

On 13 March 2025, Banco Nacional de Comercio Exterior (Bancomext) issued MXN16.5 billion in sustainability bonds to fund financing programs to support sustainability projects in vulnerable communities.<sup>411</sup> These funds will be utilized for projects funded by Bancomext's "Sustainable-Bond-Framework." The framework includes investments in renewable energy generation, transmission and storage. 412

<sup>&</sup>lt;sup>406</sup> Presidenta Claudia Sheinbaum presenta Olinia, primera armadora mexicana de mini vehículos eléctricos desarrollados en México, Presidencia de la República (Mexico City) 6 March 2025. Translation provided by Google Translate. Access Date: 18 March 2025. https://www.gob.mx/presidencia/prensa/presidenta-claudia-sheinbaum-presenta-olinia-primera-armadoramexicana-de-mini-vehiculos-electricos-desarrollados-en-mexico

<sup>&</sup>lt;sup>407</sup> Presidenta Claudia Sheinbaum presenta el Plan México que contempla un portafolio de inversiones de 277 mmdd, Presidencia de la República (Mexico City) 13 January 2025. Access Date: 16 April 2025. https://www.gob.mx/presidencia/prensa/presidentaclaudia-she in baum-presenta-el-plan-mexico-que-contempla-un-portafolio-de-inversiones-de-277-mmdd

<sup>&</sup>lt;sup>408</sup> Plan Mexico: Sheinbaum's strategy to attract investment amid uncertainty over Trump, El País (Mexico City) 27 January 2025. Access Date: 16 April 2025. https://english.elpais.com/international/2025-01-27/plan-mexico-sheinbaums-strategy-to-attractinvestment-amid-uncertainty-over-trump.html

<sup>&</sup>lt;sup>409</sup> La SENER, CFE e INPI continúan electrificando comunidades indígenas en la Sierra de Durango, Secretaría de Energía (Mexico City) 23 February 2025. Translation provided by Google Translate. Access Date: 24 March 2025.

https://www.gob.mx/sener/articulos/la-secretaria-de-energia-comision-federal-de-electricidad-e-instituto-nacional-de-lospueblos-indigenas-continuan-electrificando-comunidades-indigenas-en-la-sierra-de-durango-391079

<sup>&</sup>lt;sup>410</sup> La aprobación de las Leyes Secundarias representan un paso decisivo en la consolidación de la soberanía energética del país, Secretaría de Energía (Mexico City) 12 March 2025. Translation provided by Google Translate. Access Date: 13 July 2025. https://www.gob.mx/sener/es/articulos/la-aprobacion-de-las-leyes-secundarias-representan-un-paso-decisivo-en-laconsolidacion-de-la-soberania-energetica-del-pais?idiom=es

<sup>411</sup> EXITOSA EMISIÓN DE CEBURES FINANCIARÁ PROYECTOS SOCIALES Y AMBIENTALES, Banco Nacional de Comercio Exterior (Mexico City) 13 March 2025. Translation provided by Google Translate. Access Date: 8 August 2025.

https://www.gob.mx/bancomext/prensa/exitosa-emision-de-cebures-financiara-proyectos-en-zonas-vulnerables

<sup>&</sup>lt;sup>412</sup> BANCOMEXT Sustainability Bond Framework, Bancomext (Mexico City) July 2021. Access Date: 20 August 2025.

https://www.bancomext.com/wp-content/uploads/2021/07/BANCOMEXT Sustainable-Bond-Framework July2021.pdf

On 28 March 2025, Undersecretary for Planning and Energy Transition Jorge Islas announced that all future Mexican wind and solar plants will require battery storage up to 30 per cent of their original capacity. 413 This promotes energy transition technologies and storage.

On 3 April 2025, the Secretariat of Science, Humanities, Technology and Innovation established a group dedicated promoting the energy transition and energy sovereignty in Mexico.<sup>414</sup> The group highlighted the development of energy generation, transmission and storage as well as renewable energy systems to decrease energy poverty.

On 9 April 2025, Secretary Luz Elena Gonzales Escobar announced a MXN624 billion investment in the electric sector, of which MXN430 billion will be used to increase generation capacity. This investment supports Mexico's plans for increasing access to electricity while contributing to the energy transition.

On 2 May 2025, Mexico's Secretariat of Science, Humanities, Technology and Innovation and the Government of Sonora signed a collaboration agreement to advance the country's semiconductor industry. 416 The agreement supports the federal "Kutsari" initiative, aiming to strengthen the semiconductor value chain and enhance Mexico's technological sovereignty.

One 9 June 2025, the Mexican Petroleum Institute and Zelandez Limited signed an agreement to collaborate on research and development of lithium industry in Mexico. 417 The two institutions will collaborate on research projects, technological development and specialized training.

On 25 June 2025, the Secretariat of Economy and various public and private sector partners attended the "Mexico-United States Semiconductor Collaboration Forum" in Pheonix, Arizona.<sup>418</sup> Attendees discussed bilateral cooperation between Mexico and the state of Arizona, focusing on strengthening semiconductor value chains in the region.

On 4 July 2025, the Secretariat of Science, Humanities, Technology, and Innovation (SECIHTI) signed a Memorandum of Understanding with Intel to foster collaboration in semiconductors, supercomputing and

<sup>&</sup>lt;sup>413</sup> Mexico announces battery storage mandate for renewable energy plants, PV Magazine (Berlin) 31 March 2025. Access Date: 9 May 2025. https://www.pv-magazine.com/2025/03/31/mexico-announces-battery-storage-mandate-for-renewable-energy-plants/

<sup>&</sup>lt;sup>414</sup> Secihti instala grupo de trabajo para impulsar proyectos estratégicos que coadyuven a la soberanía energética del país, Secretaria de Ciencia, Humanidades, Tecnología e Innovación (Mexico City) 3 April 2025. Translation provided by Google Translate. Access Date 11 August 2025. https://secihti.mx/sala-de-prensa/secihti-instala-grupo-de-trabajo-para-impulsar-proyectos-estrategicos-que-coadyuven-a-la-soberania-energetica-del-pais/

<sup>&</sup>lt;sup>415</sup> Secretary Luz Elena González Escobar presented the actions of the electricity sector aimed at promoting the development of Plan Mexico, Secretaría de Energía (Mexico City) 9 April 2025, Translation provided by Google Translate, Access Date: 14 April 2025. https://www.gob.mx/sener/articulos/la-secretaria-de-energia-luz-elena-gonzalez-escobar-presento-las-acciones-del-sector-electrico-encaminadas-a-impulsar-el-desarrollo-del-plan-mexico

 <sup>416</sup> Secihti y gobierno de Sonora firman convenio para fortalecer cadena de valor en semiconductores de México, Secretaría de Ciencia, Humanidades, Tecnología e Innovación (Ciudad de México) 2 May 2025. Access Date: 20 May 2025. https://secihti.mx/sala-de-prensa/secihti-y-gobierno-de-sonora-firman-convenio-para-fortalecer-cadena-de-valor-en-semiconductores-de-mexico/
 417 IMP y Zelandez Limited firman convenio para impulsar la industria del litio, Instituto Mexicano del Petróleo (Mexico City) 9
 June 2025. Translation provided by Google Translate. Access Date: 20 August 2025. https://www.gob.mx/imp/es/articulos/imp-y-zelandez-limited-firman-convenio-para-impulsar-la-industria-del-litio

<sup>&</sup>lt;sup>418</sup> México y Estados Unidos fortalecen su alianza estratégica en semiconductores con participación histórica en Foro Binacional en Arizona, Secretaría de Economía (Mexico City) 25 June 2025. Translation provided by Google Translate. Access Date: 11 August 2025. https://www.gob.mx/se/prensa/mexico-y-estados-unidos-fortalecen-su-alianza-estrategica-en-semiconductores-con-participacion-historica-en-foro-binacional-en-arizona?idiom=es

artificial intelligence in Mexico.<sup>419</sup> SECIHTI aims to boost innovation in Mexico by establishing mechanisms for knowledge transfer and capacity building.

On 6 August 2025, InnovaBeinestar and the Ministry of Science, Humanities, Technology, and Innovation of the State of Puebla signed an agreement to support semiconductor supply chain development.<sup>420</sup> This agreement will allow for the creation of a National Semiconductor Design center in Puebla as a part of the Kutsari project and improve local semiconductor supply chains.

On 19 August 2025, SECIHTI's InnovaBienestar de México and the State of Jalisco signed an agreement to develop technological and semiconductor leadership in Jalisco.<sup>421</sup> This includes participation in the National Artificial Intelligence Laboratory.

On 21 August 2025, the Ministry of Economy issued three orders for geological exploration in the states of Sonora, Sinaloa, Mexico and Durango to identify potential mineral deposits.<sup>422</sup> These actions are being done so Mexico has access to the necessary minerals for its local energy transition.

On 14 September 2025, National Commission for the Efficient use of Energy and National Institute of Electricity and Clean Energy signed an agreement committing to share information and collaborate on designing tools and methodologies for the energy transition.<sup>423</sup>

Mexico has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Mexico has supported the joint welfare target and supported supply chains for energy transition technologies and semiconductors through its support for mini electric vehicles, Plan Mexico's investment for the domestic semiconductor industry, collaboration with the Government of Sonora for semiconductors, investment for off-grid solar and grid extensions for Indigenous communities and major investment for the electric sector.

Thus, Mexico receives a score of +1.

Analyst: Aiden Hunt

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<sup>&</sup>lt;sup>419</sup> Secihti e Intel firman alianza estratégica para impulsar ecosistema de semiconductores, supercómputo e IA en México, Secretaría de Ciencia, Humanidades, Tecnología e Innovación 4 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://secihti.mx/sala-de-prensa/secihti-e-intel-firman-alianza-estrategica-para-impulsar-ecosistema-de-semiconductores-supercomputo-e-ia-en-mexico/

<sup>&</sup>lt;sup>420</sup> InnovaBienestar de Secihti y Gobierno de Puebla impulsan proyecto científico-tecnológico de semiconductores en beneficio del país, Secretaria de Ciencia, Humanidades, Tecnología e Innovación (Mexico City) 6 August 2025. Translation provided by Google Translate. Access Date: 11 August 2025. https://secihti.mx/sala-de-prensa/innovabienestar-de-secihti-y-gobierno-de-puebla-impulsan-proyecto-cientifico-tecnologico-de-semiconductores-en-beneficio-del-pais/

<sup>&</sup>lt;sup>421</sup> InnovaBienestar de Secihti y Gobierno de Jalisco firman convenio para implementar Centro Nacional de Diseño de Semiconductores Kutsari, Secretaría de Ciencia, Humanidades, Tecnología e Innovación (Mexico City) 19 August 2025.Translation provided by Google Translate. Access Date: 17 October 2025. https://secihti.mx/sala-de-prensa/innovabienestar-de-secihti-y-gobierno-de-jalisco-firman-convenio-para-implementar-centro-nacional-de-diseno-de-semiconductores-kutsari/

<sup>&</sup>lt;sup>422</sup> SGM evaluará depósitos de minerales en Sonora, Sinaloa, Durango y Estado de México, Gorbierno De Mexico (Mexico City) 21 August 2025. Translation provided by Google Translate. Access Date: 28 August 2025. https://www.gob.mx/se/prensa/sgm-evaluara-depositos-de-minerales-en-sonora-sinaloa-durango-y-estado-de-mexico?idiom=es

<sup>&</sup>lt;sup>423</sup> Conuee e INEEL firman Convenio de Colaboración para impulsar la eficiencia energética en México, Gorbierno De Mexico (Mexico City) 14 September 2025. Translation provided by Google Translate. Access Date: 19 September 2025. https://www.gob.mx/sener/articulos/conuee-e-ineel-firman-convenio-de-colaboracion-para-impulsar-la-eficiencia-energetica-en-mexico

### Russia: +1

Russia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 25 November 2024, Russia announced new investments in clean energy initiatives aimed at improving energy efficiency and reducing environmental impact.<sup>424</sup> These investments include the construction of a Green Cyber Farm.

On 26 November 2024, Prime Minister Mikhail Mishustin chaired a strategic session to discuss enhancing the energy efficiency of the national economy.<sup>425</sup> This initiative includes efforts to modernize infrastructure, such as converting existing boiler stations to more efficient fuel types.

On 2 December 2024, Russia extended several benefits including decreased insurance premium rates to companies manufacturing semiconductor production equipment, including Computer Numerical Control machines and microcircuit development tools, supporting semiconductor supply chain security.<sup>426</sup> These incentives aim to bolster semiconductor supply chain security, which indirectly contributes to the resilience of clean energy systems.

On 5 December 2024, Russia approved measures to enhance safety for nuclear technologies, line with International Atomic Energy Agency recommendations.<sup>427</sup> This action is part of Russia's long-standing commitment to nuclear energy development. Additionally, Russia launched the Green Cyber Farm project which promotes sustainable agriculture through automated platforms powered by renewable energy. This project seeks to address environmental sustainability in agriculture, leveraging technological innovation to support green energy use in the farming sector.

On 12 December 2024, Russia held a strategic session to discuss increasing the energy and resource efficiency of the national economy. 428 This session discussed ongoing efforts to modernize infrastructure, transition boiler stations to more efficient fuel sources and expand the use of alternative and renewable energy.

On 26 December 2024, the State Atomic Energy Corporation Rosatom announced the opening of a wind blade production facility.<sup>429</sup> This facility will produce over 400 blades per year, with enough blades for over 100 wind turbines, which supports the creation of a local supply chain for wind energy technology.

On 31 January 2025, Deputy Minister of Energy Roman Marshavin and Ambassador of Kyrgyzstan to Russia Kubanychbek Bokontayev met to discuss energy sector cooperation. <sup>430</sup> This included a focus on joint electric projects in Kyrgyzstan, oil and gas cooperation and the Central Asian Coordinating Electric Power Council.

<sup>&</sup>lt;sup>424</sup> О новых инвестициях в чистую энергию, Government of Russia (Moscow) 25 November 2024. Translation provided by Google Translate. Access Date: 29 March 2025. http://government.ru/en/news/53701/

Google Translate. Access Date: 29 March 2025. http://government.ru/en/news/53701/

425 Mikhail Mishustin chairs strategic session on the energy and resource efficiency of the national economy, Government Coordination Centre (Moscow) 26 November 2024. Access Date: 30 June 2025. http://government.ru/en/news/53442/

<sup>&</sup>lt;sup>426</sup> О мерах поддержки производителей оборудования для микроэлектроники, Government of Russia (Moscow) 2 December 2024. Translation provided by Google Translate. Access Date: 29 March 2025. http://government.ru/en/news/53572/

<sup>427</sup> О развитии атомной энергетики и проекта 'Зеленая Киберферма, Government of Russia (Moscow) 5 December 2024.

Translation provided by Google Translate. Access Date: 29 March 2025. http://government.ru/en/news/53580/

<sup>&</sup>lt;sup>428</sup> О повышении энергоэффективности национальной экономики, Government of Russia (Moscow) 12 December 2024.

Translation provided by Google Translate. Access Date: 29 March 2025. http://government.ru/en/news/53442/

<sup>&</sup>lt;sup>429</sup> Композитный дивизион «Росатома» запустил производство ветролопастей в Ульяновске, Росатом (Moscow) 26 December 2024. Translation provided by Google Translate. Access Date: 19 August 2025. https://www.rosatom.ru/journalist/arkhiv-novostey/kompozitnyy-divizion-rosatoma-zapustil-proizvodstvo-vetrolopastey-v-ulyanovske/

<sup>&</sup>lt;sup>430</sup> Россия и Киргизия развивают сотрудничество в энергетике, Минэнерго России (Moscow) 31 January 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://minenergo.gov.ru/press-center/news-and-events?news-item=rossiya-i-kirgiziya-razvivayut-sotrudnichestvo-v-energetike

On 5 March 2025, President Putin and Prime Minister of Myanmar Min Aung Hlaing signed a cooperation agreement for the construction of a small modular nuclear reactor in Myanmar.<sup>431</sup> The parties agreed to a project generating 110 megawatts with the option to increase production in the future.

On 16 March 2025, First Deputy Prime Minister Denis Manturov attended joint talks with Qatar on trade and industrial cooperations. <sup>432</sup> The parties discussed industrial cooperation in the renewable energy sector.

On 17 March 2025, the Ministry of Natural Resources and Environment announced plans to significantly boost lithium production in Russia.<sup>433</sup>

On 31 March 2025, Special Envoy and Head of the Russian Direct Investment Fund Kirill Dmitriev announced that Russia and the United States had begun discussions on joint projects to develop rare-earth metal reserves in Russia. Special Envoy Dmitriev noted growing interest from companies in cooperating on rare earth projects.

On 17 April 2025, the Ministry of Energy allocated RUB3.1 million to update Rostov Region's power grid to ensure a reliable energy supply for residents.<sup>435</sup> This includes plans to modernize the electric grid, create a mobile reserve for energy generation and implement new technologies.

On 25 April 2025, the State Research and Design Institute of the Rare Metal Industry and the National University of Science and Technology MISIS signed separate Joint Declarations of Intent with India's Council of Scientific and Industrial Research's Institute of Minerals and Materials Technology. 436 Both agreements are focus on collaboration for critical mineral technologies.

On 9 May 2025, President Putin met with Brazilian President Lula da Silva in Moscow.<sup>437</sup> The two discussed expanding cooperation in nuclear energy and in the critical minerals sector.<sup>438</sup>

<sup>&</sup>lt;sup>431</sup> Russia and Myanmar signed an intergovernmental agreement for the construction of a small modular reactor, Rosatom (Moscow) 5 March 2025. Access Date: 19 August 2025. https://www.rosatom.ru/en/press-centre/news/russia-and-myanmar-signed-an-intergovernmental-agreement-for-the-construction-of-a-small-modular-rea/

 <sup>432</sup> Doha hosts the 5th meeting of the Joint Russian-Qatari Commission on Trade, Economic and Technical Cooperation,
 Government of Russia (Moscow) 16 March 2025. Access Date: 30 June 2025. http://government.ru/en/news/54508/
 433 Russia plans to launch large-scale lithium production in 2030, Reuters (Moscow) 17 March 2025. Access Date: 19 July 2025.

Aussia plans to launch large-scale lithium production in 2030, Reuters (Moscow) 17 March 2025. Access Date: 19 July 2025. https://archive.is/wCnD7
 Russia and U.S. Begin Talks on Rare Earth Metals, Putin Envoy Says (Moscow) 31 March 2025. Access Date: 16 August 2025.

https://www.themoscowtimes.com/2025/03/31/russia-and-us-begin-talks-on-rare-earth-metals-putin-envoy-says-a88538 <sup>435</sup> Минэнерго выделило 3,1 млрд рублей на обеспечение надежного энергоснабжения Ростовской области, Минэнерго России (Moscow) 17 April 2025. Translation provided by Google Translate. Access Date: 23 June 2025.

https://minenergo.gov.ru/press-center/news-and-events?news-item=minenergo-vydelilo-3-1-mlrd-rubley-na-obespechenie-nadezhnogo-energosnabzheniya-rostovskoy-oblasti

<sup>&</sup>lt;sup>436</sup> CSIR-IMMT Signs Joint Declarations of Intent with Russia's Giredmet, Rosatom, Moscow and National University of Science and Technology, Moscow to Advance Critical Mineral Technologies, Ministry of Science and Technology (New Delhi) 25 April 2025. Access Date: 23 June 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2124199

<sup>&</sup>lt;sup>437</sup> Lula at bilateral meeting with Putin: "Strengthening the construction of a strategic partnership," Government of Brazil 12 May 2025. Access Date: 17 August 2025. https://www.gov.br/planalto/en/latest-news/2025/05/lula-at-bilateral-meeting-with-putin-201cstrengthening-the-construction-of-a-strategic-partnership201d

<sup>&</sup>lt;sup>438</sup> In visits to Russia and China, Lula emphasizes the role of BRICS and defends multilateralism and new global governance (Brazil) 14 May 2025. Access Date: 16 August 2025. https://brics.br/en/news/lula-emphasizes-brics-role-defends-multilateralism-and-new-global-governance-during-visits-to-russia-and-china

On 14 May 2025, the Ministry of Energy announced that a modernized hydroelectric unit has begun operation at the Krasnoyarsk hydroelectric plant.<sup>439</sup> This unit has a capacity of 500 megawatts which will increase the plant's annual electricity generation by 5 per cent.

On 16 May 2025, Deputy Prime Minister Alexei Overchuk participated in the first Russia-Afghanistan business forum.<sup>440</sup> Government officials and business representatives from both countries discussed joint projects in several areas including energy and mineral extraction.

On 18 June 2025, Minister of Energy Sergey Tsivilev attended a ceremony for the agreement of the production of autonomous hybrid energy complexes in Yakutia.<sup>441</sup> Minister Tsivilev emphasized the importance of maintaining the supply of energy to remote and isolated areas.

On 24 June 2025, Director General of Rosatom Alexey Likhachev and Mali Minister of Energy and Water Resources Boubacar Diané signed an agreement on the cooperation "in the peaceful use of atomic energy."<sup>442</sup> The agreement underlines the development of nuclear energy sector within Mali and responsible nuclear regulation.

On 11 July 2025, the Ministry of Industry and Trade organized a roundtable with private sector representatives to discuss mining opportunities in Saudi Arabia. Saudi representatives discussed opportunities for mineral production in Saudi Arabia.

On 30 July 2025, Rosseti began construction on an electricity transmission line that will connect the Vostochny Cosmodrome to a reliable energy supply.<sup>444</sup>

On 26 September 2025, Deputy Prime Minister Alexander Novak and China's Vice Premier Ding Xuexiang led the 22nd China-Russia Energy Cooperation Committee Meeting. 445 Both members agreed to deepen energy cooperation and partner on energy projects. The Vice Premier highlighted "renewable energy, hydrogen energy and energy storage" as key areas for further cooperation.

Russia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Russia has taken strong action towards the combined welfare target and supported supply chains for energy transitions and semiconductors through financial incentives for

https://english.www.gov.cn/news/202509/27/content WS68d72a54c6d00ca5f9a067b4.html

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<sup>&</sup>lt;sup>439</sup> Модернизированный гидроагрегат увеличит среднегодовую выработку электроэнергии Красноярской ГЭС до 5%, Минэнерго России (Moscow) 14 May 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://minenergo.gov.ru/press-center/news-and-events?news-item=modernizirovannyy-gidroagregat-uvelichit-srednegodovuyu-vyrabotku-elektroenergii-krasnoyarskoy-ges-d

<sup>&</sup>lt;sup>440</sup> Alexei Overchuk participates in the first Russia-Afghanistan business forum, Government of Russia (Kazan) 16 May 2025. Access Date: 19 July 2025. http://government.ru/en/news/55036/

<sup>&</sup>lt;sup>441</sup> В Якутии создадут завод по производству автономных энергокомплексов, Министерства энергетики Российской Федерации (St. Petersburg) 18 June 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://minenergo.gov.ru/press-center/news-and-events?news-item=v-yakutii-sozdadut-zavod-po-proizvodstvu-avtonomnykhenergokompleksov

<sup>442</sup> Russia and Mali Sign Intergovernmental Agreement on Cooperation in the Peaceful Use of Atomic Energy, Rosatom (Moscow) 24 June 2025. Access Date: 19 August 2025. https://www.rosatom.ru/en/press-centre/news/russia-and-mali-sign-intergovernmental-agreement-on-cooperation-in-the-peaceful-use-of-atomic-energy/

<sup>&</sup>lt;sup>443</sup> Industry and Mineral Resources Minister Chairs Private Sector Roundtable in Moscow, Saudi Press Agency (Moscow) 11 July 2025. Access Date: 19 July 2025. https://www.spa.gov.sa/en/N2355981

<sup>&</sup>lt;sup>444</sup> «Россети» обеспечат первую категорию надежности электроснабжения космодрома Восточный, Министерство энергетики РФ (Moscow) 30 July 2025. Translation provided by Google Translate. Access Date: 18 August 2025. https://minenergo.gov.ru/press-center/news-and-events?news-item=rosseti-obespechat-pervuyu-kategoriyu-nadezhnosti-elektrosnabzheniya-kosmodroma-vostochnyy

<sup>&</sup>lt;sup>445</sup> China, Russia pledge joint efforts to elevate energy cooperation, State Council of the People's Republic of China (Beijing) 26 September 2025. Access Date: 17 October 2025.

semiconductor manufacturers, funding to update Rostov Region's power grid, a new hydroelectric unit and investments for clean energy initiatives.

Thus, Russia has received a score of +1.

Analyst: Maham Khokhar

### Saudi Arabia: +1

Saudi Arabia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 26 November 2024, Saudi Arabia signed investment agreements worth over USD9 billion to develop extraction and processing facilities for metals and rare earth elements.<sup>446</sup>

On 3 December 2024, Saudi Arabia hosted the fourth Saudi Green Initiative Forum and announced USD60 million in new funding for climate and environmental initiatives. 447 This funding will support renewable energy projects, protection of natural ecosystems and reducing desertification.

On 9 January 2025, the National Semiconductor Hub and National Technology Development Program formed a partnership with Kneron, an artificial intelligence (AI) semiconductor solutions company.<sup>448</sup> Kneron will establish a Riyadh subsidiary that will support Saudi Arabia's semiconductor ecosystem.

On 14 January 2025, Minister of Industry and Mineral Resources Bandar Alkhorayef and Vice Minister of Industry and Mineral Resources for Mining Affairs Khalid Al-Mudaifer signed several Memorandums of Understanding with representatives from Djibouti, Jordan, the United Kingdom, Austria and Zambia, respectively, to cooperate for mineral resources development, as well as declaration of intent with France for the mineral resources sector. These partnerships, formalized at the Future Minerals Forum, will support the diversification of Saudi Arabia's critical minerals supply chains.

On 4 February 2025, Minister of Industry and Mineral Resources Bandar Ibrahim Alkhorayef and India's Minister of Coal and Mines Kishan Reddy met in New Delhi to discuss cooperation for critical minerals.<sup>450</sup> The ministers discussed the need for reliable critical minerals supply chains and discussed potential cooperation for critical minerals to support the energy transition.

On 5 February 2025, the Ministry of Investment selected EdgeCortix, a semiconductor company, to join the NSH program. As part of this partnership, EdgeCortix will establish a local subsidiary to drive advanced semiconductor engineering and edge AI development.

<sup>&</sup>lt;sup>446</sup> Saudi Arabia secures metals investment deals worth \$9.3bn, Mining Technology (New York) 27 November 2024. Access Date: 29 March 2025. https://www.mining-technology.com/news/saudi-arabia-secures-metals-investment/?cf-view

<sup>&</sup>lt;sup>447</sup> Saudi Arabia advances climate action at the 2024 SGI Forum, Saudi and Middle East Green Initiatives (Riyadh) 3 December 2024. Access Date: 16 May 2025. https://www.sgi.gov.sa/knowledge-hub/saudi-arabia-advances-climate-action-at-the-2024-sgi-forum/

<sup>&</sup>lt;sup>448</sup> Kneron forms partnership with Saudi Arabia's National Semiconductor Hub and establishes local subsidiary, EIN Presswire (San Diego) 9 January 2025. Access Date: 16 April 2025. https://www.einpresswire.com/article/775610317/kneron-forms-partnership-with-saudi-arabia-s-national-semiconductor-hub-and-establishes-local-subsidiary

<sup>&</sup>lt;sup>449</sup> Saudi Arabia Strikes Mining Agreements with Several Governments at Fourth Future Minerals Forum, Saudi Press Agency (Riyadh) 14 January 2025. Access Date: 11 August 2025. https://www.spa.gov.sa/en/N2242671

<sup>&</sup>lt;sup>450</sup> Union Minister Shri G. Kishan Reddy Meets Saudi Minister to Strengthen Cooperation in Critical Minerals Sector, Ministry of Mines (New Delhi) 4 February 2025. Access Date: 23 June 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2099793 
<sup>451</sup> EdgeCortix selected by Saudi Arabia's Ministry of Investment to expand into Riyadh in partnership with the National Semiconductor Hub, Business Wire (Tokyo) 5 February 2025. Access Date: 16 April 2025.

https://www.businesswire.com/news/home/20250205996760/en/Edge Cortix-Selected-by-Saudi-Arabias-Ministry-of-Investment-to-Expand-into-Riyadh-in-Partnership-with-the-National-Semiconductor-Hub

On 10 February 2025, Saudi Arabia committed USD1.5 billion to AI chip startup Groq to expand the delivery of its advanced AI chips to the country.<sup>452</sup> This funding will support the development of reliable semiconductors supply chains.

On 14 February 2025, Saudi Arabia signed Memorandum of Understanding for mineral resource development with Djibouti, Jordan, the United Kingdom, Zambia, Austria and France.<sup>453</sup> This collaboration will help the diversification of Saudi Arabia's critical minerals supply chains.

On 16 February 2025, Saudi Arabia launched the Mining Innovation Studio to drive advancements in mineral exploration and processing.<sup>454</sup> The initiative, supported by key government and private sector stakeholders, focuses on accelerating technology adoption, enhancing efficiency and fostering sustainable practices in the mining sector.

On 17 April 2025, Saudi Arabia and Indonesia signed a series of memoranda of understanding aimed at increasing cooperation in the mining sector. The agreements will foster collaboration in areas including "mineral exploration, geological surveying, sustainable mining practices, mineral production and processing and the development of modern technologies for the mining and metallurgical industries."<sup>455</sup>

On 29 June 2025, Minister of Energy Abdulaziz bin Salman bin Abdulaziz signed a Memorandum of Understanding with the United Nations Environment Programme. 456 The memorandum aims to promote transition technologies and cooperation on lowering carbon emissions.

On 2 July 2025, Saudi Arabia and Indonesia agreed to enhance cooperation in developing and sustaining energy supply chains, developing renewable energy and energy storage and developing carbon capture and storage technologies.<sup>457</sup> The agreement entails encouraging collaborative research, technology transfer, encouraging private sector joint ventures and expertise exchange in the aforementioned areas.

On 10 July 2025, Minister Alkhorayef held meetings with leading Russian industrial and mining companies.<sup>458</sup> The parties discussed mining technology transfer and exploration opportunities in Saudia Arabia.

On 11 July 2025, Minister Alkhorayef chaired a private sector roundtable in Russia on mining opportunities in Saudi Arabia. Minister Alkhorayef emphasized Saudi Arabia's focus on mining and highlighted its mineral discoveries.

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<sup>&</sup>lt;sup>452</sup> Saudi Arabia Announces \$1.5 Billion Expansion to Fuel Al-powered Economy with Al Tech Leader Groq, Groq (Mountain View and Riyadh) 10 February 2025. Access Date: 29 March 2025. https://groq.com/news/saudi-arabia-announces-1-5-billion-expansion-to-fuel-ai-powered-economy-with-ai-tech-leader-groq

<sup>&</sup>lt;sup>453</sup> Saudi Arabia champions global collaboration and innovation at Future Minerals Forum, Arab News (Riyadh) 14 January 2025. Access Date: 16 April 2025. https://www.arabnews.com/node/2586366/business-economy

<sup>&</sup>lt;sup>454</sup> Saudi Arabia Launches Mining Innovation Studio to Accelerate Sector Transformation, Saudi Press Agency (Riyadh) 16 January 2025. Access Date: 29 March 2025. https://www.spa.gov.sa/en/N2243898

<sup>&</sup>lt;sup>455</sup> Saudi Arabia, Indonesia sign key agreements to boost trade and mining cooperation, Arab News (Riyadh) 17 April 2025. Access Date: 20 May 2025. https://www.arabnews.com/node/2597430/business-economy

<sup>&</sup>lt;sup>456</sup> Minister of Energy, UNEP Chief Sign MoU on Regional Emissions Cooperation, Global Climate Action, Saudi Press Agency (Riyadh) 29 June 2025. Access Date: 17 July 2025. https://www.spa.gov.sa/en/N2349074

<sup>&</sup>lt;sup>457</sup> Joint Statement Issued at Conclusion of Indonesian President's Visit to the Kingdom, Saudi Press Agency (Jeddah) 2 July 2025. Access Date: 7 July 2025. https://www.spa.gov.sa/en/N2351128

<sup>&</sup>lt;sup>458</sup> Industry Minister Explores Expanded Partnerships with Top Russian Companies, Saudi Press Agency (Moscow) 10 July 2025. Access Date: 19 July 2025. https://www.spa.gov.sa/en/N2355642

<sup>&</sup>lt;sup>459</sup> Industry and Mineral Resources Minister Chairs Private Sector Roundtable in Moscow, Saudi Press Agency (Moscow) 11 July 2025. Access Date: 19 July 2025. https://www.spa.gov.sa/en/N2355981

On 14 July 2025, ACWA Power, Badeel and Saudi Aramco agreed to develop five solar projects and two wind projects totaling SAR63.75 billion.<sup>460</sup> The new projects aim to generate a combined capacity of 15,000 megawatts.

On 17 July 2025, the Ministry of Industry and Mineral Resources established a non-profit association to enhance research and innovation.<sup>461</sup> This action aims to support sustainability and efficiency in the industrial sector.

On 20 July 2025, ACWA Power announced an agreement with energy corporations from Italy, France, the Netherlands and Germany to develop a green hydrogen and renewable energy export corridor between Saudi Arabia to Europe. 462 The agreements aim to enhance energy security and serve industrial demand.

On 29 July 2025, Minister of Industry and Mineral Resources Bandar bin Ibrahim Al Khorayef met with American private sector leaders to discuss investment opportunities in Saudi Arabia.<sup>463</sup> Minister Al Khorayef emphasized opportunities in Saudi Arabia's mining sector, including its rare earth element reserves.

On 26 August 2025, Saudi Arabian officials met with Brazil's National Secretary for Oil, Natural Gas and Biofuels Pietro Mendes to discuss the implementation of the Action Plan for Energy Cooperation. 464 Brazil and Saudi Arabia agreed to create technical working groups to further explore initiatives and collaboration hydrogen and energy supply chains.

On 28 September 2025, Minister of Industry and Mineral Resources Bandar bin Ibrahim Alkhorayef returned to Saudi Arabia from China where he established over 42 Memorandums of Understanding with Chinese companies in the energy and technology sectors. 465 Additionally, the National Industrial Development Center and Tsinghua Unigroup signed an Memorandum of Understanding to cooperate on semiconductors.

Saudi Arabia has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. Saudi Arabia has taken strong action towards the combined welfare target and supported supply chains for critical minerals, semiconductors and energy transition technologies through the Mining Innovation Studio, funding for AI chip startup Groq, funding for renewable energy projects and investing in extraction and processing facilities for metals and rare earth elements.

Thus, Saudi Arabia receives a score of +1.

Analysts: Ana Grace Rans Kolakovic and Erfan Ehsan

G20 Research Group, 18 November 2025

<sup>&</sup>lt;sup>460</sup> ACWA Power, Badeel and SAPCO to invest approximately \$8.3 billion to develop 15,000 MW of renewable energy projects in Saudi Arabia, Public Investment Fund of the Kingdom of Saudi Arabia (Riyadh) 14 July 2025. Access Date: 14 July 2025. https://www.pif.gov.sa/en/news-and-insights/newswire/2025/acwa-power-badeel-and-sapco-to-invest-approximately-8-3-billion-to-develop-15000-mw-of-renewable-energy-projects-in-saudi-arabia/

<sup>&</sup>lt;sup>461</sup> Industry Ministry Establishes New Non-Profit Association for Industrial Growth, Saudi Press Agency (Riyadh) 17 July 2025. Access Date: 19 July 2025. https://www.spa.gov.sa/en/N2362318

<sup>&</sup>lt;sup>462</sup> Saudi Arabia Solidifies Global Renewable Energy Leadership, Signs Agreements for Green Hydrogen and Power Exports to Europe Under IMEC Initiative, Saudi Press Agency (Riyadh) 20 July 2025. Access Date: 13 August 2025. https://www.spa.gov.sa/en/N2364007?

<sup>&</sup>lt;sup>463</sup> Saudi Minister of Industry and Mineral Resources Engages U.S. Private Sector Leaders at World Business Chicago, Ministry of Industry and Natural Resources (Chicago) 29 July 2025. Access Date: 13 August 2025. https://mim.gov.sa/en/mediacenter/news/saudi-minister-industry-us-chicago-meeting

<sup>&</sup>lt;sup>464</sup> Brasil e Arábia Saudita dão início a plano de ação para cooperação energética, Ministério de Minas e Energia (Brasília) 26 August 2025. Translation provided by Google Translate. Access Date: 17 October 2025. https://www.gov.br/mme/pt-br/assuntos/noticias/brasil-e-arabia-saudita-dao-inicio-a-plano-de-acao-para-cooperacao-energetica

<sup>&</sup>lt;sup>465</sup> Industry Minister Concludes Official Visit to China, Saudi Press Agency (Beijing) 28 September 2025. Access Date: 17 October 2025. https://www.spa.gov.sa/en/N2409269

### South Africa: 0

South Africa has partially complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 23 December 2024, Minister of Electricity and Energy Kgosientsho Ramokgopa announced bidders for the Renewable Energy Independent Power Producer Procurement Programme. 466 This program is designed to facilitate the procurement of up to 5,000 megawatts of renewable energy capacity.

On 3 January 2025, President Cyril Ramaphosa signed into law a 150 per cent tax deduction on investments in electric and hydrogen-powered vehicles.<sup>467</sup>

On 12 February 2025, Minister of Forestry, Fisheries and the Environment announced changes to South Africa's environmental authorization processes to prioritize transition technology projects. This includes speeding up environmental review for renewable energy projects, removing environmental authorization for "solar and battery facilities," the creation of renewable energy zones and transmission corridors.

On 1 March 2025, South Africa and Chile signed an agreement to improve cooperation in critical minerals and the energy transition.<sup>469</sup> This agreement focuses on leveraging trade and industry to strengthen cooperation.

On 12 March 2025, President Ramaphosa, President of the European Commission Ursula von der Leyen and President of the European Council António Costa signed a joint statement on various issues including supply chains and energy transition technologies.<sup>470</sup> The members agreed to launch negotiations for a "Clean Trade and Investment Partnership." This partnership will include investment in raw materials supply chains and renewable energy projects.

On 28 March 2025, the Cabinet approved the South Africa Renewable Energy Master Plan. This plan pursues a target of developing three to five gigawatts of energy generation to support domestic manufacturing.<sup>471</sup> The plan seeks to "improve the resilience and sustainability of energy supply."

On 14 April 2025, Minister of Forestry, Fisheries and the Environment Dion Goerge welcomed Eskom's issuance of a tender to establish a separate renewable energy business unit.<sup>472</sup> Minister Goerge encouraged private sector actors to participate and drive innovation to bolster renewable energy capacity.

<sup>&</sup>lt;sup>466</sup> Minister Kgosientsho Ramokgopa on 8 Preferred Bidders under Renewable Energy Independent Power Producer Procurement Programme and 8 Preferred Bidders under Battery Energy Storage Independent Power Producer Procurement P, Government of South Africa (Cape Town) 23 December 2024. Access Date: 21 March 2025. https://www.gov.za/news/media-statements/minister-kgosientsho-ramokgopa-8-preferred-bidders-under-renewable-energy

<sup>&</sup>lt;sup>467</sup> South Africa Launches Tax Break, Helping to Lure China EV Makers, BNN Bloomberg (Johannesburg) 3 January 2025. Access Date: 16 April 2025. https://www.bnnbloomberg.ca/investing/commodities/2025/01/03/ev-tax-break-may-lure-china-to-27-billion-south-africa-industry/

<sup>&</sup>lt;sup>468</sup> Minister George takes action to boost SA's green economy, Forestry, Fisheries and the Environment (Pretoria) 12 February 2025. Access Date: 20 August 2025. https://www.dffe.gov.za/mediarelease/george\_actiontoboostsagreeneconomy

<sup>&</sup>lt;sup>469</sup> South Africa and Chile to Strengthen Trade And Cooperate on Decarbonisation and Critical Minerals, Department of Trade, Industry and Competition (Pretoria) 1 March 2025. Access Date: 13 July 2025. https://www.thedtic.gov.za/south-africa-and-chile-to-strenghten-trade-and-cooperate-on-decarbonisation-and-critical-minerals/

<sup>&</sup>lt;sup>470</sup> EU - South Africa Summit Declaration, European Commission (Cape Town) 12 March 2025. Access Date: 15 May 2025. https://ec.europa.eu/commission/presscorner/detail/en/statement 25 773

<sup>&</sup>lt;sup>471</sup> Minister Kgosientsho Ramokgopa welcomes Cabinet's approval of the South African Renewable Energy Master Plan, government, Government of South Africa (Cape Town) 28 March 2025, Access Date: 8 May 2025. https://www.gov.za/news/media-statements/minister-kgosientsho-ramokgopa-welcomes-cabinet%E2%80%99s-approval-south-african

<sup>&</sup>lt;sup>472</sup> Minister Dion George welcomes Eskom's tender for renewable energy business unit, Government of South Africa (Cape Town) 14 April 2025, Access Date: 14 April 2025. https://www.gov.za/news/media-statements/minister-dion-george-welcomes-eskoms-tender-renewable-energy-business-unit-14

On 17 April 2025, South Africa signed a Memorandum of Understanding with Nigeria to deepen cooperation in the mining sector. <sup>473</sup> The agreement outlines several areas of cooperation including technical support, training, technology transfer and joint exploration projects.

On 20 May 2025, Minister of Mineral and Petroleum Gwede Mantashe welcomed the Cabinet approval of both the Critical Minerals and Metal Strategy along with the Mineral Resources Development Bill of 2025. 474 These legislations identify critical minerals and strategies for exploration, production and beneficiation.

On 21 May 2025, Minister of Finance Enoch Godongwana gave a budget speech which outlined ZAR219.2 billion for energy supply networks through the 2025 budget.<sup>475</sup> This includes investments in renewable energy, energy transmission and expansion to stabilize power and reduce loadshedding.

On 23 May 2025, Minister Ramokgopa concluded a visit to the Republic of Namibia where parties discussed maintaining existing power supply agreements and exploring the establishment of cross border transmission infrastructure between the two countries.<sup>476</sup>

On 27 May 2025, Minister Mantashe announced a visit to Orion Minerals in the Northern Cape, where it possesses mineral rights over precious metals and critical minerals.<sup>477</sup> The purpose of the visit is to receive an appraisal on mining operations and discuss mining opportunities.

On 30 May 2025, Minister Ramokgopa announced that five bidders had been appointed to the Battery Storage power procurement program.<sup>478</sup> These private bidders will be assigned to development projects to increase battery energy storage of the grid.

On 12 June 2025, Minister of Trade, Industry and Competition Parks Tau gave an address at the Green Hydrogen summit held in Cape Town.<sup>479</sup> Minister Tau announced EUR23 million from the German government's KfW development bank to be used in funding catalytic green hydrogen projects.

On 29 July 2025, Minister Mantashe hosted the G20 Critical Minerals Stakeholder Engagement.<sup>480</sup> The meeting sought to launch a collaborative process to translate the G20 Critical Minerals Framework into actionable partnerships, investment, and capacity building across exploration, processing, supply chains, and technology innovation.

<sup>&</sup>lt;sup>473</sup> Nigeria Partners with South Africa to Unlock Mineral Wealth and Diversify Economy, Voice of Africa (Washington D.C.) 29 April 2025. Access Date: 5 May 2025. https://thevoiceofafrica.com/nigeria-partners-with-south-africa-to-unlock-mineral-wealth-and-diversify-economy/

<sup>&</sup>lt;sup>474</sup> Minister Gwede Mantashe: Approval of Critical Minerals and Metals Strategy for South Africa and Draft Mineral Resources Development Bill, Government of South Africa (Cape Town) 20 May 2025. Access Date: 21 May 2025.

https://www.gov.za/news/media-statements/minister-gwede-mantashe-approval-critical-minerals-and-metals-strategy-south drica (Cape Town) 21 May 2025. Access Date: 13 July 2025. https://www.gov.za/news/speeches/minister-enoch-godongwana-budget-speech-2025%C2%A0-21-may-2025

<sup>&</sup>lt;sup>476</sup> Minister Kgosientsho Ramokgopa concludes working visit to Namibia on energy alliances and security, Government of South Africa (Cape Town) 23 May 2025. Access Date: 28 May 2025. https://www.gov.za/news/media-statements/minister-kgosientshoramokgopa-concludes-working-visit-namibia-energy

<sup>&</sup>lt;sup>477</sup> Minister Gwede Mantashe visits Orion Minerals at Northern Cape, 30 May, Government of South Africa (Cape Town) 27 May 2025. Access Date: 3 June 2025. https://www.gov.za/news/media-statements/minister-gwede-mantashe-visits-orion-minerals-northern-cape-30-may-27-may

<sup>&</sup>lt;sup>478</sup> Minister Kgosientsho Ramokgopa on Battery Energy Storage Independent Power Procurement Programme, South African Government (Cape Town) 30 May 2025. Access Date: 7 August 2025. https://www.gov.za/news/media-statements/minister-kgosientsho-ramokgopa-battery-energy-storage-independent-power

<sup>&</sup>lt;sup>479</sup> Trade, Industry and Competition on implementation of Green Hydrogen Commercialisation Strategy, South African Government (Cape Town) 12 July 2025. Access Date: 11 August 2025. https://www.gov.za/news/media-statements/trade-industry-and-competition-implementation-green-hydrogen

<sup>&</sup>lt;sup>480</sup> Minister Gwede Mantashe: G20 Critical Minerals Stakeholder Engagement, Department of Mineral and Petroleum Resources (Pretoria) 29 July 2025. Access Date: 23 August 2025. https://www.gov.za/news/speeches/minister-gwede-mantashe-g20-critical-minerals-stakeholder-engagement-29-jul-2025

On 22 August 2025, Minister of Economy, Trade and Industry Yoji Muto and South Africa's Minister of Trade, Industry and Competition Parks Tau, Minister of Electricity and Energy Kgosientsho Ramokgopa and Minister of Science, Technology and Innovation Blade Nzimande signed a joint declaration to promote decarbonization and cooperation.<sup>481</sup>

On 22 August 2025, South Africa, African Union, Japan and African Union member-states released the TICAD 9 Yokohama Declaration to "[c]o-create innovative solutions with Africa." The declaration includes a statement on cooperation for enhancing artificial intelligence governance and projects. It highlights the importance of continued collaboration between Japan and Africa in energy transition technologies and clean energy projects.

On 25 August 2025, Minister of Transport announced two new Train Operating Companies that will directly manage manganese routes, ensuring manganese is reliably transported to the Port of Saldanha.<sup>483</sup>

On 3 September 2025, Deputy Minister Phumzile Mgcina announced a new policy framework on mineral output. <sup>484</sup> The framework aims to optimize African mineral output with geoscience mapping, investments in new infrastructure and endeavors to localize the industry.

On 10 October 2025, the African Union and South Africa launched an Africa Energy Efficiency Facility to develop and enhance energy efficiency projects.<sup>485</sup>

On 12 October 2025, Deputy Minister of International Relations and Cooperation Alvin Botes and the African Union Commission's Deputy Chairperson Selma Malika Haddadi reaffirmed cooperation to support African development and shared frameworks such as Agenda 2063 and G20.486

South Africa has partially complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. South Africa has made steps to increase the renewable share of the energy production. It has also taken steps to work with other African countries to increase the output of critical minerals. However, South Africa has not taken action with regards to semiconductors or energy transition technologies.

Thus, South Africa receives a score of 0.

Analyst: Aiden Hunt

<sup>&</sup>lt;sup>481</sup> Minister Muto Attends the Ninth Tokyo International Conference on African Development (TICAD 9), Ministry of Economy, Trade and Industry (Tokyo) 22 August 2025. Access Date: 18 October 2025.

https://www.meti.go.jp/english/press/2025/0822 002.html

<sup>482</sup> TICAD 9 Yokohama Declaration "Co-create innovative solutions with Africa", African Union (Addis Ababa) 22 August 2025. Access Date: 18 October 2025. https://au.int/en/pressreleases/20250822/ticad-9-yokohama-declaration-co-create-innovative-solutions-africa

<sup>&</sup>lt;sup>483</sup> Western Cape welcomes efforts to reform and revitalise the national rail system, Government of South Africa (Cape Town) 25 August 2025, Access Date: 10 September 2025 https://www.gov.za/news/media-statements/western-cape-welcomes-efforts-reform-and-revitalise-national-rail-system-25

<sup>&</sup>lt;sup>484</sup> Deputy Minister Phumzile Mgcina: Africa down under conference, Government of South Africa (Cape Town) 3 September 2025. Access Date: 24 September 2025. https://www.gov.za/news/speeches/deputy-minister-phumzile-mgcina-africa-down-under-conference-03-sep-2025

<sup>&</sup>lt;sup>485</sup> The African Union and South Africa Launch the Africa Energy Efficiency Facility (AfEEF) Programme to Unlock Africa's Energy Productivity, African Union (Addis Ababa) 10 October 2025. Access Date: 18 October 2025.

https://au.int/en/pressreleases/20251010/au-and-south-africa-launch-africa-energy-efficiency-facility-afeef

<sup>&</sup>lt;sup>486</sup> The Deputy Chairperson of the African Union Commission concludes a productive working visit to South Africa amid the Inaugural Diaspora Week, African Union (Addis Ababa) 1 October 2025. Access Date: 18 October 2025.

https://au.int/en/pressreleases/20251012/auc-dcp-concludes-working-visit-south-africa-amid-inaugural-diaspora-week and the south-africa-amid-inaugural-diaspora-week and the south-africa-amid-diaspora-week and the south-afric

## Türkiye: +1

Türkiye has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 27 November 2024, Minister of Energy Alparslan Bayraktar discussed strategies for energy transitions with Germany and private stakeholders at the German-Turkish Energy Forum.<sup>487</sup> Minister Bayraktar called for German investors to partner in Türkiye's efforts to increase wind and solar capacity and several memoranda of understanding were signed between Turkish and German organizations.

On 10 February 2025, President Recep Tayyip Erdoğan met with Malaysian Prime Minister Anwar Ibrahim to announce increased partnership in the research, development and production of semiconductors. This partnership includes Turkish firms hiring Malaysian engineers and Malaysia purchasing Turkish semiconductors.

On 12 February 2025, the Ministry of Energy and Natural Resources and Indonesia's Ministry of Energy and Mineral Resources announced cooperation to accelerate clean energy development in Indonesia, including the signing of a Memorandum of Understanding. This collaboration will bolster Indonesia's commitment to clean power generation.

On 2 May 2025, Minister of Energy Alparslan Bayraktar announced that state-owned company MTA has plans to renew its partnership with Niger.<sup>490</sup> Minister Bayraktar along with Nigerien Minister of Mines announced that MTA has had significant progress in the mining of critical minerals in Niger and has developed a partnership that is mutually beneficial.

On 2 May 2025, Hungarian Deputy Minister of Foreign Affairs and Trade Boglarka Illes announced that the Turkish state-owned Turkish Petroleum Corporation has signed an agreement with Hungary to commence mineral exploration and extraction within Hungary.<sup>491</sup> This supports the diversification of minerals within the energy transition supply chain.

On 7 May 2025, President Erdoğan announced a commitment to invest USD80 billion by 2035 to ensure Türkiye's energy transition to renewable energy.<sup>492</sup> Türkiye aims to raise its wind and solar power capacity to 120,000 megawatts by 2035.

On 2 July 2025, the Turkish Grand National Assembly adopted the country's first climate law.<sup>493</sup> The law seeks to ensure greater energy efficiency in the country and the development of new technologies.

https://energypartnership-turkiye.org/highlights/6th-turkish-german-energy-forum/

488 Erdoğan begins Malaysia trip in bid for more ties with Asia, Daily Sabah (Kuala Lumpur) 10 February 2025. Access Date: 10

<sup>&</sup>lt;sup>487</sup> 6th Turkish-German Energy Forum, Türkiye Energy Partnership (Berlin) 27 November 2024. Access Date: 16 April 2025. https://energypartnership-turkiye.org/highlights/6th-turkish-german-energy-forum/

May 2025. https://www.dailysabah.com/politics/diplomacy/erdogan-begins-malaysia-trip-in-bid-for-more-ties-with-asia description Presiden Prabowo dan Presiden Erdogan, Menteri Bahlil Teken Kerja Sama di Sektor Energi, Ministry of Energy and Natural Resources (Jakarta) 12 February 2025. Translation provided by Google Translate. Access date: 10 May 2025. https://www.esdm.go.id/en/media-center/news-archives/disaksikan-presiden-prabowo-dan-presiden-erdogan-menteri-bahlil-

teken-kerja-sama-di-sektor-energi

490 Türkiye rapidly becoming global player in mining: Energy Minister, Daily Sabah (Istanbul) 2 May 2025. Access Date: 10 May 2025. https://www.dailysabah.com/business/energy/turkiye-rapidly-becoming-global-player-in-mining-energy-minister

491 Türkiye rapidly becoming global player in mining: Energy Minister, Daily Sabah (Istanbul) 2 May 2025. Access Date: 10 May 2025.

<sup>2025.</sup> https://www.dailysabah.com/business/energy/turkiye-rapidly-becoming-global-player-in-mining-energy-minister <sup>492</sup> Türkiye advances renewable push, opens new solar, wind plants, Daily Sabah (Ankara) 7 May 2025. Access Date: 10 May 2025. https://www.dailysabah.com/business/energy/turkiye-advances-renewable-push-opens-new-solar-wind-plants

<sup>&</sup>lt;sup>493</sup> Türkiye'nin ilk iklim kanunu TBMM'de kabul edildi, Çevre, Şehircilik ve İklim Değişikliği Bakanlığı (Ankara) 2 July 2025. Translation provided by Google Translate. Access Date: 25 July 2025. https://csb.gov.tr/turkiyenin-ilk-iklim-kanunu-tbmm-de-kabul-edildi-bakanlik-faaliyetleri-41712

On 19 July 2025, the Law on Amendment of Certain Laws (Law No. 7554) entered into force. Law No. 7554 includes multiple amendments to existing laws.<sup>494</sup> Under Article 3, mining exploration permits are allowed within state forests and "environmental protection zones." Article 11 allows olive trees to be relocated for mining activities. Article 15 specifies new permitting rules for solar and wind energy facilities on "forest properties," which allow companies with "preliminary license[s]" to survey and drill the area.

On 29 July 2025, Minister Bayraktar and Minister of Energy of Kazakhstan Yerlan Akkenzhenov signed a Memorandum of Understanding (MoU) on collaboration in the fields of energy and mining.<sup>495</sup> The parties aim to develop joint projects in areas including exploration and production as well as electricity and renewable energy.

On 31 July 2025, President Erdogan and President of Gabon Brice Clotaire Oligui Nguema witnessed the signing of two intergovernmental MoUs to increase cooperation within the fields of renewable energy and mining. <sup>496</sup> The MoUs highlights cooperation in critical mineral supply chains and electricity transmission and distribution infrastructure.

Türkiye has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. It has taken action domestically and internationally to diversify supply chains for energy transitions and has taken steps to strengthen supply chains for critical minerals and semiconductors.

Thus, Türkiye receives a score of +1.

Analyst: Arash Aslan-Beigi

# United Kingdom: +1

The United Kingdom has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 9 December 2024, the United Kingdom, the United States and Tokamak Energy announced a joint fusion energy project for lithium research which is essential to diversify the energy sector to include fusion energy.<sup>497</sup> Fusion energy, once commercially available, has the potential to provide ample clean electricity. This project will be supported by GBP40.5 million in funding of which the United Kingdom and United States will each provide GBP13.5 million.

On 10 December 2024, UK Export Finance offered JDR Cables a GBP30 million bond support for a project in the floating winds sector.<sup>498</sup> JDR Cables is a British power-cable company that installs subsea cables for electricity. This financial assistance will support the technology development of green energy solutions and public-private partnerships for renewable energy sources in the United Kingdom.

<sup>&</sup>lt;sup>494</sup> BAZI KANUNLARDA DEĞİŞİKLİK YAPILMASINA DAİR KANUN, Türkiye Büyük Millet Meclisi (Ankara) 19 July 2025. Translation provided by Google Translate. Access Date: 22 August 2025. https://www.tbmm.gov.tr/Yasama/Kanun/80d8f541-8c22-47af-ae19-019769447bc3

<sup>&</sup>lt;sup>495</sup> Kazakistan ile Enerji İlişkileri Gelişiyor, T.C. Enerji Ve Tabii Kaynaklar Bakanliği (Ankara) 29 July 2025. Translation provided by Google Translate. Access Date: 15 August 2025. https://enerji.gov.tr/haber-detay?id=21541

<sup>&</sup>lt;sup>496</sup> Gabon ile 3 Alanda İş Birliği, T.C. Enerji Ve Tabii Kaynaklar Bakanliği (Ankara) 31 July 2025. Translation provided by Google Translate. Access Date: 15 August 2025. https://enerji.gov.tr/haber-detay?id=21544

<sup>&</sup>lt;sup>497</sup> UK and US announce first joint project in fusion energy innovation, Department for Energy Security and Net Zero (London) 9 December 2024. Access Date: 23 June 2025. https://www.gov.uk/government/news/uk-and-us-announce-first-joint-project-infusion-energy-innovation

<sup>&</sup>lt;sup>498</sup> GBP30 Million UKEF Support Fuels JDR Cables' Global Expansion in the Renewable Energy Sector, United Kingdom Export Finance (London) 10 December 2024. Access Date: 14 April 2025. https://www.gov.uk/government/news/30-million-ukef-support-fuels-jdr-cables-global-expansion-in-the-renewable-energy-sector

On 10 December 2024, contracts for the East Coast Cluster in Teesside were signed.<sup>499</sup> This is part of the United Kingdom's carbon capture, usage and storage project and is aligned with the government's Plan for Change environmental policy. The Teesside project will capture carbon emission from regional industries and provide the contractors of the East coast Cluster with GBP4 billion to be used in technological innovation, energy security and supply chain development.

On 14 January 2025, Secretary of State for Business and Trade Jonathan Reynolds and Saudi Arabia's Minister of Mineral Resources Bandar Alkhorayef and Vice Minister of Industry and Mineral Resources for Mining Affairs Khalid Al-Mudaifer signed a Memorandum of Understanding to cooperate for mineral resources development.<sup>500</sup> Formalized at the Future Minerals Forum, this collaboration will support the diversification of Saudi Arabia's critical minerals supply chains.

On 22 January 2025, the United Kingdom and Japan's Ministry of Economy, Trade and Industry, Ministry of Internal Affairs and Communications and the Digital Agency of Japan held an online meeting to discuss cooperation in digital technology.<sup>501</sup> The meeting reviewed progress under the Japan-UK Digital Partnership, focusing on areas such as Beyond 5G/6G research, semiconductor supply chain resilience and the promotion of Data Free Flow with Trust.

On 5 February 2025, Foreign Secretary David Lammy announced GBP17 million in funding to support round two of the InnovateUkraine initiative. <sup>502</sup> Projects selected through this initiative will advance low-carbon energy solutions for Ukraine with a focus on renewable energy, smart grids, industrial decarbonization and green fuels.

On 13 February 2025, the Department for Energy Security and Net Zero launched the Clean Industry Bonus to support clean energy manufacturing and create skilled jobs in industrial towns and coastal areas.<sup>503</sup> The initiative offers financial support to offshore wind developers who invest in deprived regions, build low-carbon factories and enhance net-zero supply chains.

On 21 February 2025, the Department for Energy Security and Net Zero started a consultation process for policy proposals of relaxing the eligibility criteria on planning consent, changing how offshore wind budgets are set and published and increasing the Contracts for Difference contract term.<sup>504</sup> These policy changes will help bolster the UK commitment to a clean energy system by 2030 as they will strengthen sustainable energy infrastructure through increased investment and the promotion of public-private cooperation in green energy systems.

On 11 March 2025, the Department for Energy Security and Net Zero introduced the Planning and Infrastructure Bill which will help expedite green electricity project initiatives. <sup>505</sup> This bill will bring "ready-to-

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<sup>&</sup>lt;sup>499</sup> Contracts signed for UK's first carbon capture projects in Teesside, Department of Energy and Security and Net Zero (London) 10 December 2024. Access Date: 14 April 2025. https://www.gov.uk/government/news/contracts-signed-for-uks-first-carbon-capture-projects-in-teesside

<sup>&</sup>lt;sup>500</sup> Saudi Arabia Strikes Mining Agreements with Several Governments at Fourth Future Minerals Forum, Saudi Press Agency (Riyadh) 14 January 2025. Access Date: 11 August 2025. https://www.spa.gov.sa/en/N2242671

<sup>&</sup>lt;sup>501</sup> Ministerial-Level Meeting of Japan-UK Digital Partnership Held, Ministry of Economy, Trade and Industry (Tokyo) (Tokyo) 22 January 2025. Access Date: 14 August 2025. https://www.meti.go.jp/english/press/2025/0122\_002.html

<sup>&</sup>lt;sup>502</sup> InnovateUkraine opens second round of investment for clean energy projects, Foreign, Commonwealth & Development Office (London) 5 February 2025. Access Date: 23 June 2025. https://www.gov.uk/government/news/innovateukraine-opens-second-round-of-investment-for-clean-energy-projects

<sup>&</sup>lt;sup>503</sup> New industry bonus opens to support good jobs and low carbon manufacturing factories, Department for Energy Security and Net Zero (London) 13 February 2025. Access Date: 15 May 2025. https://www.gov.uk/government/news/new-industry-bonus-opens-to-support-good-jobs-and-low-carbon-manufacturing-factories

<sup>&</sup>lt;sup>504</sup> Essential reforms to pave the way for clean power by 2030, Department of Energy and Security and Net Zero (London) 21 February 2025. Access Date: 9 May 2025. https://www.gov.uk/government/news/essential-reforms-to-pave-the-way-for-clean-power-by-2030

<sup>&</sup>lt;sup>505</sup> Planning revolution to fuel growth and make Britain energy secure, Ministry of Housing, Communities and Local Government and Department of Energy and Security and Net Zero (London) 10 March 2025. Access Date: 9 May 2025. https://www.gov.uk/government/news/planning-revolution-to-fuel-growth-and-make-britain-energy-secure

go" infrastructure projects at the front of the grid connection queue instead of approving projects on a first come first serve basis. This shift in policy framework will aid the timeline of renewable energy projects and bring the UK closer to its decarbonization goals in the Clean Power 2030 Action Plan.

On 20 March 2025, the Office of Gas and Electricity Markets introduced their GBP4 billion Advanced Procurement Mechanism for supply chains pertinent to electricity.<sup>506</sup> This action will expedite the approval process for electricity transmission officers for spending on the necessary resources for renewable energy projects.

On 21 March 2025, Great British Energy launched a GBP10 million partnership with metro mayors to develop clean power projects across England.<sup>507</sup> The initiative will support rooftop solar, onshore wind and hydropower installations, with profits reinvested in communities or used to reduce residents' energy bills.

On 26 March 2025, Chancellor of the Exchequer Rachel Reeves presented the Spring Statement.<sup>508</sup> The statement includes a commitment to review the Climate Change Levy for electricity used to produce hydrogen and greater investment in energy and housing infrastructure. The government confirmed the allocation of GBP42 million for "DSIT-led Frontier AI Exemplars" aimed at creating greater government efficiency.

On 27 March 2025, the UK Atomic Energy Authority announced GBP3.5 million in funding for 13 organizations to "develop robust sensing technologies for use in future fusion power plants." These technologies are essential to diversifying the energy sector to include fusion energy.

On 28 March 2025, the Department for Science, Innovation and Technology announced a third wave of semiconductor startups which will receive GBP1.1 million to advance innovative technologies related to semiconductors.<sup>510</sup> The selected companies include RX-Watt which is developing "battery-free sensors that can be wirelessly powered using safe microwave signals."

On 7 April 2025, the Department for Energy Security and Net Zero shortlisted 27 hydrogen projects as part of the next step of the government's hydrogen plan.<sup>511</sup> This initiative is another step in the decarbonization process and creates investment opportunities for the private sector to engage in the implementation process for these hydrogen projects.

On 12 April 2025, Minister of State for Trade Policy and Economic Security Douglas Alexander and China's Vice Minister of Industry and Information Technology Xin Guobin discussed deepening China-UK industrial cooperation in artificial intelligence, digital economy and green energy.<sup>512</sup> The talks demonstrate a step in strengthening cooperation in energy transition technologies.

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<sup>&</sup>lt;sup>506</sup> Electricity Transmission Advanced Procurement Mechanism, Office of Gas and Electricity Markets (London) 20 March 2025. Access Date: 29 June 2025. https://www.ofgem.gov.uk/decision/electricity-transmission-advanced-procurement-mechanism <sup>507</sup> Great British Energy announces £10 million for local government, Department for Energy Security and Net Zero (London) 21 March 2025. Access Date: 4 July 2025. https://www.gov.uk/government/news/great-british-energy-announces-10-million-for-local-governments

<sup>&</sup>lt;sup>508</sup> Spring Statement 2025, HM Treasury (London) 26 March 2025. Access Date: 23 August 2025. https://assets.publishing.service.gov.uk/media/67e3ec2df356a2dc0e39b488/E03274109 HMT Spring Statement Mar 25 Web Accessible .pdf

<sup>&</sup>lt;sup>509</sup> Creating sensors for extreme fusion energy conditions, UK Atomic Energy Authority (London) 27 March 2025. Access Date: 23 June 2025. https://www.gov.uk/government/news/creating-sensors-for-extreme-fusion-energy-conditions

<sup>&</sup>lt;sup>510</sup> Government backs next wave of semiconductor start-ups to scale up growth, Department for Science, Innovation and Technology (London) 28 March 2025. Access Date: 23 June 2025. https://www.gov.uk/government/news/government-backs-next-wave-of-semiconductor-start-ups-to-scale-up-growth

New hydrogen power projects to boost growth, Department for Energy Security and Net Zero (London) 7 April 2025. Access Date 15 May 2025. https://www.gov.uk/government/news/new-hydrogen-power-projects-to-boost-growth

<sup>512</sup> 辛国斌会见英国商业贸易部国务大臣道格拉斯·亚历山大, 国际合作司、办公厅、工信微报 (Beijing) 12 April 2025. Access Date: 18 May 2025. https://www.miit.gov.cn/xwfb/bldhd/art/2025/art 5cf485364cd24447aca9634f21fb57ef.html

On 24 April 2025, the Department for Energy Security and Net Zero and energy company Eni agreed to a deal that will create GBP2 billion in supply chain contracts for the Liverpool Carbon Capture and Storage Project.<sup>513</sup> This deal will increase investment in the United Kingdom's green energy industry and is a major commitment to the decarbonization process of the region.

On 14 May 2025, the Department for Energy Security and Net Zero announced a Great British Energy scheme with GBP4 million in funding for Scottish clean energy projects.<sup>514</sup> Selected projects will focus on community-based clean energy projects including onshore wind, solar and hydropower.

On 19 May 2025, the United Kingdom and the European Union held the 2025 EU-UK Leaders' Summit to discuss plans for cooperation.<sup>515</sup> The summit affirmed energy cooperation between the two parties on a permanent basis and further discussion was held as to the UK's role in the internal electricity market of the EU.

On 13 June 2025, the Department for Energy Security and Net Zero announced a GBP500 million investment for hydrogen infrastructure.<sup>516</sup> The funding will establish the United Kingdom's first regional hydrogen transport and storage network.

On 17 June 2025, the G7, including the United Kingdom, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>517</sup> It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 19 June 2025, Minister for Climate Kerry McCarthy and Japan's Senior Deputy Minister of Education, Culture, Sports, Science and Technology Hiroshi Masuko signed a Memorandum of Understanding for a partnership in fusion energy.<sup>518</sup>

On 23 June 2025, the Department for Energy Security and Net Zero published its ten-year Clean Energy Industries Sector Plan which will invest GBP700 million in clean energy supply chains in Britain.<sup>519</sup> The investment will go towards key clean power initiatives such as floating offshore wind platforms, electric cables and hydrogen infrastructure.

On 23 June 2025, the United Kingdom announced GBP2.5 billion over 5 years in investments in fusion energy.<sup>520</sup> UK Industrial Fusion Solutions aims to deliver a prototype fusion power plant by 2040.

<sup>&</sup>lt;sup>513</sup> Major carbon capture project to deliver jobs and growth, Department of Energy and Security and Nets Zero (London) 24 April 2025. Access Date: 9 May 2025. https://www.gov.uk/government/news/major-carbon-capture-project-to-deliver-jobs-and-growth <sup>514</sup> Great British Energy funding boost for Scottish communities, Department for Energy Security and Net Zero (London) 14 May 2025. Access Date 23 June 2025. https://www.gov.uk/government/news/great-british-energy-funding-boost-for-scottish-communities

<sup>&</sup>lt;sup>515</sup> EU-UK 2025 Leaders' Summit: Setting the path for further rapprochement, European Parliament Think Tank (Brussels) 19 May 2025. Access Date: 4 July 2025. https://www.europarl.europa.eu/thinktank/en/document/EPRS\_BRI(2025)775858

<sup>&</sup>lt;sup>516</sup> £500m boost for hydrogen to create thousands of British jobs, Department for Energy Security and Net Zero (London) 13 June 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/500m-boost-for-hydrogen-to-create-thousands-of-british-jobs

<sup>&</sup>lt;sup>517</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>518</sup> UK-Japan cooperation on fusion energy: memorandum of cooperation, Department for Energy Security and Net Zero (London), 19 June 2025. Access Date: 5 July 2025. https://www.gov.uk/government/publications/uk-japan-cooperation-on-fusion-energy-memorandum-of-cooperation/uk-japan-cooperation-on-fusion-energy-memorandum-of-cooperation

<sup>&</sup>lt;sup>519</sup> Clean energy future to be 'built in Britain,' Department for Energy Security and Net Zero (London) 23 June 2025. Access Date: 25 June 2025. https://www.gov.uk/government/news/clean-energy-future-to-be-built-in-britain

<sup>&</sup>lt;sup>520</sup> Fusion energy powers UK's Industrial Strategy, UK Industrial Fusion Solutions, UK Atomic Energy Authority and Department for Energy Security and Net Zero (London) 23 June 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/fusion-energy-powers-uks-industrial-strategy

On 30 June 2025, the Department of Energy Security and Net Zero released "The Solar Roadmap" which details 70 actions needed to help increase solar deployment across the country.<sup>521</sup> Actions included streamlining grid connections, reviewing reinforcement costs, scaling innovative technologies and more.

On 3 July 2025, the Compound Semiconductor Applications Catapult and National Research Council of Canada and Quebec's MiQro Innovation Collaborative Centre signed a memorandum of understanding to bolster semiconductor supply chains in G7 countries and improve their resiliency.<sup>522</sup> This memorandum will synthesize Canada and the United Kingdom's respective abilities to design, fabricate and package semiconductors.

On 4 July 2025, the Department for Energy Security and Net Zero published a new plan for offshore wind revolution. 523 This initiative involves resolving the current offshore wind turbines and expanding the wind farms through encouragement of domestic and foreign investment in wind turbine supply chains.

On 8 July 2025, the UK Atomic Energy Authority launched its International Fellowships Scheme to build global fusion expertise.<sup>524</sup> The scheme aims to create impactful research opportunities at both domestic and international institutions.

On 10 July 2025, the Department for Energy Security and Net Zero announced reforms to its electricity system focusing on increasing efficiency and lowering costs.<sup>525</sup>

On 13 July 2025, the United Kingdom announced a GBP63 million funding package to expand electric vehicle infrastructure.<sup>526</sup> As part of the Plan for Change, this funding will be used to expand access to affordable charging and electrify ambulances and medical fleets.

On 14 July 2025, the United Kingdom and the Czech Republic signed a partnership regarding industrial collaboration on modular reactors and their export to other European countries.<sup>527</sup> This partnership will help shift the United Kingdom's dependency on fossil fuels and further promote their energy security goals.

On 15 July 2025, Transport Secretary Heidi Alexander announced a GBP3650 million Electric Car Grant.<sup>528</sup> The grant supports upfront discounts on electric vehicles (EVs) aiming to incentive consumers to purchase EVs from participating manufacturers.

<sup>&</sup>lt;sup>521</sup> Solar roadmap, Department for Energy Security and Net Zero (London) 30 June 2025. Access Date: 4 July 2025. https://www.gov.uk/government/publications/solar-roadmap

<sup>522</sup> Strategic partnership strengthens the Canadian and United Kingdom semiconductor supply chains essential for growing Al compute capacity, National Research Council of Canada (Ottawa) 3 July 2025. Access Date: 6 July 2025.

https://www.canada.ca/en/national-research-council/news/2025/07/canada-and-uk-partner-to-build-a-stronger-semiconductor-supply-chain.html

<sup>&</sup>lt;sup>523</sup> New plan to kickstart onshore wind revolution, Department for Energy Security and Net Zero (London) 4 July 2025. Access Date: 4 July 2025. https://www.gov.uk/government/news/new-plan-to-kickstart-onshore-wind-revolution

<sup>&</sup>lt;sup>524</sup> UKAEA launches International Fellowships Scheme for fusion, UK Atomic Energy Authority (London) 8 July 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/ukaea-launches-international-fellowships-scheme-for-fusion

<sup>&</sup>lt;sup>525</sup> Government sets out reforms to create a fair, secure, affordable and efficient electricity system, Department for Energy Security and Net Zero (London) 10 July 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/government-sets-out-reforms-to-create-a-fair-secure-affordable-and-efficient-electricity-system

<sup>&</sup>lt;sup>526</sup> New £63 million boost for Britain's electric vehicle revolution, Department for Transport (London) 13 July 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/new-63-million-boost-for-britains-electric-vehicle-revolution

<sup>&</sup>lt;sup>527</sup> UK and Czechia to lead global race on small modular reactors, Department for Energy Security and Net Zero (London) 14 July 2025. Access Date: 30 July 2025. https://www.gov.uk/government/news/uk-and-czechia-to-lead-global-race-on-small-modular-reactors

<sup>&</sup>lt;sup>528</sup> Discount of up to £3,750 on electric cars set to slash costs for thousands, Department of Transport (London) 15 July 2025. Access Date: 23 August 2025. https://www.gov.uk/government/news/discount-of-up-to-3750-on-electric-cars-set-to-slash-costs-for-thousands

On 17 July 2025, the United Kingdom and Germany signed the Treaty on Friendship and Bilateral Cooperation, agreeing to implement 17 joint projects under its Implementation Plan.<sup>529</sup> Of these, two focus on advancing energy cooperation. The North Sea Energy Infrastructure Project commits both countries to developing offshore hybrid interconnection between the UK and Germany by the mid-2030s and the Strategic Science and Technology Partnership outlines collaboration on developing technologies such as quantum, AI, semiconductors, advanced connectivity and sustainable energy solutions.

On 24 July 2025, Maritime Minister Mike Kane announced GBP30 million to decarbonize the shipping sector. <sup>530</sup> The funds will go towards hydrogen, methanol and ammonia fuel projects as well as renewable energy development within the shipping industry.

On 24 July 2025, Prime Minister Modi and British Prime Minister Starmer met and endorsed the new India-UK Vision 2035.<sup>531</sup> It builds on the finalized Trade Deal to develop, among others, a transformative climate partnership, such as enhancing India-UK Nuclear Cooperation Agreement to include small modular reactors, exchange best practices, advance joint work on renewables, energy storage and carbon capture.

On 4 August 2025, Great British Energy and Highlands and Islands Enterprise signed a partnership agreement to accelerate the UK's transition towards renewable energy. <sup>532</sup> The partnership agreement focuses on the goals of clean energy storage, generation, supply chain development and community energy projects.

On 3 September 2025, the government released a strategic bilateral framework with Spain. <sup>533</sup> This framework provides a foundation for renewable energy supply chains, through increased cooperation in the just transition and the development of a Memorandum of Understanding.

On 10 September 2025, the government-owned National Wealth Fund and EIG Global Energy Partners allocated up to GBP445 in investment funding for FIDRA Energy.<sup>534</sup> This will support FIDRA Energy's standalone Battery Energy Storage System in the Thorpe Marsh region. The 1,400-megawatt project has the potential "to export over 2 million Mega Watt hours annually."

On 15 September 2025, the Department for Transport announced GBP448 million in funding to reduce emissions from the UK's shipping industry.<sup>535</sup> The investment will be used for research and development into renewable alternatives for maritime shipments such as electric, hydrogen and wind power.

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<sup>&</sup>lt;sup>529</sup> Friendship and Bilateral Cooperation Treaty: the 17 projects the UK and Germany will deliver together, British Embassy Berlin (Berlin) 17 July 2025. Access Date: 25 July 2025. https://www.gov.uk/government/news/friendship-and-bilateral-cooperation-treaty-the-17-projects-the-uk-and-germany-will-deliver-together

<sup>&</sup>lt;sup>530</sup> £30 million to decarbonise shipping, boost careers and deliver growth across the UK, Department for Transport (London) 24 July 2025. Access Date: 23 August 2025. https://www.gov.uk/government/news/30-million-to-decarbonise-shipping-boost-careers-and-deliver-growth-across-the-uk

<sup>&</sup>lt;sup>531</sup> India-UK Vision 2035, Ministry of External Affairs (London) 24 July 2025. Access Date: 20 August 2025. https://www.mea.gov.in/bilateral-documents.htm?dtl/39846/INDIAUK VISION 2035

<sup>&</sup>lt;sup>532</sup> HIE and Great British Energy sign partnership agreement, Project Scotland () 4 August 2025. Access Date: 5 August 2025. https://projectscot.com/2025/08/hie-and-great-british-energy-sign-partnership-agreement/

<sup>&</sup>lt;sup>533</sup> Strategic bilateral framework between the Kingdom of Spain and the United Kingdom of Great Britain and Northern Ireland: 3 September 2025, Prime Minister's Office, 10 Downing Street (London) 3 September 2025. Access Date: 30 September 2025. https://www.gov.uk/government/news/strategic-bilateral-framework-between-the-kingdom-of-spain-and-the-united-kingdom-of-great-britain-and-northern-ireland-3-september-2025

<sup>&</sup>lt;sup>534</sup> Fidra Energy reaches financial close on the UK's largest battery energy storage project, backed by EIG and the National Wealth Fund, National Wealth Fund (London) 10 September 2025. Access Date: 12 September 2025.

https://www.nationalwealthfund.org.uk/news/fidra-energy-reaches-financial-close-uks-largest-battery-energy-storage-project-backed-eig-and

<sup>535</sup> More than £1.1 billion investment to boost growth, jobs and skills in UK's coastal towns and cities, Department for Transport (London) 15 September 2025. Access Date: 16 September 2025. https://www.gov.uk/government/news/more-than-11-billion-investment-to-boost-growth-jobs-and-skills-in-uks-coastal-towns-and-cities

On 18 September 2025, the United Kingdom and United States signed a Technology Prosperity Memorandum of Understanding.<sup>536</sup> The partnership highlights technological cooperation, partnership in the development of nuclear energy regulatory processes, technologies and supply chains.

On 22 September 2025, the United Kingdom Atomic Energy Authority and Energy and Mines Commission of Ontario, Canada signed a Memorandum of Understanding for the supply of tritium to the UK.<sup>537</sup> This advancement of the UK's nuclear energy supply chain in cooperation with the Ontario provincial government.

On 24 September 2025, Department for Science, Innovation and Technology announced GBP10 million for the UK's semiconductor industry.<sup>538</sup> The funds will support a diverse range of projects in the semiconductors industry.

On 29 September 2025, UK's Secretary of State for Energy Security and Net Zero formally announced that the Maritime Energy Security Hub project headed by the energy transition company EnergyPathways, will be treated as a development of national significance. <sup>539</sup> This initiative will support UK wind power with the use of hydrogen geo-storage to help capture and monetize lost wind energy as well as develop the UK's hydrogen production capacity.

The United Kingdom has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. The United Kingdom has taken strong action towards the combined welfare target and supported supply chains for energy transitions and semiconductors through sustainable supply chain projects, investment for clean energy projects, funding for semiconductor startups and fusion energy technologies and support for the InnovateUkraine initiative. The UK has also signed a critical minerals partnership with Saudi Arabia.

Thus, the United Kingdom receives a score of +1.

Analyst: Simeon Karakolev

### United States: +1

The United States has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and energy transition technologies.

GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND REGARDING THE TECHNOLOGY PROSPERITY DEAL, The White House (Washington D.C.) 18 September 2025. Access Date: 14 October 2025. https://www.whitehouse.gov/presidential-actions/2025/09/memorandum-of-understanding-between-the-government-of-the-united-states-of-america-and-the-government-of-the-united-kingdom-of-great-britain-and-northern-ireland-regarding-the-technology-prosperity-de/

<sup>&</sup>lt;sup>537</sup> Ontario and United Kingdom Sign Groundbreaking Clean Energy Partnership, Energy and Mines (Toronto) 22 September 2025. Access Date: 14 October 2025. https://news.ontario.ca/en/release/1006516/ontario-and-united-kingdom-sign-groundbreaking-clean-energy-partnership

<sup>&</sup>lt;sup>538</sup> New £10 million fund to support UK businesses to deliver next generation of semiconductors, Department for Science, Innovation and Technology (London) 24 September 2025. Access Date: 18 October 2025. https://www.gov.uk/government/news/new-10-million-fund-to-support-uk-businesses-to-deliver-next-generation-of-semiconductors

<sup>&</sup>lt;sup>539</sup> Low Carbon Hydrogen Supply 2 competition - Stream 1 Phase 1 projects, Department for Energy Security and Net Zero and the Department for Business, Energy and Industrial Strategy (London) 29 September 2025. Access Date: 14 October 2025. https://www.gov.uk/government/publications/low-carbon-hydrogen-supply-2-competition-successful-projects/low-carbon-hydrogen-supply-2-competition-stream-1-phase-1-summaries-of-successful-projects#zero-carbon-hydrogen-production-projects

On 9 December 2024, the United Kingdom, the United States and Tokamak Energy announced a joint fusion energy project for lithium research which is essential to diversify the energy sector to include fusion energy.<sup>540</sup> Fusion energy, once commercially available, has the potential to provide ample clean electricity. This project will be supported by GBP40.5 million in funding of which the United Kingdom and United States will each provide GBP13.5 million.

On 19 December 2024, President Joe Biden announced a new climate target for the United States, aiming for a 61-66 per cent reduction in net greenhouse gas emissions by 2035 from 2005 levels.<sup>541</sup> The strategy includes leveraging investments from the Inflation Reduction Act and Bipartisan Infrastructure Law, implementing federal standards and mobilizing private capital. This commitment supports the sustainability and responsibility of energy transition supply chains by promoting clean energy initiatives and reducing emissions.

On 24 December 2024, the United States and Japan agreed to strengthen cooperation in the development and deployment of advanced clean energy technologies.<sup>542</sup> This includes floating offshore wind, clean hydrogen and derivatives such as ammonia and synthetic fuels, carbon capture and recycling and small modular reactors. Japan also committed to collaborate on resilient mineral supply chains and methane emission reductions in the Indo-Pacific. The United States and Japan also co-hosted a session involving private sector representatives to boost public-private collaboration in the energy transition. Participants exchanged views on emerging clean energy markets, including synthetic methane and hydrogen, to meet the growing demand for clean electricity in the digital age.

On 3 January 2025, the Biden-Harris Administration awarded the Semiconductor Research Corporation Manufacturing Consortium USD285 million to establish a new CHIPS Manufacturing USA Institute for Digital Twins, headquartered in North Carolina.<sup>543</sup> This initiative aims to advance US leadership in semiconductor technology, enhancing the reliability and diversification of semiconductor supply chains critical for energy transition technologies.

On 16 January 2025, the Department of Energy announced an investment of nearly USD14 million in federal funding for four projects aimed at advancing the large-scale conversion of carbon dioxide emissions into valuable products.<sup>544</sup> These projects focus on developing technologies that transform carbon emissions into fuels, building materials and other carbon-based products, contributing to the sustainability and responsibility of energy transition supply chains by reducing greenhouse gas emissions and promoting innovative uses of captured carbon.

https://www.energy.gov/fecm/articles/doe-invests-nearly-14-million-advance-technologies-transform-carbon-emissions and the second contract of the contract o

<sup>&</sup>lt;sup>540</sup> UK and US announce first joint project in fusion energy innovation, Department for Energy Security and Net Zero (London) 9 December 2024. Access Date: 23 June 2025. https://www.gov.uk/government/news/uk-and-us-announce-first-joint-project-infusion-energy-innovation

FACT SHEET: President Biden Sets 2035 Climate Target Aimed at Creating Good-Paying Union Jobs, Reducing Costs for All Americans, and Securing U.S. Leadership in the Clean Energy Economy of the Future, The White House (Washington D.C.) 19 December 2024. Access Date: 29 March 2025. https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/12/19/fact-sheet-president-biden-sets-2035-climate-target-aimed-at-creating-good-paying-union-jobs-reducing-costs-for-all-americans-and-securing-u-s-leadership-in-the-clean-energy-economy-of-the-future

<sup>&</sup>lt;sup>542</sup> Results of the Japan-U.S. Clean Energy Partnership (JUCEP) Ministerial Meeting, Ministry of Economy, Trade and Industry (Tokyo) 24 December 2024. Access Date: 2 April 2025. https://www.meti.go.jp/english/press/2024/1224\_001.html <sup>543</sup> Biden-Harris Administration Awards Semiconductor Research Corporation Manufacturing Consortium \$285M for New CHIPS Manufacturing USA Institute for Digital Twins, Headquartered in North Carolina, U.S. Department of Commerce (Washington D.C.) 3 January 2025. Access Date: 29 March 2025. https://www.commerce.gov/news/press-releases/2025/01/biden-harris-administration-awards-semiconductor-research-corporation

<sup>&</sup>lt;sup>544</sup> DOE Invests Nearly \$14 Million to Advance Technologies That Transform Carbon Emissions into Valuable Products, U.S. Department of Energy (Washington D.C.) 16 January 2025. Access Date: 29 March 2025.

On 20 January 2025, President Donald Trump issued a memorandum temporarily withdrawing all areas on the Outer Continental Shelf from offshore wind leasing and initiating a review of the federal government's leasing and permitting practices for wind projects.<sup>545</sup>

On 20 January 2025, President Trump signed an executive order titled "Unleashing American Energy" which outlines policies to encourage energy exploration and production on federal lands and waters, including the Outer Continental Shelf.<sup>546</sup> The order emphasizes establishing the United States as a leading producer and processor of non-fuel minerals, including rare earth minerals, to create jobs, strengthen supply chains and reduce reliance on adversarial states. While this action could promote domestic production of critical minerals essential for energy transition technologies, it also intends to disrupt existing global critical minerals supply chains.

On 13 February 2025, President Trump hosted Indian Prime Minister Narendra Modi for an Official Working Visit in Washington D.C. where a Strategic Mineral Recovery initiative was launched. The initiative is a new US-India cooperative program to recover and process critical minerals including lithium, cobalt and rare earths from heavy industries like aluminum, coal mining and oil and gas.<sup>547</sup> President Trump and Prime Minister Modi also re-committed to the US-India Energy Security Partnership, including in oil, gas and civil nuclear energy.

On 13 February 2025, the US-India Transforming the Relationship Utilizing Strategic Technology Initiative was launched to build trusted and resilient supply chains for semiconductors and critical minerals.<sup>548</sup> This partnership will build on ongoing collaboration between the US National Science Foundation and several Indian science agencies to enable joint research in the areas of semiconductors.

On 24 March 2025, the Department of Energy re-issued a USD900 million solicitation to support the deployment of small modular reactors.<sup>549</sup> This will enable energy transition to cleaner alternatives to meet demand forecasts driven by AI data center growths.

On 31 March 2025, Russia's Special Envoy and Head of the Russian Direct Investment Fund Kirill Dmitriev announced that Russia and the United States had begun discussions on joint projects to develop rare-earth metal reserves in Russia. <sup>550</sup> Special Envoy Dmitriev noted growing interest from companies in cooperating on rare earth projects.

On 8 April 2025, President Trump signed an Executive Order to designate coal as a mineral, lift barriers on coal mining and require agencies to rescind any policies that seek transition away from coal.<sup>551</sup> This action goes

<sup>&</sup>lt;sup>545</sup> Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects, The White House (Washington D.C.) 20 January 2025. Access Date: 29 March 2025. https://www.whitehouse.gov/presidential-actions/2025/01/temporary-withdrawal-of-all-areas-on-the-outer-continental-shelf-from-offshore-wind-leasing-and-review-of-the-federal-governments-leasing-and-permitting-practices-for-wind-projects

<sup>&</sup>lt;sup>546</sup> Unleashing American Energy, The White House (Washington D.C.) 20 January 2025. Access Date: 29 March 2025. https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy

<sup>&</sup>lt;sup>547</sup> India-U.S. Bilateral Relations Brief, Embassy of India Washington D.C. (Washington D.C.) March 2025. Access Date: 19 May 2025. https://indianembassyusa.gov.in/pdf/menu/Brief\_Bilateral\_March\_2025.pdf

<sup>&</sup>lt;sup>548</sup> United States-India Joint Leaders' Statement, The White House (Washington D.C.) 13 February 2025. Access Date: 19 May 2025. https://www.whitehouse.gov/briefings-statements/2025/02/united-states-india-joint-leaders-statement/

<sup>&</sup>lt;sup>549</sup> \$900 Million Available to Unlock Commercial Deployment of American-Made Small Modular Reactors, U.S. Department of Energy (Washington D.C.) 24 March 2025. Access Date: 19 May 2025. https://www.energy.gov/ne/articles/900-million-available-unlock-commercial-deployment-american-made-small-modular-reactors

<sup>550</sup> Russia and U.S. Begin Talks on Rare Earth Metals, Putin Envoy Says (Moscow) 31 March 2025. Access Date: 16 August 2025. https://www.themoscowtimes.com/2025/03/31/russia-and-us-begin-talks-on-rare-earth-metals-putin-envoy-says-a88538 551 Fact Sheet: President Donald J. Trump Reinvigorates America's Beautiful Clean Coal Industry, The White House (Washington D.C.) 8 April 2025. Access Date: 19 May 2025. https://www.whitehouse.gov/fact-sheets/2025/04/fact-sheet-president-donald-j-trump-reinvigorates-americas-beautiful-clean-coal-industry/

against the promotion of energy transition technologies and dilutes the importance placed to critical minerals as the Secretary of Energy is asked to review the inclusion of "steel."

On 22 April 2025, the Department of Energy released the third loan disbursement to Holtec for the reopening of the Palisades Nuclear Plant.<sup>552</sup> When completed, it is expected to provide 800 megawatts of affordable, reliable baseload power in Michigan.

On 13 May 2025, the Department of Energy and the Ministry of Industry and Mineral Resources in Saudi Arabia signed a Memorandum of Cooperation to collaborate on mining and mineral resources.<sup>553</sup> The investment will contribute to economic development and the diversification and resilience of critical mineral supply chains.

On 2 June 2025, the Department of Energy announced funding of USD8 million through the Community Microgrid Assistance Partnership to support microgrid projects.<sup>554</sup> The 14 projects selected through the program will advance microgrid innovation in remote communities.

On 17 June 2025, the G7, including the United States, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>555</sup> It supports the diversification of critical mineral supply, investment in local value creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 25 June 2025, the Department of Energy announced USD15 million in support for three energy storage projects.<sup>556</sup> The projects support critical industries and infrastructure in the event of a power outage or other emergency.

On 26 June 2025, the Department of Energy's Office of Nuclear Energy awarded 23 Rapid Turnaround Experiment projects to support the advancement of nuclear technology.<sup>557</sup> These awards provide researchers access to access to irradiation testing, post-irradiation examination, and technical expertise at no cost.

On 27 June 2025, Secretary of Energy Chris Wright and other senior officials met with Argentina's Minister of Foreign Affairs Gerardo Werthein to discuss bilateral cooperation in energy and mining.<sup>558</sup> The meeting highlighted Argentina's regulatory measures to attract investment, including the development of Vaca Muerta for unconventional hydrocarbons, lithium and other critical minerals for energy transition.

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<sup>&</sup>lt;sup>552</sup> DOE Approves Third Loan Disbursement to Reopen the Palisades Nuclear Plant, U.S. Department of Energy (Washington D.C.) 22 April 2025. Access Date: 19 May 2025. https://www.energy.gov/articles/doe-approves-third-loan-disbursement-reopen-palisades-nuclear-plant

<sup>&</sup>lt;sup>553</sup> Fact Sheet: President Donald J. Trump Secures Historic \$600 Billion Investment Commitment in Saudi Arabia, The White House (Washington D.C.) 13 May 2025. Access Date: 19 May 2025. https://www.whitehouse.gov/fact-sheets/2025/05/fact-sheet-president-donald-j-trump-secures-historic-600-billion-investment-commitment-in-saudi-arabia/

<sup>&</sup>lt;sup>554</sup> U.S. Department of Energy Announces \$8M for Microgrid Innovation, U.S. Department of Energy (Washington D.C.) 2 June 2025. Access Date: 25 July 2025. https://www.energy.gov/oe/articles/us-department-energy-announces-8m-microgrid-innovation

<sup>&</sup>lt;sup>555</sup> G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025. https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>556</sup> DOE Selects \$15 M in Projects Advancing Energy Storage and Critical Infrastructure Resiliency, U.S. Department of Energy (Washington D.C.) 25 June 2025. Access Date: 25 July 2025. https://www.energy.gov/oe/articles/doe-selects-15m-projects-advancing-energy-storage-and-critical-infrastructure

<sup>&</sup>lt;sup>557</sup> DOE Awards Rapid Turnaround Experiments to Advance Nuclear Fuels and Materials, U.S. Department of Energy (Washington D.C.) 26 June 2025. Access Date: 25 July 2025. https://www.energy.gov/ne/articles/doe-awards-rapid-turnaround-experiments-advance-nuclear-fuels-and-materials

<sup>&</sup>lt;sup>558</sup> El Canciller Werthein se reunió con el Secretario de Energía de los Estados Unidos, Ministerio de Relaciones Exteriores, Commercio Internacional y Culto (Buenos Aires) 27 June 2025. Translation provided by Google Translate. Access Date: 6 October 2025. https://www.cancilleria.gob.ar/es/actualidad/noticias/el-canciller-werthein-se-reunio-con-el-secretario-de-energia-de-losestados

On 1 July 2025, Secretary of State Marco Rubio attended the Japan-Australia-India-US (Quad) Foreign Ministers' Meeting in Washington D.C. along with Australian Minister for Foreign Affairs Penny Wong, Indian Minister of External Affairs Subrahmanyam Jaishankar and Japanese Minister for Foreign Affairs Iwaya Takeshi. The Quad Foreign Ministers issued a Joint Statement and Fact Sheet announcing the launch of the Quad Critical Minerals Initiative which aims to secure and diversify reliable supply chains for critical minerals, including through electronic waste recovery and re-processing, while coordinating with private sector partners to facilitate investment. Secure 2015

On 4 July 2025, President Trump enacted the One Big Beautiful Bill Act (OBBBA), allocating USD125 million for the US military to develop small modular nuclear reactors for its use, diversifying the military's energy security. Section 70308 of the OBBBA also expanded tax incentives provided under CHIPS and Science Act from 25 per cent to 35 per cent on advanced manufacturing investment credit, supporting the strengthening of semiconductor supply chains and section 20004(c and d) allocated USD5 billion to the US Department of Defense (Dod) to boost its Industrial Base Fund, facilitating investments to secure critical mineral supply chains. It also allocated USD500 million to the DoD Credit Account Program to specifically invest in any critical mineral related projects. However, sections 70501-70510 of the OBBBA terminated clean energy subsidies previously accorded by the Green New Deal, including the clean vehicle credit, residential clean energy credit and energy efficient home improvement credit. Section 70511 will also eliminate the clean hydrogen production tax credit by 2028, almost 6 years earlier than the previously legislated 2033 timeline and section 70512(a) terminated clean energy production credits for wind and solar facilities that produce electricity after December 2027, earlier than the previous 2032 timeline. These terminations undermine the commitment's focus on a sustainable and responsible energy transition and use of energy transition technologies to achieve this goal.

On 7 July 2025, the Department of Energy extended an agreement with Norway's Royal Ministry of Energy to collaborate in joint research and development of hydropower and marine energy technologies.<sup>562</sup> This action will reduce barriers in technology development, testing and expand generation capacity for a creative, underused source of energy transition.

On 16 July 2025, the Department of Energy launched a pilot program to build and operate nuclear fuel production lines.<sup>563</sup> This program strengthens domestic nuclear fuel supply chains, reduce reliance on foreign sources and open private sector investment in testing advanced reactor designs.

On 24 July 2025, the Department of the Interior directed the US Geological Survey to map and inventory federal mine waste sites and streamline federal regulation on critical mineral recovery from mine waste, prioritizing uranium.<sup>564</sup> This action will add a new source of supply by recovering critical minerals whilst also cleaning up mining sites, thereby strengthening energy transition.

<sup>&</sup>lt;sup>559</sup> Japan-Australia-India-U.S. (Quad) Foreign Ministers' Meeting, Ministry of Foreign Affairs Japan (Tokyo) 2 July 2025. Access Date: 3 August 2025. https://www.mofa.go.jp/fp/nsp/pageite\_000001\_01097.html

<sup>&</sup>lt;sup>560</sup> Factsheet: 2025 Quad Foreign Ministers' Meeting in Washington D.C. (July 01, 2025), Ministry of External Affairs (New Delhi) 2 July 2025. Access Date: 3 July 2025. https://www.mea.gov.in/bilateral-

documents.htm?dtl/39734/Factsheet++2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Foreign+Ministers+Meeting+in+Washington+DC+July+01+2025+Quad+Goreign+Ministers+Meeting+Meetin

<sup>&</sup>lt;sup>561</sup> H.R.1 - One Big Beautiful Bill Act, United States Congress (Washington D.C.) 4 July 2025. Access Date: 7 July 2025. https://www.congress.gov/bill/119th-congress/house-bill/1/text

<sup>&</sup>lt;sup>562</sup> Energy Department Expands Commitment to Collaboration with Norway on Water Power Research and Development, US Department of Energy (Washington D.C.) 7 July 2025. Access Date: 6 October 2025. https://www.energy.gov/articles/energy-department-expands-commitment-collaboration-norway-water-power-research-and

<sup>&</sup>lt;sup>563</sup> Energy Department Announces Pilot Program to Build Advanced U.S. Nuclear Fuel Lines and End Foreign Dependence, U.S. Department of Energy (Washington D.C.) 16 July 2025. Access date: 20 August 2025. https://www.energy.gov/articles/energy-department-announces-pilot-program-build-advanced-us-nuclear-fuel-lines-and-end

<sup>&</sup>lt;sup>564</sup> Department of the Interior Launches Effort to Unlock Critical Minerals from Mine Waste, US Department of the Interior (Washington D.C.) 24 July 2025. Access Date: 6 October 2025. https://www.doi.gov/pressreleases/department-interior-launcheseffort-unlock-critical-minerals-mine-waste

On 26 July 2025, the United States and European Union agreed to a deal on tariffs and trade.<sup>565</sup> The parties agreed to "zero-for-zero" tariffs on strategic products including semiconductor equipment and critical raw materials.

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On 13 August 2025, the Department of Energy announced nearly USD1 billion in funding opportunities to advance critical mineral and material supply chain projects.<sup>567</sup> These include an accelerator program to facilitate commercialization, a byproduct recovery pilot from existing industrial processes, a grant to support manufacturing critical material in batteries, and to recover critical minerals from industrial wastewater.

On 13 August 2025, the Department of Energy unveiled a USD50 million notice of funding opportunity for a 'Critical Minerals and Materials Accelerator' that will promote partnerships led by American industries to prototype and pilot processing technologies for innovative critical materials.<sup>568</sup> This specific accelerator will support research and development to enable predictable supply chains for energy transition technologies.

On 15 September 2025, the Office of Fossil Energy and Carbon Management announced USD6 million for gallium research and development projects. The TRACE-Ga initiative aims to produce technologies that can generate pure gallium from aluminum or zinc for semiconductor, energy and defense supply chains.

On 15 September 2025, the United States and United Kingdom signed a bilateral deal expediting the manufacturing process of nuclear power plants within both countries.<sup>570</sup> This will be done by speeding up the licensing process through removal of red tape and opening to cross-Atlantic market cooperation.

On 18 September 2025, the United States and the United Kingdom signed a Technology Prosperity Memorandum of Understanding.<sup>571</sup> The partnership highlights technological cooperation, partnership in the development of nuclear energy regulatory processes, technologies and supply chains.

<sup>&</sup>lt;sup>565</sup> Statement by President von der Leyen on the deal on tariffs and trade with the United States, European Commission (Prestwick) 26 July 2025. Access Date: 12 August 2025.

https://ec.europa.eu/commission/presscorner/detail/en/statement\_25\_1915

<sup>&</sup>lt;sup>566</sup> Statement by President von der Leyen on the deal on tariffs and trade with the United States, European Commission (Prestwick) 26 July 2025. Access Date: 12 August 2025.

https://ec.europa.eu/commission/presscorner/detail/en/statement 25 1915

<sup>&</sup>lt;sup>567</sup> Energy Department Announces Actions to Secure American Critical Minerals and Materials Supply Chain, U.S. Department of Energy (Washington D.C) 13 August 2025. Access date: 20 August 2025. https://www.energy.gov/articles/energy-department-announces-actions-secure-american-critical-minerals-and-materials-supply

<sup>&</sup>lt;sup>568</sup> Critical Minerals and Materials Accelerator, US Department of Energy (Washington D.C.) 13 August 2025. Access Date: 7 October 2025. https://www.energy.gov/eere/ammto/critical-minerals-and-materials-accelerator-0

<sup>&</sup>lt;sup>569</sup> U.S. Department of Energy Announces \$6 Million to Enhance U.S. Supply Chain Security Through Domestic Gallium Production, Office of Fossil Energy and Carbon Management (Washington D.C.) 15 September 2025. Access Date: 17 October 2025. https://www.energy.gov/fecm/articles/us-department-energy-announces-6-million-enhance-us-supply-chain-security-through

<sup>&</sup>lt;sup>570</sup> Golden age of nuclear delivers UK-US deal on energy security, Department for Energy Security and Net Zero (London) 15 September 2025. Access Date: 16 September 2025. https://www.gov.uk/government/news/golden-age-of-nuclear-delivers-uk-us-deal-on-energy-security

<sup>571</sup> MEMORANDUM OF UNDERSTANDING BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND REGARDING THE TECHNOLOGY PROSPERITY DEAL, The White House (Washington D.C.) 18 September 2025. Access Date: 14 October 2025. https://www.whitehouse.gov/presidential-actions/2025/09/memorandum-of-understanding-between-the-government-of-the-united-states-of-america-and-the-government-of-the-united-kingdom-of-great-britain-and-northern-ireland-regarding-the-technology-prosperity-de/

On 26 September 2025, the Department of Energy announced USD80 million for mining technology and USD15 million for research and development in critical minerals.<sup>572</sup> The program is aimed at supporting the development of a national critical minerals supply chain.

On 1 October 2025, the Department of Energy announced USD365 million for Puerto Rico's energy grid and infrastructure.573

On 2 October 2025, the Department of Energy terminated USD7.56 billion funding for 223 projects issued by the Offices of Clean Energy Demonstrations, Manufacturing and Energy Supply Chains, Advanced Research Projects Agency-Energy, amongst others for being economically unviable.<sup>574</sup> These actions will disrupt the diversification of energy supply chains, from battery factories to hydrogen fuel supply chains projects.<sup>575</sup>

The United States has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. The United States has taken strong action towards the combined welfare target and to strengthen supply chains for energy transition technologies and semiconductors through strengthening domestic semiconductor supply chains, advance nuclear energy as a reliable energy transition technology and financing fusion energy projects.

Thus, the United States receives a score of +1.

Analyst: Ajay Gokul Sivanandam

### African Union: 0

The African Union has partially complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 5 December 2024, at the African Union's Specialized Technical Committee on Transport and Energy, African ministers from 39 countries approved the Climate Resilient and Smart Infrastructure Policy.<sup>576</sup> This policy ensures the promotion of Information Communication Technology industrialization, resilient energy, water and transportation development while ensuring the policies adaptivity to climate related changes.

On 20 January 2025, Commissioner for Infrastructure and Energy Amani Abou-Zeid emphasized the African Union's energy transition and its potential as a leader of this movement.<sup>577</sup> Through the "Pathways to Competitiveness: Setting the Industrial Policy Agenda" and "Powering Progress: Financing the Energy Transition" sessions, the Commissioner highlighted the need for private investment in clean energy within Africa and outside investment in the energy sector to develop Africa's gaps in energy access.

<sup>&</sup>lt;sup>572</sup> U.S. Department of Energy Launches Mine of the Future Initiatives to Bolster the U.S. Mining Industry, US Department of Energy (Washington D.C.) 26 September 2025. Access Date: 17 October 2025. https://www.energy.gov/fecm/articles/usdepartment-energy-launches-mine-future-initiatives-bolster-us-mining-industry

<sup>&</sup>lt;sup>573</sup> Energy Department Announces \$365 Million in Funding to Provide Overdue Support to Puerto Rico's Power Grid, US Department of Energy (Washington D.C.) 2 October 2025. Access Date: 17 October 2025. http://energy.gov/articles/energydepartment-announces-365-million-funding-provide-overdue-support-puerto-ricos-power

<sup>&</sup>lt;sup>574</sup> Energy Department Announces Termination of 223 Projects, Saving Over \$7.5 Billion, US Department of Energy (Washington D.C.) 2 October 2025. Access Date: 7 October 2025. https://www.energy.gov/articles/energy-department-announcestermination-223-projects-saving-over-75-billion

<sup>&</sup>lt;sup>575</sup> Energy Dept. Cancels \$7.5 Billion for Hundreds of Projects, Mostly in Blue States, New York Times (Washington D.C.) 2 October 2025. Access Date: 7 October 2025 https://www.nytimes.com/2025/10/02/climate/doe-clean-energy-programs-shutdown.html <sup>576</sup> African Ministers Endorse Landmark Strategies to Underpin Climate Resilience, Promote Alternative Fuels, African Union (Addis-Ababa), 5 December 2024, Access date: 17 April 2025. https://au.int/en/pressreleases/20241205/african-ministersendorse-landmark-strategies-underpin-climate-resilience

<sup>&</sup>lt;sup>577</sup> African Union at the World Economic Forum, African Union (Davos) 22 January 2025. Access date: 17 April 2025. https://au.int/en/pressreleases/20250120/african-union-world-economic-forum

On 13 February 2025, the African Energy Commission and Denmark launched a project to enhance energy efficiency and sustainable development within the AU.<sup>578</sup> The project will focus on improving energy capacity and advancing sustainable and reliable supply chains in line with the energy transition.

On 16 February 2025, the African Union adopted the Continental Strategy for Sustainable Aviation Fuels, Low Carbon Aviation Fuels and the African Green Hydrogen Strategy at the 38th African Union summit.<sup>579</sup> The first and second strategy aims to decrease the carbon output of aviation through the creation of a sustainable aviation fuels industry providing aircrafts with non-carbon fuel sources. The third initiative verifies that financial and technical advancements in hydrogen are at the forefront of Africa's green hydrogen plan which is in line with ensuring energy security in the African Union.

On 21 March 2025, the African Forum on Mining offered a platform to discuss Africa's green energy potential due to its abundant mineral supply. <sup>580</sup> This meeting emphasized the African Mining vision and is expected to mitigate the challenges inhibiting the release of this environmental potential. Other expected outcomes of this forum are policy recommendations, a climate action roadmap for Africa's green energy transition and developing intra-African partnership frameworks.

On 25 March 2025, the fifth India–Africa Strategic Dialogue convened to explore synergies between India's Critical Minerals Mission and the African Green Minerals Strategy.<sup>581</sup> Building on momentum from India's G20 presidency and the African Union's inclusion as a permanent member, the dialogue emphasized the importance of equitable partnerships. One session highlighted the need for India and African nations to integrate social responsibility into critical mineral extraction.

On 29 May 2025, the African Energy Commission and Swedish International Development Cooperation Agency concluded a three day "Validation Workshop for the Framework for Cross-Border Strategic Cooperation in Skills Sharing." This event reinforces the energy transition partnership between the two countries, while also promoting a pathway for skills exchange aimed at enhancing the energy sector of both the African Union and Sweden.

On 12 June 2025, Commissioner for Infrastructure and Energy of the African Union Commission Lerato Mataboge spoke at the Africa Green Hydrogen Summit and pushed for action by African states to adopt green hydrogen.<sup>583</sup> The summit concluded with a pledge by the members to "fast-track the development of national green hydrogen strategies" with "technical support from the African Union Commission."

<sup>&</sup>lt;sup>578</sup> AFREC and Denmark Launch "Efficiency First" programme to promote Energy Efficiency in Africa, African Energy Commission (Addis Ababa) 13 February 2025. Access Date: 23 June 2025. https://au-afrec.org/afrec-and-denmark-launch-efficiency-first-programme-promote-energy-efficiency-africa

<sup>&</sup>lt;sup>579</sup> African Union Summit Adopts Bold Strategies for Clean and Sustainable Energy and Transport Pathways, African Union (Addis Ababa) 19 February 2025, Access date: 6 May 2025. https://au.int/en/pressreleases/20250219/african-union-summit-adopts-bold-strategies-clean-and-sustainable-energy-and

The 3RD African Forum on Mining Under the theme "The Africa Mining Vision at 16: Achievements, Challenges and Opportunities," African Union (Addis Ababa) 21 March 2025. Access date: 5 April 2025. https://au.int/sw/node/44527
 India and Africa: Partnership in the Next Decade, Manohar Parrikar Institute for Defence Studies and Analyses (New Delhi) 25 March 2025. Access Date: 19 May 2025. https://www.idsa.in/wp-content/uploads/2025/03/Booklet-5th-IASD-25-26-March-2025.pdf

<sup>&</sup>lt;sup>582</sup> AFREC Validates Skills Sharing Framework and Trains Member States on Energy Statistics, African Energy Commission (Addiis Ababa) 26 May 2025. Access Date: 24 July 2025. https://au-afrec.org/afrec-validates-skills-sharing-framework-and-trains-member-states-energy-statistics

<sup>&</sup>lt;sup>583</sup> Commissioner Lerato Calls for Urgent Action on Adopting National Green Hydrogen Policies at African Green Hydrogen Summit 2025, African Union Information & Communication Directorate (Cape Town) 12 June 2025. Access Date: 25 August 2025. https://au.int/sites/default/files/pressreleases/45019-pr-Press\_Release\_-

Commissioner\_Lerato\_Calls\_For\_Urgent\_Action\_on\_Adopting\_National\_Green\_Hydrogen\_Policies\_at\_African\_Green\_Hydrogen\_Summit 2025.pdf

On 27 June 2025, Commissioner Mataboge conducted a four-day official visit to the Democratic Republic of Algeria to explore bilateral cooperation to promote Africa's clean energy future.<sup>584</sup> The conversation centered around Algeria's contribution to the African Single Electricity Market and the capacity of natural gas as Africa's energy fuel.

On 1 July 2025, Director of Infrastructure and Energy Kamugisha Kazaura highlighted the foundation of the African Union's renewable energy framework at the African Single Electricity Market High-Level Technical Meeting. This conference between AU countries acknowledged the work already done to support the AU's unified pathway to energy transition and outlined the future plans of the "AfSEM High-Level Technical Oversight Committee" which serves to create a fully integrated electricity system between all AU member states.

On 11 July 2025, the Pan-African Parliament hosted the Africa Digital Parliamentary Summit on Artificial Intelligence (AI), Data Protection and Privacy.<sup>586</sup> The delegates declared their intention to create legislation to regulate AI in collaboration with civil society and AU departments, enhance science and technology education and fund "Digital Infrastructure, Research, Innovation and Development in AI."

On 20 August 2025, Union Commission Chairperson Mahmoud Ali Youssouf spoke with Japanese Prime Minister Shigeru Ishiba about African development, policy cooperation and collaboration on the African Union's Agenda 2063.<sup>587</sup> Agenda 2063 includes priorities including renewable energy development and sustainable natural resource management.<sup>588</sup>

On 22 August 2025, South Africa, African Union, Japan and African Union member-states released the TICAD 9 Yokohama Declaration to "[c]o-create innovative solutions with Africa". <sup>589</sup> The declaration includes a statement on cooperation for enhancing artificial intelligence governance and projects. It highlights the importance of continued collaboration between Japan and Africa in energy transition technologies and clean energy projects.

On 12 October 2025, the African Union Commission's Deputy Chairperson Selma Malika Haddadi and South Africa's Deputy Minister of International Relations and Cooperation Alvin Botes reaffirmed cooperation to support African development and shared frameworks such as Agenda 2063 and G20.<sup>590</sup>

<sup>&</sup>lt;sup>584</sup> African Union Commissioner for Infrastructure and Energy Concludes Successful Mission to Algeria with Focus on Continental Energy Cooperation and Integration, African Energy Commission (Algiers) 27 June 2025. Access Date: 31 July 2025. https://au-afrec.org/african-union-commissioner-infrastructure-and-energy-concludes-successful-mission-algeria-focus

<sup>&</sup>lt;sup>585</sup> Towards a Unified Electricity Market AfSEM-CMP Technical Meeting in Addis Ababa Solidifies Africa's Power Integration Trajectory, African Union (Addis Ababa) 1 July 2025. Access Date: 7 July 2025. https://au.int/en/node/45013

<sup>&</sup>lt;sup>586</sup>Africa Digital Parliamentary Summit - The Lusaka Declaration, Pan-African Parliament (Johannesburg) 11 July 2025. Access Date: 25 August 2025. https://pap.au.int/en/news/press-releases/2025-07-11/africa-digital-parliamentary-summit-lusaka-declaration

<sup>&</sup>lt;sup>587</sup> Meeting between Prime Minister ISHIBA and Mahmoud Ali YOUSSOUF, Chairperson of the African Union Commission, Ministry of Foreign Affairs Japan (Tokyo) 20 August 2025. Access Date: 18 October 2025. https://www.mofa.go.jp/afr/af2/pageite\_000001\_01178.html

<sup>&</sup>lt;sup>588</sup> Goals & Priority Areas of Agenda 2063, African Union (Addis Ababa) n.d. Access Date: 18 October 2025. https://au.int/en/agenda2063/goals

<sup>&</sup>lt;sup>589</sup> TICAD 9 Yokohama Declaration "Co-create innovative solutions with Africa", African Union (Addis Ababa) 22 August 2025. Access Date: 18 October 2025. https://au.int/en/pressreleases/20250822/ticad-9-yokohama-declaration-co-create-innovative-solutions-africa

<sup>&</sup>lt;sup>590</sup> The Deputy Chairperson of the African Union Commission concludes a productive working visit to South Africa amid the Inaugural Diaspora Week, African Union (Addis Ababa) 1 October 2025. Access Date: 18 October 2025. https://au.int/en/pressreleases/20251012/auc-dcp-concludes-working-visit-south-africa-amid-inaugural-diaspora-week

On 10 October 2025, African Union and South Africa launched an Africa Energy Efficiency Facility to develop and enhance energy efficiency projects.<sup>591</sup>

The African Union has partially complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. The African Union has advanced the combined welfare target through a partnership with Denmark and has taken action to support supply chains for energy transitions through the partnership, Continental Strategy for Sustainable Aviation Fuels, Low Carbon Aviation Fuels and African Green Hydrogen Strategy and Climate Resilient and Smart Infrastructure Policy.

Thus, the African Union receives a score of 0.

Analyst: Simeon Karakolev

## European Union: +1

The European Union has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies.

On 5 December 2024, the European Union and Mercosur concluded negotiations on a new EU-Mercosur agreement which includes increasing support in renewable energy sectors, diversifying supply chains and securing raw materials for the green transition.<sup>592</sup>

On 14 January 2025, the European Commission published a report that suggests that EU states need to review outbound investments in key areas such as artificial intelligence, semiconductors and quantum technologies.<sup>593</sup> The report highlights the importance of economic security for the EU.

On 15 January 2025, the European Investment Bank (EIB) gave a EUR1 billion loan to NXP Semiconductors.<sup>594</sup> The loan will support NXP's semiconductor solutions and research in five EU member states and is part of broader investment by the EU into artificial intelligence, quantum computing and the digitalization of numerous industries.

On 16 January 2025, the EU and Mexico concluded negotiations on an updated Global Agreement which includes securing supply chains for raw materials.<sup>595</sup> The agreement also includes advancements towards net-zero and development in sectors like telecommunications and e-commerce.

On 1 February 2025, the European Commission allocated EUR645 million from the Connecting Europe Facility towards Denmark and Germany's offshore wind energy project. <sup>596</sup> The Bornholm Energy Island project

<sup>&</sup>lt;sup>591</sup> The African Union and South Africa Launch the Africa Energy Efficiency Facility (AfEEF) Programme to Unlock Africa's Energy Productivity, African Union (Addis Ababa) 10 October 2025. Access Date: 18 October 2025.

https://au.int/en/pressreleases/20251010/au-and-south-africa-launch-africa-energy-efficiency-facility-afeef

<sup>&</sup>lt;sup>592</sup> EU and Mercosur reach political agreement on groundbreaking partnership, European Commission (Brussels) 5 December 2024. Access Date: 29 March 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_24\_6244

<sup>&</sup>lt;sup>593</sup> Commission calls on Member States to review outbound investments and assess risks to economic security, European Commission (Brussels) 14 January 2025. Access Date: 29 March 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_261

<sup>&</sup>lt;sup>594</sup> NXP secures €1 billion EIB loan to advance semiconductor innovation in Europe, European Investment Bank (Luxembourg City) 15 January 2025. Access Date: 29 March 2025. https://www.eib.org/en/press/all/2025-010-nxp-secures-eur1-billion-eib-loan-to-advance-semiconductor-innovation-in-europe

<sup>&</sup>lt;sup>595</sup> Negotiators conclude on modernised Global Agreement with Mexico, European Commission (Brussels) 16 January 2025. Access Date: 29 March 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_248

<sup>&</sup>lt;sup>596</sup> Offshore-Kooperationsprojekt zwischen Dänemark und Deutschland Bornholm Energy Island erhält EU-Fördermittel, Bundesministerium für Wirtschaft und Energie (Berlin) 1 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Pressemitteilungen/2025/20250201-offshore-kooperationsprojekt-daenemark-deutschland-eu-foerdermittel.html

aims to integrate 3 gigawatts of wind energy within the European electricity grid by the next decade. This will support energy efficiency, the renewable energy transition and energy security within Europe.

On 5 February 2025, the European Union, the French Development Agency, the Indonesian Ministry of Energy and Mineral Resources and the National Electricity Company launched the 2025-2030 Indonesia Energy Transition Facility, under the Just Energy Transition Partnership Framework.<sup>597</sup> This project will focus on developing and implementing renewable energy and transmission projects and ensuring appropriate public policies for the energy transition. The EU will provide EUR10.6 million and AFD will provide EUR4.1 million for this initiative.

On 23 February 2025, the European Commission approved a EUR227 million aid measure to support the construction of a wafer manufacturing facility in Austria.<sup>598</sup> The measure will strengthen Europe's security of supply, resilience and technological autonomy in semiconductor technologies.

On 27 February 2025, the EIB Bank loaned EUR430 million to Portugal for a renewable hydrogen project and a biofuels project.<sup>599</sup> The renewable hydrogen production unit project will be one of the first major operational hydrogen production units in the EU.

On 12 March 2025, President of the European Commission Ursula von der Leyen, President of the European Council António Costa and President of South Africa Cyril Ramaphosa signed a joint statement on various issues including supply chains and energy transition technologies.<sup>600</sup> The members agreed to launch negotiations for a "Clean Trade and Investment Partnership." This partnership will include investment in raw materials supply chains and renewable energy projects.

On 24 March 2025, the European Commission adopted 47 Strategic Projects from 13 EU member states, including a focus on strategic raw materials.<sup>601</sup> The raw materials include lithium, nickel, cobalt, manganese, tungsten, magnesium and graphite. These extraction, processing or recycling projects all meet the EU's environmental and social governance criteria.

On 27 March 2025, the European Commission invested EUR1 billion in artificial intelligence technologies.<sup>602</sup> The Commission aims to promote the adoption of artificial intelligence within the public and private sectors as well as the creation of a digital Earth to support climate adaption technologies.

On 28 March 2025, the EIB loaned EUR110 million to Banco del Estado de Chile for renewable energy investments and climate action.<sup>603</sup> The loan specifies that mining companies and providers of critical raw

<sup>599</sup> Portugal: EIB finances Galp's Renewable Hydrogen and Biofuels projects in Sines with €430 million, European Investment Bank (Luxembourg City) 27 February 2025. Access Date: 29 March 2025. https://www.eib.org/en/press/all/2025-107-eib-finances-galp-s-renewable-hydrogen-and-biofuels-projects-in-sines-with-eur430-million

<sup>&</sup>lt;sup>597</sup> La France et l'UE renforcent leur partenariat avec l'Indonésie pour accélérer la transition énergétique, Agence Française de Développement (Paris) 5 February 2025. Translation provided by Google Translate. Access Date: 23 June 2025. https://www.afd.fr/fr/actualites/communique-de-presse/la-france-et-lue-renforcent-leur-partenariat-avec-lindonesie-pour-

accelerer-la-transition-energetique
<sup>598</sup> Commission approves €227 million Austrian State aid measure to support ams Osram in setting up a new wafer manufacturing facility in Premstätten, European Commission (Brussels) 23 February 2025. Access Date: 29 March 2025.

https://ec.europa.eu/commission/presscorner/detail/en/ip 25 589

<sup>&</sup>lt;sup>600</sup> EU - South Africa Summit Declaration, European Commission (Cape Town) 12 March 2025. Access Date: 15 May 2025. https://ec.europa.eu/commission/presscorner/detail/en/statement\_25\_773

<sup>601</sup> Commission selects 47 Strategic Projects to secure and diversify access to raw materials in the EU, European Commission (Brussels) 24 March 2025. Access Date: 29 March 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_864 602 Commission to invest €1.3 billion in artificial intelligence, cybersecurity and digital skills, European Commission (Brussels) 27 March 2025. Access Date: 15 May 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_907

<sup>&</sup>lt;sup>603</sup> Chile: EIB to provide \$110 million to finance energy efficiency and renewable energy investments, European Investment Bank (Luxembourg City) 28 March 2025. Access Date: 29 March 2025. https://www.eib.org/en/press/all/2025-160-eib-to-provide-usd110-million-to-finance-energy-efficiency-and-renewable-energy-investments-in-chile

materials are eligible beneficiaries. The focus of the loan is on small and medium businesses to support the decarbonization of supply chains.

On 3 April 2025, the European Union, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan signed a joint declaration committing to further cooperation.<sup>604</sup> The declaration includes cooperation on sustainable and diversified critical raw materials and supply chains. The EU also declared its support of "regional cooperation within Central Asia," specifically for energy transition technologies and projects.

On 25 April 2025, the EIB and PGE Polska Grupa Energetyczna signed a EUR525 million loan agreement for Poland's energy transition. <sup>605</sup> The deal includes investments in photovoltaic installations and storage units. This supports Poland and the EU's energy transition.

On 11 May 2025, the European Union and Japan held the third Digital Partnership Council to reinforce their technology cooperation. <sup>606</sup> Both members agreed to collaborate on semiconductors, Artificial Intelligence and 5G/6G research. This will support both members diversification of responsible semiconductor supply chains.

On 19 May 2025, the European Union and the United Kingdom held the 2025 EU-UK Leaders' Summit to discuss plans for cooperation.<sup>607</sup> The summit affirmed energy cooperation between the two parties on a permanent basis and further discussion was held as to the UK's role in the internal electricity market of the EU.

On 3 June 2025, the European Commission signed an agreement with the European Investment Bank (EIB) to renew support for innovative decarbonisation projects not covered by the Innovation Fund.<sup>608</sup> Under the renewed agreement, the EIB will provide project development assistance to up to 250 projects until 2028.

On 15 June 2025, President of the European Commission Ursula von der Leyen urged G7 partners to boost cooperation on critical mineral supply chains, proposing joint action to diversify sourcing, invest in processing and coordinate policies in key sectors to cut dependencies and counter non-market practices.<sup>609</sup>

On 16 June 2025, the EIB announced EUR1.6 billion to finance the Bay of Biscay electricity interconnection between Spain and France.<sup>610</sup> The project will nearly double cross-border capacity from 2,800 megawatts (MW) to 5,000 MW.

On 17 June 2025, the G7, including the European Union, launched the G7 Critical Minerals Action Plan during the G7 Kananaskis Summit.<sup>611</sup> It supports the diversification of critical mineral supply, investment in local value

https://g7.utoronto.ca/summit/2025kananaskis/250617-critical-minerals.html

<sup>&</sup>lt;sup>604</sup> Joint Declaration following the First European Union-Central Asia Summit, European Commission (Samarkand) 3 April 2025. Access Date: 15 May 2025. https://ec.europa.eu/commission/presscorner/detail/en/statement\_25\_980

<sup>&</sup>lt;sup>605</sup> EIB extends over €525 million to Poland's top utility PGE for renewable energy production, European Investment Bank (Luxembourg) 25 April 2025. Access Date 15 May 2025. https://www.eib.org/en/press/all/2025-193-eib-extends-over-eur525-million-to-poland-s-top-utility-pge-for-renewable-energy-production

<sup>&</sup>lt;sup>606</sup> EU and Japan reinforce tech and digital partnership, European Commission (Brussels) 11 May 2025. Access Date: 15 May 2025. http://ec.europa.eu/commission/presscorner/detail/en/ip 25 1185

<sup>&</sup>lt;sup>607</sup> EU-UK 2025 Leaders' Summit: Setting the path for further rapprochement, European Parliament Think Tank (Brussels) 19 May 2025. Access Date: 4 July 2025. https://www.europarl.europa.eu/thinktank/en/document/EPRS\_BRI(2025)775858

<sup>&</sup>lt;sup>608</sup> European Commission and EIB to further support decarbonisation projects from the Innovation Fund, European Commission (Brussels) 3 June 2025. Access Date: 25 July 2025. https://www.eib.org/en/press/all/2025-227-european-commission-and-eib-to-further-support-decarbonisation-projects-from-the-innovation-fund

<sup>&</sup>lt;sup>609</sup> Statement by President von der Leyen at Session II – working lunch of the G7, 'Economic growth, security and resilience', European Commission (Kananaskis) 15 June 2025. Access Date: 12 August 2025. https://ec.europa.eu/commission/presscorner/detail/en/statement\_25\_1522

<sup>610</sup> EIB supports with €1.6 bn the strategic Bay of Biscay electricity interconnection between Spain and France, European Investment Bank (Luxembourg) 16 June 2025. Access Date: 25 July 2025. https://www.eib.org/en/press/all/2025-241-eib-supports-with-eur1-6-bn-the-strategic-bay-of-biscay-electricity-interconnection-between-spain-and-france 611 G7 Critical Minerals Action Plan, G7 Information Centre (Kananaskis) 17 June 2025. Access Date: 5 July 2025.

creation and sustainable mining practices, to strengthen responsible and resilient critical mineral supply chains. The Action Plan was also endorsed by Australia, India and Korea.

On 20 June 2025, the EIB announced a financing ceiling of EUR100 billion for 2025 to boost investments in European security and defence, energy grids and technological leadership.<sup>612</sup> The approved major projects span several countries including both European Union member states and third countries.

On 22 June 2025, the EU and Canada signed a Security and Defence Partnership to boost defence cooperation and launched talks on Canada's access to the EUR150 billion SAFE procurement instrument.613 They also agreed to enhance critical raw materials trade with Canada and announced the EU-Canada Industrial Policy Dialogue to further strengthen supply chains in critical sectors.

On 24 June 2025, European Commission announced the Clean Industrial Deal a new State aid framework.<sup>614</sup> This will support green energy development and energy transition within EU member states.

On 30 June 2025, EIB announced a long-term credit facility of EUR450 million for construction and development of energy infrastructure in Northern Germany. 615 This investment in reliable energy transmission supports the European Union's energy transition.

On 2 July 2025, European Commission and EIB released EUR3.66 billion for energy related projects in Croatia, Czechia, Greece, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia. 616 Energy related projects include investments in energy storage, energy efficiency and updating electricity grid and transmission for renewable energy.

On 3 July 2025, the EIB announced EUR50,000 for Kenya's National Hospital for an assessment to implement a photovoltaic system within the hospital's energy grid.617

On 3 July 2025, the European Commission announced EUR852 million in grants for six electric vehicle battery manufacturing projects.<sup>618</sup> The investments aim to support the development of battery technologies and accelerate the growth of European battery manufacturing.

<sup>612</sup> EIB Group increases 2025 financing ceiling to record EUR 100 billion to step up investments in security and defence, energy grids and Europe's tech leadership, European Investment Bank (Luxembourg) 24 June 2025. Access Date: 25 July 2025. https://www.eib.org/en/press/all/2025-247-eib-group-increases-2025-financing-ceiling-to-record-eur100-billion-to-step-upinvestments-in-security-and-defence-energy-grids-and-europe-s-tech-leadership

<sup>613</sup> Statement by President von der Leyen at the joint press conference with President Costa and Prime Minister Carney of Canada, European Commission (Brussels) 22 June 2025. Access Date: 12 August 2025.

https://ec.europa.eu/commission/presscorner/detail/en/statement 25 1596

<sup>614</sup> New State aid framework enables support for clean industry, European Commission (Brussels) 24 June 2025. Access Date: 26 August 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_1598

<sup>&</sup>lt;sup>615</sup> Germany: Largest EIB financing for EWE – over 2,600 km of new underground power lines and more than 1,100 substations for Lower Saxony's energy transition, European Investment Bank (Luxembourg) 30 June 2025. Access Date: 10 July 2025. https://www.eib.org/en/press/all/2025-258-largest-eib-financing-for-ewe-over-2600-km-of-new-underground-power-lines-andmore-than-1100-substations-for-lower-saxony-s-energy-transition

<sup>&</sup>lt;sup>616</sup> Joint press release: Investment of €3.66 billion from EU emissions trading revenues in cleaner energy systems, European Commission (Brussels) 2 July 2025. Access Date: 26 August 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_1714

<sup>617</sup> Kenya's largest hospital gets EIB Global support to bolster and green its energy supply, European Investment Bank (Luxembourg) 3 July 2025. Access Date: 10 July 2025. https://www.eib.org/en/press/all/2025-269-kenya-s-largest-hospital-getseib-global-support-to-bolster-and-green-its-energy-supply

<sup>618</sup> EU invests €852 million in six innovative electric vehicle battery projects, European Commission (Brussels) 3 July 2025. Access Date: 25 July 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip 25 1727

On 22 July 2025, six projects selected under the Innovation Fund 2023 general call for Net-Zero Technologies signed their Grant Agreements.<sup>619</sup> These projects will receive approximately EUR319 million in grants.

On 23 July 2025, the European Union and China issued a joint press statement on climate on the 50th anniversary of their diplomatic relations.<sup>620</sup> The parties committed to accelerating global renewable energy deployment and increasing access to green technologies.

On 26 July 2025, European Union and United States agreed to a deal on tariffs and trade.<sup>621</sup> The parties agreed to "zero-for-zero" tariffs on strategic products including semiconductor equipment and critical raw materials.

On 28 July 2025, European Infrastructure Bank approved a EUR264 million loan to support the construction of gas pipelines dedicated to biomethane. The project seeks to integrate biomethane plants into the Italian gas transmission network.

On 8 September 2025, the European Union and African Union launched two flagship programs aimed at accelerating the African Union's just transition, namely the Continental Energy Program in Africa funded by the European Union and Engaging for Africa's Green Energy Transition funded by Germany's Ministry for Economic Cooperation and Development.<sup>623</sup>

On 8 September 2025, the European Union, French Development Agency and Ethiopia signed a EUR120 million loan and grant agreement to support Ethiopia's green and digital transition.<sup>624</sup> The funding will go towards renewable generation, electricity infrastructure and training schemes.

On 16 September 2025, European Commission announced EUR300 million for projects that meet Work Programme for Cluster Five. 625 Cluster Five emphasizes sustainable, reliable, inclusive and responsible energy supply chains.

622 Italy: EIB—Snam — €264 million agreement to integrate biomethane into Italy's gas network, European Investment Bank (Brussels) 28 July 2025. Access Date: 23 August 2025. https://www.eib.org/en/press/all/2025-303-eib-snam-eur264-million-agreement-to-integrate-biomethane-into-italy-s-gas-network

<sup>&</sup>lt;sup>619</sup> Innovation Fund: six additional projects supporting the decarbonisation of European industry, European Climate, Infrastructure and Environment Executive Agency (Brussels) 22 July 2025. Access Date: 23 August 2025.

 $https://cinea.ec.europa.eu/news-events/news/innovation-fund-six-additional-projects-supporting-decarbonisation-european-industry-2025-07-22\_en$ 

<sup>&</sup>lt;sup>620</sup> Joint EU-China press statement on climate, European Commission (Brussels) 23 July 2025. Access Date: 23 August 2025 https://ec.europa.eu/commission/presscorner/detail/en/statement\_25\_1902

<sup>&</sup>lt;sup>621</sup> Statement by President von der Leyen on the deal on tariffs and trade with the United States, European Commission (Prestwick) 26 July 2025. Access Date: 12 August 2025.

https://ec.europa.eu/commission/presscorner/detail/en/statement 25 1915

<sup>&</sup>lt;sup>623</sup> Africa Climate Summit: Major energy programmes launched as African Union and European Union celebrate 25 years of partnership, Delegation of the European Union to the African Union (Addis Ababa) 10 September 2025. Access Date: 30 September 2025. https://www.eeas.europa.eu/delegations/african-union-au/africa-climate-summit-major-energy-programmes-launched-african-union-and-european-union-celebrate-25\_en?s=43

<sup>&</sup>lt;sup>624</sup> European Union, France and Ethiopia Sign €120 Million Flagship Agreement to Modernise Power and Digital Infrastructure, Agence Française de Développement (Paris) 8 September 2025. Access Date: 18 October 2025. https://www.afd.fr/en/press-releases/european-union-france-and-ethiopia-sign-eu120-million-flagship-agreement-modernise

<sup>625</sup> Horizon Europe Energy: over €300 million available to fund new energy research projects, European Commission (Brussels) 16 September 2025. Access Date: 18 October 2025. https://cinea.ec.europa.eu/news-events/news/horizon-europe-energy-over-eu300-million-available-fund-new-energy-research-projects-2025-09-16\_en

On 23 September 2025, Indonesia and the European Union agreed to a Comprehensive Economic Partnership Agreement (CEPA), including provisions related to clean energy. The CEPA eliminates tariff and non-tariff barriers for clean energy technologies and infrastructures between the two members.

On 24 September 2025, the EIB announced an EUR380 million loan for BEN Berlin Energie und Netzholding and Stromnetz Berlin to modernize and transition Berlin's electricity infrastructure.<sup>627</sup> This includes new digital components, power cables and renewable energy integration.

On 27 September 2025, European Commission revealed an EUR545 million package to support Africa's energy transition. 628 The funding will be allocated to projects in Côte d'Ivoire, Cameroon, Republic of Congo, Lesotho, Ghana, Central Africa, Madagascar, Mozambique and Somalia for energy infrastructure, renewable energy projects and electrification of rural areas.

On 1 October 2025, the EIB and Intesa Sanpaolo signed an EUR500 million loan agreement and an EUR250 million counter-guarantee to finance renewable energy supply chains in Italy.<sup>629</sup> The first loan aims to support renewable energy projects and storage. The counter-guarantee aims to generate new investment in wind industry and supply chain.

On 9 October 2025, European Commission announced EUR618 million package to develop Africa's renewable energy capacity.<sup>630</sup> Half of the projects focus on electrification and energy infrastructure in Kenya, Uganda, Democratic Republic of Congo and Mauritania. The rest include renewable energy and storage projects in Togo, Cabo Verde, Nigeria and the Zambia-Tanzania interconnector power exchange project.

On 9 October 2025, European Commission and Team Europe announced an EUR430 million package to support the Bac Ai Pumped Hydro Storage Project.<sup>631</sup> The investment supports Vietnam's renewable energy integration as well as reliable and sustainable energy transmission.

The European Union has fully complied with its commitment to support reliable, diversified, sustainable and responsible supply chains for energy transitions, including for critical minerals and materials beneficiated at source, semiconductors and technologies. The EU's 47 Strategic Projects demonstrate investment in reliable, diversified and sustainable supply chains beneficiated at source. In addition, the EU has invested in multiple member states energy transition technologies, semiconductor research and facilities as well as critical minerals projects. The EU's projects and loans robust environmental and social criteria also help ensure responsible supply chains for energy transitions.

<sup>626</sup> Key elements of the EU-Indonesia Trade Agreement and Investment Protection Agreement, European Commission (Brussels) 23 September 2025. Access Date: 12 October 2025. https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/indonesia/eu-indonesia-agreements/key-elements-eu-indonesia-trade-agreement-and-investment-protection-agreement\_en

<sup>&</sup>lt;sup>627</sup> Germany: Investment in Berlin's electricity grid - BEN and EIB sign loan agreement, European Investment Bank (Luxembourg) 24 September 2025. Access Date: 18 October 2025. https://www.eib.org/en/press/all/2025-347-investition-in-das-berliner-stromnetz-ben-und-eib-unterzeichnen-kreditvertrag

<sup>628</sup> European Commission announces €545 million package to scale up renewables in Africa, European Commission (Brussels) 27 September 2025. Access Date: 18 October 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_2193 629 Italy: EIB and Intesa Sanpaolo lend €750 million to support the development of renewable energy and the related supply chain, European Investment Bank (Luxembourg) 1 October 2025. Access Date: 18 October 2025.

https://www.eib.org/en/press/all/2025-357-eib-and-intesa-sanpaolo-lend-eur 750-million-to-support-the-development-of-renewable-energy-and-the-related-supply-chain

<sup>630</sup> President von der Leyen announces €618 million package to scale up renewables in Africa at Global Gateway Forum, European Commission (Brussels) 9 October 2025. Access Date: 18 October 2025. https://ec.europa.eu/commission/presscorner/detail/en/ip 25 2335

<sup>&</sup>lt;sup>631</sup> EU reinforces support for Vietnam's Just Energy Transition with €430 million package, European Investment Bank (Luxembourg) 9 October 2025. Access Date: 18 October 2025. https://www.eib.org/en/press/all/2025-377-eu-reinforces-support-for-vietnam-s-just-energy-transition-with-eur430-million-package

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