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EU CLEAN TRANSITION PARTNERSHIPS WITH EMERGING ECONOMIES

AN EU FOREIGN POLICY TOOL TO NAVIGATE NEW CLIMATE GEOPOLITICS

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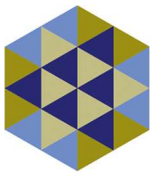
Clean transition partnerships with developing countries can help the EU navigate increasingly complex climate geopolitics. They can increase its geoeconomic resilience, enhance its competitiveness in the clean economy and strengthen its relationship with key emerging economies, maintaining the EU's influence and viability in a multipolar world. EU partnerships in general are being touted as a core tool of the EU's international climate outreach. A more integrated and strategic Team EU approach to partnerships with the Global South, ensuring they are co-designed and mutually beneficial, would make the sum of EU efforts more than its parts.

Focused and co-developed clean transition partnerships would help the EU strengthen its geopolitical position in an increasingly multipolar world. Doing so is critical to preserve Europe's influence as an international actor, and essential to the long-term viability, security, and prosperity of the EU project. Clean transition partnerships can contribute to rebuilding trust with the Global South by making a strong case for cooperation with the EU, while addressing EU fears of overdependence on critical imports from China and its loss of international competitiveness due to rising energy costs and competitive green subsidies. They can also facilitate the emergence of a climate ambitious coalition in 2025 by reassuring emerging economies about the available support for choosing



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sustainable development pathways, and thereby giving them the confidence to reflect such ambition in their next Nationally Determined Contributions (NDCs).

This briefing builds a case for incorporating clean transition partnerships at the core of the EU's foreign policy, and illustrates how the EU could approach and design these partnership offers by exploring three case studies:

1. An industrial decarbonisation partnership to expand cooperation on green steel value chains with Brazil.
2. A cleantech partnership with Indonesia to support its strategy of leveraging its mineral resources into becoming a manufacturing hub.
3. And a clean energy partnership to support Egypt's transition away from fossil gas by quickly deploying renewable technologies.

The case studies underscore that, to succeed, EU clean transition partnerships must:

> be agreed and co-owned at the highest political level

> reflect shared economic interests

> be mutually beneficial to both partners' strategic interests

> and thus, remain tailor-made and flexible instruments.

Clean transition partnerships in a changing world

Partnerships can help tackle new climate geopolitics

Partnerships of various kinds have been proposed lately to strengthen the EU's clean economy cooperation with developing countries. Their popularity dovetails with the growing intersection between climate action and geopolitics. The EU is increasingly anxious about its overdependence on critical imports and its loss of competitiveness in the clean economy, caused by high energy costs domestically and large subsidies in the US and China. Clean transition partnerships with large emerging economies can help safeguard EU influence in a changing world, while strengthening the resilience of critical EU clean value chains and EU competitiveness in future-proof growth sectors. Doing so is critical to ensure the long-term prosperity and viability of the European project.

Various EU approaches to partnerships are emerging as a politically nimble complement to trade agreements and multilateral reforms. Given the growing

mistrust among some countries towards global institutions, willingness to agree to sweeping, whole-of-economy agreements is at a historical low. Partnerships focused on specific value chains can thus provide some political space for economic cooperation among countries. Moreover, they are a suitable foreign policy tool to accompany the rise of industrial policy since they can facilitate the coordination of public–private projects across borders.

Partnerships are also a good climate tool in an increasingly multipolar world. As a growing number of countries defend their strategic autonomy, coalitions will become more ad hoc and issue specific. In this context, co-tailored partnerships with leading emerging economies can strengthen the EU's international climate leadership. Their successful deployment can lower political and economic barriers to higher climate ambition in such countries, thus being critical in the run-up to COP30 and the next round of Nationally Determined Contributions (NDCs).

But the EU needs a more integrated approach to partnerships

The EU partnerships proposed in the wider context of the European Green Deal so far have mostly focused on securing critical green imports, such as minerals or hydrogen, raising doubts over their benefits for potential partners.[1] The European Commission has also negotiated broader Green Partnerships with Morocco and the Republic of Korea, building on the experience of the Green Alliances with Japan, Norway, and Canada. Such partnerships figured prominently as a core foreign policy tool in the Commission's proposal for a 2040 climate target.[2]

However, this current EU approach has some shortcomings. Such partnerships rarely stem from an agreement at head of government level, which limits the political traction they can achieve across bureaucracies and economies. Indeed, so far within the EU there's been seemingly little coordination between the Commission services responsible for negotiating the various partnerships. EU partnerships have also been only loosely integrated with Member States' own partnerships and other Team Europe initiatives. The lack of a systemic and integrated Team EU approach to partnerships in the context of the global transition towards a clean economy decreases their impact on partners' economic development choices, as the sum of EU efforts ends up being less than its parts.

[1] Fern, EEB et al., 2023, **A Partnership of Equals? How to strengthen the EU's Critical Raw Materials Strategic Partnerships**

[2] European Commission, 2024, **Communication on a 2040 Climate Target**.

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Principles for effective EU clean transition partnerships with developing countries

To fully seize the geopolitical, economic and climate opportunities they present, EU clean transition partnerships can follow certain principles:

1. Partnerships need to be **mutually beneficial** and **co-owned**. They cannot stem from a top-down, one-size-fits-all exercise driven by the EU. They must instead emerge from a co-designed process leading to a shared understanding of each partner's interests and their potential overlaps.
2. They should **reflect a political agreement at the highest political level**. A successful partnership must stem from an eye-to-eye conversation between heads of government, who can build the necessary political traction within their respective bureaucracies. On the EU side, it is essential to coordinate with Member States and other Team EU actors.
3. Such agreement must be built **on shared economic and political interests, not just a common set of goals**. EU climate partnerships so far focus mostly on identifying a list of policy priorities to cooperate on. A transition partnership should also spell out how both partners will seize specific economic or political opportunities, building on each other's strengths, to achieve a positive-sum result they could not attain alone.
4. As such, they must be **firmly rooted in partners' economic and development plans** and reflect their aspirations to benefit from the global clean transition. They should integrate partners' needs for more technological and financial resources, opening opportunities for shared prosperity.
5. They also need to be **aligned with the EU's core strategic interests**. In a world of increased distrust among countries, being transparent and sincere about what the EU expects to gain from a deal can enhance the EU's credibility and be conducive to higher trust.
6. Finally, they must remain a **flexible and tailor-made instrument**. EU partnerships must reflect each partner's different needs and interests, and thus mobilise a different set of tools each time, such as demand-side tools like offtake agreements and public procurement, different forms of public finance, or tools to facilitate private investment like guarantees and export credits.

While partnerships for joint clean economy transitions do not focus on trade liberalisation, they could indirectly facilitate market access by promoting cooperation in areas such as cleantech development and deployment, technical

capacity building and sustainable finance. They would also foster and facilitate strategic commercial opportunities that are not readily accessible for either partner, rather than seeking solely to increase trade flows. Importantly, they would remain compatible with WTO obligations, staying clear of contradicting international trade frameworks. The EU also needs to keep in mind its obligations regarding human rights, marginalized groups, and the participation of civil society, including free, prior, and informed consent of local communities during the implementation of projects under the partnership.

Sketches for clean and just transition partnerships

Brazil, Indonesia, and Egypt are important players in the global clean economy transition. All three are strong global and regional leaders, with high existing and projected emissions, and with strong competitive advantages in clean economy sectors such as renewable energy, hydrogen, critical minerals, or sustainable fuels (Table 1). They also have strong relationships with the EU and its Member States.

Despite these similarities, they offer different challenges to EU climate diplomacy. Their geopolitical strength and position varies: Brazil is an undisputed regional leader in Latin America, and Indonesia is by far the largest economy in ASEAN; in contrast, Egypt is one of several influential countries in the Middle East. Also, their main sources of greenhouse emissions vary, being mainly deforestation in Brazil, coal in Indonesia, and oil and gas consumption in Egypt. These differences, among others, highlight the importance of co-designing the partnerships so they address EU partners' particular needs and domestic politics. Only then can such an offer of cooperation influence partners' interest calculus.[3]

There are many other partners that would merit being a priority for Team EU clean transition partnerships. The case studies below can be understood as blueprints from which to draw inspiration for other cases.[4]

[3] E3G, 2023, **A European Green Deal Diplomacy toolbox**.

[4] This briefing proposes sketches for tailored clean transition partnerships with developing countries. The case studies selected do not exhaustively represent the needs or interests of developing countries, but such an in-depth discussion is beyond the scope of this paper. We invite readers to contact us to further discuss our approach to selecting the three case studies.

Table 1: Critical information for Brazil, Indonesia, and Egypt.

Indicator	Brazil	Indonesia	Egypt
Region	Latin America	Southeast Asia	Middle East & North Africa
GDP (% of global) 2022[5]	$1.92 trillion (1.9%)	$1.32 trillion (1.3%)	$0.47 trillion (0.48%)
% of regional GDP 2022[6]	32.8%[7]	36,4%	10,9%
CO_2eq emissions 2022 (% of global)[8]	1.31 GT (2.44%)	1.24 GT (2.31%)	0.38 GT (0.70%)
% of fossil fuel in domestic CO_2eq emissions 2022[9]	35.62%	55.79%	70.4%
Priority sectors for clean economy cooperation	Heavy industry (iron, steel, aluminium); green hydrogen	Critical minerals; cleantech manufacturing	Fossil fuel production; renewable energy

Brazil: Seizing opportunities for green industrialisation

Industrial decarbonisation: the silent opportunity in Brazil

Cooperation on industrial decarbonisation with Brazil has received little political attention in the EU but it offers a great opportunity. Brazil has great potential to produce green hydrogen and with that green iron, steel, and aluminium, three growth markets in the EU. Meanwhile, EU investors can provide much-needed transition finance and infrastructure investments in Brazil, while EU companies could provide expertise on hydrogen-based direct reduced iron (DRI) and green steelmaking, as well as smart grid design. A partnership can also contribute to

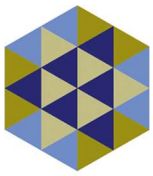
[5] World Bank, 2024, **World Development Indicators**.

[6] Ibid.

[7] Excluding Venezuela and Cuba.

[8] EDGAR Community GHG Database, 2023, **EDGAR v8.0**. **EDGAR Total GHG in CO2eq**

[9] Ibid.



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better coordinating public support schemes, while facilitating private investments and spurring technology transfers.

Such a partnership would build on a very deep trade relationship. Brazil is the EU's most important trading partner in Latin America, accounting for almost a third of its trade with the region in 2022.[10] Meanwhile, the EU is Brazil's second largest partner, accounting for 15.2% of its total exports in 2022[11], and the main source of foreign investments.[12] The EU and Brazil have been exploring how to deepen their relationship via an EU–Mercosur trade agreement but differences over agriculture and deforestation remain.[13] Their divergent positions on Ukraine and the Middle East, as well as the impact of the EU's CBAM and Deforestation Regulations on Brazilian exports, have recently strained their relationship.

Brazil can be the pacesetter for the Global South's transition

President Lula's Ecological Transformation Plan[14], based on a combination of financial, regulatory and tax policies, aims to leverage an additional €120 billion to €150 billion in yearly green investments.[15] Its goals are to increase the productivity of Brazil's clean economy and create high-quality jobs by incorporating technological innovations into the country's industries and into its natural resources management, reducing the environmental footprint of economic development, and promoting a just and equitable transition with better income distribution and widespread benefits. It could showcase a successful just transition, which coupled with Brazil's upcoming G20, COP30 and BRICS Presidencies builds the country's strong candidacy to lead the Global South's clean economy transition, solidifying its geopolitical clout.

Brazil's potential to leverage green hydrogen and high-quality iron and bauxite ores to become a green industrial giant grows by the year. Its electricity is highly decarbonised already, aided by large hydro power plants, but also skyrocketing wind and solar additions that almost double the growth rate of power demand.[16] Brazil is also the ninth largest producer of steel worldwide, with a yearly capacity

[10] Eurostat, 2024, **Extra-EU trade by partner**; European Parliamentary Research Services, 2023, **EU trade with Latin America and the Caribbean**

[11] Ministério do Desenvolvimento, Indústria, Comércio e Serviços, Secretaria de Comércio Exterior, 2024, **Resultados do Comércio Exterior Brasileiro – Dados Consolidados**.

[12] U.S. Department of State, 2023, **2023 Investment Climate Statements: Brazil**.

[13] E3G, 2023, **The EU-Mercosur joint instrument fails to pass the EU's own sustainability tests**

[14] Federal Government of Brazil, 2023, **Ecological Transformation Plan**.

[15] Máximo, Agência Brasil, 2023, **Entenda o Plano de Transformação Ecológica lançado na COP28**

[16] EMBER, 2023, **Brazil passes 25% wind and solar for the first time**.

of 51 million tonnes[17], while iron ore made up almost 9% of its total exports in 2023From such solid foundations Brazil can develop as a relevant player in the green steel and aluminium markets, while opening opportunities in other sectors like critical minerals and the wider bioeconomy.

A partnership with the EU can support Brazil's clean economy ambitions. It can contribute to the goals of President Lula's Ecological Transformation Plan, opening opportunities to move downstream in global value chains, spur domestic innovation through technology transfers, and attract foreign investments. The foreign currency obtained from exporting sponge iron, green hydrogen and even green steel can also provide an alternative to that from current fossil fuel exports. Moreover, Brazil can leverage its transformation to build South–South green industrial partnerships with countries with great potential for green iron production such as Gambia, Guinea, and Namibia.[18]

There is much to gain for the EU as well

Building an industrial decarbonisation partnership with Brazil can enhance the EU's economic resilience by diversifying its supplies of critical green steel components such as DRI sponge iron and green hydrogen. It also creates export and investment opportunities for EU cleantech sectors like electrolysers, DRI technology, smart grids, and energy storage, helping to spur innovation domestically.

On the production side, importing cheap sponge iron from Brazil can in fact help enhance the competitiveness of European steel manufacturing and downstream sectors in the EU compared to a scenario which prioritises primary iron production in Europe.[19] The latter option would be more expensive due to the continent's comparatively lower potential for renewable hydrogen production. Helping Brazil expand its production of sponge iron and green hydrogen may increase competition for EU green iron projects in the short term. However, the opportunities for competitive green imports to support a growing EU demand for green steel in the automotive and construction industries outweigh these risks.

Supporting Brazil's local added-value and new value chains will also help showcase how the EU can offer a high-quality alternative to cooperation with China. This will increase the EU's credibility as a partner among Global South

[17] Instituto Aco Brasil, 2022**, Consolidated industry data for 2022**, accessed November 2023

[18] E3G, 2024, **Raising Ambition on Steel Decarbonisation. 2023 Steel Policy Scorecard**

[19] Verpoort et al., 2023, **Estimating the renewables pull in future global green value chains**

countries, growing its geopolitical clout and creating opportunities for coalition-building in climate negotiations.

Additionally, a successful EU–Brazil green steel partnership could turn the perception within Brazil of the EU's CBAM as a trade barrier into an opportunity, as Brazilian producers of steel components could displace more carbon-intensive foreign producers in key EU value chains like car manufacturing and construction.

Roadblocks remain for deeper EU–Brazil clean cooperation

Brazil's domestic political economy and geopolitical ambitions might pose political hurdles to a closer clean partnership with the EU.

Conservative parties currently have a majority in Brazil's National Congress[20], and they are historically entangled with emissions-intensive industries, particularly large agribusiness.[21] The latter have a direct stake in Brazilian steel decarbonisation given biochar is currently used in 11% of Brazil's blast furnaces.[22] Their influence could work against an EU partnership given their opposition to EU environmental standards, which they perceive as protectionist.

The Brazilian oil and gas sector could also be a challenge to greater climate cooperation with Brazil. The sector has great political influence. For example, Repetro – a special tariff regime for goods intended for fossil fuel exploration and production – provides direct benefits to companies.[23] Additionally, the royalties from oil production represent a substantial source of subnational governments' revenues.[24] The 2021 and 2022 ten-year Energy Expansion Plans[25] of Brazil's previous government forecasted strong increases in oil production, supported by more than €400 billion in investments in the coming decade. Indeed, Brazil's recent plans to expand oil exploration in the Amazon basin has

[20] TSE, 2024, **Eleição Estadual Ordinária 2022 – Candidatos eleitos: Brasil – Deputado Federal**; TSE, 2024, **Eleição Estadual Ordinária 2022 – Candidatos eleitos: Brasil – Senador**.

[21] Oliveira, Jurema, RIFS, 2023, **Brazil: An Environmental Power**

[22] Fastmarkets, March 2022, **Brazil at steel decarbonization crossroads; charcoal, gas short-term options** (accessed March 2024)

[23] INESC, 2023, **Subsídios às fontes fósseis e renováveis (2018 – 2022): reformar para uma transição energética justa**.

[24] Hughes, Argus Media, 2023, **Brazil to reintroduce taxes on ethanol**.

[25] Empresa de Pesquisa Energética, Ministry of Mines and Energy Brazil, 2022, **Ten-Year Energy Expansion Plan (PDE) 2031**. **Chapter 5 - Oil and Natural Gas Production.**

caused significant national and international uproar.[26] There are also fears that the Growth Acceleration Program (PAC) could allocate €60.2 billion to upstream production and development of fossil fuel projects.[27]

Designing an EU–Brazil industrial decarbonisation partnership

The architecture of EU–Brazil dialogues, particularly the Bilateral Joint Committee, provides a solid basis for cooperation. The EU–Brazil Strategic Partnership, concluded in 2007[28], covers more than 30 sectoral dialogues, including high-level ones on climate, energy, and the environment.[29] Both partners are also negotiating a Critical Raw Materials Partnership, which could establish a basis for green iron cooperation.[30] Additionally, an initiative by Team Europe in Brazil, with a strong focus on the Green Deal, can lay the basis for increased coherence between the EU and its Member States.[31] It is critical to ensure the partnership reflects the priorities of Brazil's Ecological Transformation Plan and its new €55 billion Nova Industria strategy.[32]

The EU can support Brazil's transition by channelling much-needed public and private transition finance. President Von der Leyen already pledged €2 billion in Global Gateway investments for green hydrogen production.[33] Member States and their development banks could expand this commitment with investments in hydrogen infrastructure, linking its production to Brazilian iron and steel hubs.

Team EU can also incentivise EU firms with relevant knowhow to support much-needed technology transfers. Such private partnerships have already begun in the steel sector: the Swedish startup H2 Green Steel recently agreed to study the feasibility of low-carbon steel production with the Brazilian mining giant Vale.[34] Similarly, EU-based ArcelorMittal is considering importing green iron from countries with lower production costs for hydrogen-based DRI.

[26] Schröder, Mongabay, 2024, **Lula's ambitious green agenda runs up against Congress's agribusiness might**.

[27] Rodrigues, 2023, **Politics and the environment collide in Brazil: Lula's first year back in office**; Casa Civil, **Novo PAC - Transição e Segurança Energética - Petróleo e Gás** (webpage, accessed March 2024).

[28] European Commission, 2007, **Communication from the Commission to the European Parliament and the Council - Towards an EU-Brazil Strategic Partnership**.

[29] Delegation of the European Union to Brazil, 2021, **The European Union and Brazil**.

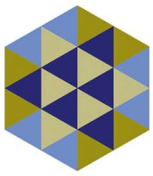
[30] European Commission, Directorate-General for Communication, 2023, **Statement by President von der Leyen at the joint press conference with Brazilian President Lula da Silva**.

[31] European Commission, Directorate-General for International Partnerships, 2024, **Brazil - Green Deal**

[32] Federal Government of Brazil, 2024, **Nova Industria Brasil: Action Plan for a New Industrialisation**.

[33] E3G, 2023, **EU warms up relations with Latin America ahead of Leaders' Summit**.

[34] Vale, 2023, **Vale and H2 Green Steel sign agreement to study the development of green industrial hubs in Brazil and North America**.



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European car manufacturers are also showing a great appetite for green steel to clean up their supply chains. Mercedes-Benz Group, Volkswagen and BMW have started to make deals with EU steelmakers like Thyssenkrupp and Salzgitter AG for non-carbon-intensive steel. The main roadblock they are facing to progress in Europe is a lack of green hydrogen. EU-based car manufacturers are already increasing their green investments in Brazil, in the context of Nova Industria's focus on the sector.[35] Involving such large downstream players in an EU–Brazil clean industrial partnership can provide an additional demand pull to establish green steel value chains in Brazil.

Finally, the EU can be a privileged partner for Brazil's ambition to navigate a multipolar world. Both actors share the core goal of ensuring the US–China geopolitical rivalry does not derail multilateral cooperation nor impose stark choices on them, defending their strategic autonomy. Team EU can solidify the partnership by supporting Brazil's aspirations to constructively shape the international regime, particularly via its G20 Presidency. The existing High-Level Dialogues and the EU–Brazil Bilateral Joint Committee provide good grounds for coordination, but more frequent leaders' summits are needed.

Indonesia: leveraging minerals to become a cleantech powerhouse

ASEAN's leader is an outlier on trade openness – and EU policy must reflect it

Indonesia is an ascending powerhouse in the Indo-Pacific region and among the ASEAN countries. It is the world's third largest democracy and largest Muslim country. It is a key G20 member, and has the biggest population in Southeast Asia at almost 275 million, and over 36% of the region's GDP at €1.22 trillion.[36] It is however an outlier in Southeast Asia: unlike the other Tiger Cub economies, Indonesia's growth is not clearly tied to globalisation. In fact, its trade openness is one of the lowest in the region, plummeting since the 1990s financial crisis.[37] This decline was mirrored by a fall in manufacturing, which successive governments have tried to reverse via industrial policies.

The EU's policy towards Indonesia has so far been focused on ensuring access to its growing market and rich natural resources. In 2014 Indonesia became the first

[35] Romani, Boas et al., Reuters, 2024, **Volkswagen to invest a further $1.8 billion in Brazil in next five years.**

[36] World Bank, 2024, **World Development Indicators**.

[37] Lakatos et al., World Bank Blogs, 2023, **The fast track to high-income status: how trade can help Indonesia reach its development goal**.

ASEAN country to have a Partnership and Cooperation Agreement (PCA) in force with the EU.[38] The Agreement has enabled regular policy dialogues focused on trade, connectivity, security, and sustainable development.[39] The success of the PCA led to opening negotiations for a trade agreement in 2016, thinking it would be a stepping stone to an EU agreement with ASEAN.[40] Instead, the negotiations met strong roadblocks on several fronts, and have stalled ever since.

The frictions stemmed from differences regarding Indonesia's openness to international trade and the EU's access to its market. After the 1997 Asian financial crisis, Indonesia has focused on leveraging its abundant natural resources to improve its position in global value chains. The strategy has achieved notable results, particularly in critical minerals such as nickel ore, of which Indonesia produced 40% of the global supply in 2023.[41]

Indonesia's ban on the export of unprocessed nickel ore in 2020[42] led to considerable inflows of investments into domestic nickel smelting, particularly from Chinese investors, and contributed almost €28 billion in government revenues in 2022.[43] The Indonesian government aims to expand such investments into downstream cleantech manufacturing.[44] It also replicated the ban for bauxite, copper, iron, lead, zinc, and anode slime in June 2023.[45] The last five are expected to take full effect in May 2024.[46]

Bolstering Indonesian cleantech production is good for climate

The considerable success of Indonesia's critical mineral strategy in attracting foreign investments into higher value-add sectors, and its continuous opposition to increasing its trade openness[47], should prompt the EU to consider a different approach. Team Europe can instead focus on building a partnership supportive of

[38] European External Action Service, 2014, Press Release: **The EU – Indonesia Partnership and Cooperation Agreement enters into force**.

[39] European Commission, Directorate-General for International Partnerships, 2022, **Multi-annual Indicative Programme for the period 2021-2027 – Indonesia, Annex**.

[40] European Commission, Directorate-General for Trade, 2024, EU – Indonesia Free Trade Agreement.

[41] Silva, S&P Global Market Intelligence, 2024**, Indonesian nickel production dominates commodity market**.

[42] IEA, 2023, **Prohibition of the export of nickel ore**.

[43] Mendina, ASEAN Briefing, 2023, **Indonesia Economy Recap for 2023**.

[44] Asamarini, CNBC Indonesia, 2023, **PLN Gaet Perusahaan China Garap Proyek Energi Bersih Rp 848 T**.

[45] Government of Indonesia, 2023, **Gov't Reaffirms Commitment to Downstream Industry**

[46] European Commission, 2023, **Access2Markets - Trade barriers - Export restrictions**.; Economist Intelligence, 2023, **Indonesia introduces export restrictions**.

[47] Shofa, Jakarta Globe, 2024, **Prabowo Banks on Domestic Processing for Double-Digit Growth**; Widianto; Fenton, Reuters, 2023, **Indonesia presidential front-runner Prabowo criticises EU on deforestation**.

Indonesia's strategy of using its nickel and copper production to expand the manufacturing of cleantech such as EV batteries, PV cells and grid-scale storage.

Such an EU partnership can include Global Gateway investments in critical infrastructure, cooperation on research and development of clean technologies, lesson sharing on upskilling workers and ensuring a just transition for affected communities, and exchange of best practices on accelerating and managing the deployment of renewables. Team EU could also facilitate private investments and technology transfer schemes, while mainstreaming nature preservation and sustainability standards into emerging value chains, a distinctive EU priority and added value.

A cleantech partnership would furthermore increase the support in Indonesia for an accelerated deployment of renewables as domestic actors earn a stake in expanding the market for locally made hardware. Renewables can help meet Indonesia's growing energy demand and eventually bolster the phase-down of coal power, which currently represents a huge portion of Indonesia's emissions. The EU cleantech partnership could thus provide an impulse to Indonesia's Just Energy Transition Partnership (JETP), whose 2023 Comprehensive Investment and Policy Plan aims for a 34% share of renewables by 2030.[48]

Both partners' competitiveness and resilience stand to benefit

A cleantech partnership with Indonesia is good for the EU's economic resilience and competitiveness as it would increase and diversify the supply of cheap components for key EU green sectors, like electric vehicles or renewables deployment. Such a partnership would also rebuild the EU's credibility as a development-oriented actor, eroded by the WTO cases against Indonesia's nickel export controls, strengthening the EU's geopolitical standing among other ASEAN countries.

In turn, a partnership with the EU can support Indonesia's clean economy ambitions. It would open opportunities to move from resource extraction to more upstream activities in global value chains by providing a strong EU demand signal to developers and investors, spurring domestic innovation via research cooperation and technology transfers through business-to-business cooperation, and potentially attracting more sustainable investments. This would form a solid basis for an accelerated and just clean industrialisation that creates high-quality

[48] Government of Indonesia, 2023, **JETP Comprehensive Investment and Policy Plan**.

jobs and enhances Indonesia's transport and power infrastructure, while reducing emissions, air pollution, and environmental damage.

The partnership would also be aligned with Indonesia's careful geopolitical balancing. While EU investments probably cannot displace China as Indonesia's main cleantech investor, they can help balance its dominant position by providing a valuable alternative. EU partnerships have been touted by European leaders as a high-quality alternative to China's offer given the former's stringent environmental and social standards. However, Indonesian stakeholders often perceive such standards as green protectionism – particularly in the context of deforestation.[49] An EU cleantech partnership that is conducive to enhancing Indonesia's position in global value chains could counter some of these concerns.[50]

A cleantech partnership cannot shy away from Indonesia's energy politics

The prospect of an EU–Indonesia cleantech partnership is not free of challenges. Indonesia's mineral and cleantech strategy is closely intertwined with its coal economy. Coal is one of the country's main export commodities.[51] The sector employs millions in Indonesia, provides huge revenues to national and local budgets, and has close links with high-ranking decision makers.[52]

Given the diminishing global market for coal, there have been substantial pressures during Widodo's presidency to expand Indonesia's fleet of coal-fired power plants. One fifth of these (8.2 GW) are operated off-the-grid by the metal processing industry; an additional 9.7 GW of such "captive power plants" are planned by nickel smelters alone.[53] Given their strategic value to Indonesia's industrial policy, captive plants have been left out of the JETP.[54] An EU partnership would have to address the task of decarbonising manufacturing.

The challenge of decarbonising cleantech manufacturing is not limited to Indonesia, but its nature as the world's largest archipelago complicates the issue.

[49] Indonesian Ministry of Foreign Affairs, 2023, **Diplomacy Efforts on EU Deforestation Regulation**

[50] ARISE+, **Contributing to Indonesia's Medium-term National Development Plan** (webpage, accessed March 2024).

[51] Observatory of Economic Complexity, 2021, **Indonesia country profile**.

[52] Ordonez et al., 2022, **Coal, power and coal-powered politics in Indonesia** in *The Political Economy of Coal*.

[53] Centre for Research on Energy and Clean Air & Global Energy Monitor, 2023, **Emerging captive coal power: dark clouds on Indonesia's clean energy horizon**.

[54] Suroyo, Nangoy Reuters, 2023, **Exclusive: Indonesia to omit private coal power plants from its JETP investment plan**. Indonesia currently has a total of 40.6 GW of coal-fired power stations.

Indonesia cannot rely on a large national grid to compensate for renewables' intermittency. Moreover, many islands lack an adequate grid, an additional barrier to utility-scale renewables that can support manufacturing. This is particularly true of regions rich in critical minerals, such as Sulawesi, Maluku, and Kalimantan. On the other hand, the potential of renewables to decentralise energy production makes them suitable for meeting the growing energy demand of remote regions. Indeed, there is an increasing number of local renewables initiatives in Indonesia.[55]

Building a cleantech partnerships with Indonesia also has wider geopolitical implications to consider. China is the major foreign supporter of Indonesia's cleantech manufacturing strategy,[56] and the main investor behind captive power plants.[57] The EU's diplomatic offer risks a Chinese backlash if it is perceived to challenge its economic interests in Indonesia. In a similar vein, an EU partnership could be seen to interfere with Indonesia's efforts to negotiate an exception for its minerals and cleantech under the US Inflation Reduction Act.[58]

EU has the right tools to start building the partnership

The EU–Indonesia 2014 Partnership and Cooperation Agreement (PCA)[59] and the 2022 bilateral Cooperation Facility (EUICF)[60], which was launched during Indonesia's G20 Presidency, provide a solid foundation for co-designing a cleantech partnership. The EUICF already supports a policy dialogue on climate and energy while providing technical assistance to the Team Europe Initiative (TEI) Green Agenda.[61] The latter includes Team EU's contribution to the Indonesian JETP.[62] There are also ongoing plans to establish a Critical Minerals Partnership with Indonesia to support strategic mining and smelting projects.

[55] Setyowati, Quist, 2022, **Contested transition? Exploring the politics and process of regional energy planning in Indonesia**.

[56] Government of Indonesia, 2023, **Joint Statement on Deepening Comprehensive Strategic Cooperation between the People's Republic of China and the Republic of Indonesia**.

[57] Centre for Research on Energy and Clean Air, 2022, **12.8 GW of Chinese overseas coal projects cancelled, but 19 GW could still go ahead**.

[58] Nikkei Asia, 2023, **U.S. and Indonesia upgrade ties with eye on critical minerals pact**.

[59] European Community and its Member States, Republic of Indonesia, 2014, **Framework Agreement on comprehensive partnership and cooperation between the European Community and its Member States, of the one part, and the Republic of Indonesia, of the other part**.

[60] European Commission, Directorate-General for International Partnerships, 2022, **Multi-annual Indicative Programme for the period 2021-2027 – Indonesia, Annex**.

[61] Ibid.

[62] European Union, Directorate-General for International Partnerships, **Indonesia – Green Agenda** (webpage, accessed March 2024).

The Cleantech Partnership could include a matchmaking mechanism to connect EU investors with cleantech projects in Indonesia. EU cleantech firms have valuable knowhow but often lack the opportunities to scale up in Europe. This creates opportunities for R&D cooperation and technology transfers for Indonesian manufacturers. The Partnership could also facilitate the negotiation of offtake agreements for cleantech components between EU and Indonesian firms.

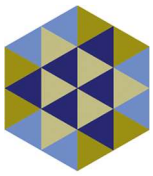
Another area the partnership could include is just transitions for workers. Upskilling programs within the TEI are currently mainly funded by Germany.[63] Team Europe can expand its financial and technical support to ensure a just transition for Indonesia's large coal workforce so they can benefit from the cleantech expansion.[64] This pillar of the Cleantech Partnership can only succeed if local civil society actors and trade unions are involved in its design from the start.

It is crucial that the manufacturing projects have positive spillovers for the affected communities beyond good-quality jobs. The partnership can include regulatory dialogues and capacity building on managing and financing a large-scale and quick transition to renewables, including addressing energy poverty. The EU's experience expanding power grids can also be valuable to decarbonising Indonesian cleantech factories. Such efforts can be supported via a larger Global Gateway package in support of clean infrastructure such as grids supporting manufacturing hubs.

The EU–Indonesia Cleantech Partnership could be co-designed and negotiated within the EUICF, in consultation with all relevant stakeholders, while seeking synergies with the strategic CRM projects identified. It can also be integrated within the TEI Green Agenda. A co-designed roadmap with specific actions and projects could then be regularly reviewed by the EUICF, who would also be charged with tracking the resilience of new value chains.

[63] European Commission, Directorate-General for International Partnerships, 2022, **Multiannual Indicative Programme 2021-2027 for Indonesia – annex**.

[64] New Climate Institute, 2023, **Walking the tightrope of Indonesia's energy transition: Boosting jobs or leaving coal communities behind?**



E3G

Building the Mediterranean's future energy system with Egypt

The EU–Egypt relationship is already about energy

As the most populous country in the MENA region, Egypt is a big player in the EU's engagement with its Southern Neighbourhood. Supporting Egypt's transition to clean energy can help it manage its growing population and energy needs. There are also economic and geopolitical benefits of joining new EU supply chains. EU–Egypt relations already have a strong focus on energy, particularly since 2022 when three different deals were signed, to:

> increase Egyptian (and Israeli via Egypt) gas exports to Europe[65]

> promote the green hydrogen economy in Egypt, particularly for export[66]

> replace inefficient fossil fuel power plants with clean energy sources[67].

The main Egyptian export to the EU is fossil gas, followed by fossil-based fertilisers.[68] Since the Russian invasion of Ukraine, Egypt has emerged as a marginal alternative gas supplier for the EU. It has attempted to solidify this position via gas deals with EU Member States, especially gas-hungry Germany and Italy. At the same time, the EU has firmly set itself on a trajectory to reduce fossil gas demand, with the REPowerEU measures foreseeing a 30–50% reduction in gas demand by 2030.

Clean energy has therefore also emerged as an area with great potential for further cooperation. In 2023, the EU designated the GREGY power interconnector project (linking the Greek electricity grid to new renewable production in the Egyptian grid) as a Project of Mutual Interest. Egypt has also signed a flurry of other MoUs with European actors over the last two years on green hydrogen and renewable electricity.[69]

[65] European Commission, Directorate-General for Energy, 2022, **EU Egypt Israel Memorandum of Understanding**.

[66] European Commission, Directorate-General for Energy, 2022, **Memorandum of understanding on a strategic partnership on renewable hydrogen between the European union and the Arab republic of Egypt**

[67] Via a €35 million grant to EBRD to support Egypt's Energy Wealth Initiative (EWI), Egypt's country platform to deliver its NDC.

[68] Friedrich Ebert Stiftung – Egypt Office, 2018, **The Impact of Egypt-EU Free Trade Agreement on Egypt's Manufacturing Exports and Employment**.

[69] ECFR, 2022, **EU Energy Deals Tracker**.

The EU and Egypt coordinate regularly through the structures of their 2004 Association Agreement and meet at ministerial level at least every two years. They are also both key members of the Union for the Mediterranean. Although negotiations for a Deep and Comprehensive Free Trade Area (DCFTA) have stalled, trade between both partners is mostly tariff-free – making the EU Egypt's top economic partner, representing 24.5% of its trade.[70]

Untapped opportunities for deeper clean energy cooperation

Egypt has immense renewables potential

Egypt's revised NDC aims for 42% renewables share by 2030, drawing on its immense potential for both wind and solar, which have already started to experience a boom. Wind capacity has more than doubled since 2015; it is now roughly 1.7 GW, and is poised to grow to 4.3 GW by 2026 and 8 GW by 2030.[71] However, it is solar energy that holds the most promise: Egypt has one of the greatest solar potentials in the world[72], leading the government to plan for a 25% solar power share by 2035 (a number that will almost certainly increase once the ongoing Egyptian energy strategy review is complete).[73,74] There is currently a project pipeline of 13 GW of solar capacity.[75]

Egypt's government recognises the transition as a high priority. It is seen as a competitive way to meet its growing energy demand, which has recently led to planned blackouts due to gas production issues and an extreme heatwave.[76] The transition is also seen as an avenue to attract foreign investments and much-needed foreign currency, partially by reserving domestic gas supplies for export.

The Egyptian government is advancing a series of reforms to encourage foreign investments in renewables, including launching its Nexus of Water, Food and Energy country platform in 2022. This initiative aims to drive Egypt's green transition through mobilising climate finance and private investments. Egypt has so far attracted large Saudi, Emirati, and Chinese investments, as well as some

[70] European Commission, Directorate-General for Trade, **Egypt. EU trade relations with Egypt. Facts, figures and latest developments** (webpage, accessed March 2024)

[71] Global Wind Energy Council, 2023, **Global Wind Energy Outlook 2023**.

[72] Solargis s.r.o., World Bank Group, 2024, **Global Solar Atlas 2.0, a free, web-based application is developed and operated by the company Solargis s.r.o. on behalf of the World Bank Group, utilizing Solargis data, with funding provided by the Energy Sector Management Assistance Program (ESMAP)**

[73] Moharram et al., 2022, **Brief review on Egypt's renewable energy current status and future vision.**

[74] Ivanova, Renewables Now, 2024, **Egypt plans to boost 2030 renewable energy target to 60%**

[75] Enerdata, 2024, **Chinese and Egyptian companies sign deal to develop a 10 GW solar project in Egypt**.

[76] Kandil, Ahram Online, 2023, **Power cuts continue across Egypt: What really causes the problem?**

European companies, alongside climate financing from MDBs and Western governments.[77]

A deepened EU–Egypt partnership on clean energy can bring further strategic benefits to both actors

For Egypt, it can bring enhanced energy security and flexibility – critical for domestic stability given Egypt's rapidly growing population and increased cooling needs. It can also bring economic benefits, notably a reliable European market for Egyptian clean energy via the GREGY interconnector, and for green hydrogen exports, helping compensate for the medium- to long-term diminishing demand for Egyptian LNG in Europe.

For the EU, it can provide a reliable long-term footing to solidify its geopolitical standing in North Africa, deepening its cooperation with one of the top global "swing states" that does not automatically align with the US or China.[78] Such enhanced cooperation with the Egyptian government will be crucial to stabilising the broader region. This is essential to deliver on the goals of the EU's Southern Neighbourhood policy, including on security and migration. The increased EU support for clean energy development can also empower Egypt to raise the ambition of its upcoming NDC revision and become a regional clean economy champion.

There are challenges ahead for deeper cooperation

Alongside the tailwinds of Egyptian renewable potential and government interest, and the benefits of a stronger EU–Egypt partnership, there are also headwinds that both sides need to navigate. The EU and Egypt must avoid raising unrealistic expectations of their potential for cooperation. The EU risks overrepresenting its need for fossil gas imports to Egypt, which given its accelerating downward gas demand trajectory could cause a financial blow to Egypt in terms of stranded assets. On the flip side, the reliability of such exports has taken a hit recently because of unstable gas production in Egypt, rising domestic demand, and conflict in the wider region.

Similarly, the future scale of hydrogen exports is also uncertain. Hydrogen infrastructure is still taking off in Egypt, and the EU's future demand is at best uncertain. The recent 2040 target communication by the European Commission

[77] Ministry of International Cooperation Egypt, **Egypt's Country Platform for NWFE نُوَفِّي Program** (webpage, accessed March 2024); Enterprise, 2022, **Egypt has just lined up as much as 25 GW worth of wind projects**; Enerdata, 2024, **Chinese and Egyptian companies sign deal to develop a 10 GW solar project in Egypt**.

[78] The Economist, 2023, **How to survive a superpower split**.

reduced the expectations for EU hydrogen imports by 90% compared to RePowerEU. And in any case, Egypt has its own domestic needs for green hydrogen to decarbonise its domestic industry, in particular fertilisers.

Moreover, the cost of capital for both solar and onshore wind projects in Egypt is high, currently 8.8% – well above Germany's 1.3% or the UAE's 5.6%.[79] This cost is likely to remain high due to Egypt's poor credit rating, high exposure to global inflation, high debt burden, and the aforementioned shortage of foreign currency. It is thus very probable that green hydrogen and electricity exports to the EU will not fully replace Egypt's current fossil gas revenues due to their smaller margins and uncertain volumes.

EU tools to unlock a clean energy partnership with Egypt

1. Investment, both directly and through mobilising private sector capital

The clean energy transition is already a core objective of EU development assistance to Egypt, which amounted to over €240 million in NDICI funds in 2021–2024.[80] This included a Team Europe initiative to upgrade Egypt's electricity grid, and a €35 million EBRD grant to support Egypt's Energy Wealth Initiative.[81] The EU should continue to prioritise Egyptian clean energy projects as it finalises its NDICI priorities and allocations for 2025–27.

But North Africa features only lightly in the Global Gateway's €150 billion Investment Package for Africa.[82] Global Gateway projects could help lift infrastructure roadblocks, for example by building on existing EU funding to upgrade the power grid, or address other barriers like the lack of sufficient technical experts. The EU must ensure Egyptian authorities co-design such projects based on Egypt's own energy transition goals, building on the 2022 grant to the Energy Wealth Initiative, and enable synergies with other components of its Egypt programme, such as water shortages or addressing energy poverty.

EU support to mitigate the high cost of capital of renewables projects in Egypt would be helpful. The EU could take some inspiration from its measures to help

[79] IRENA, 2023, **The cost of financing for renewable power – Appendix**.

[80] European Commission, Directorate-General for Neighbourhood and Enlargement Negotiations, 2023, **Egypt**.

[81] European Commission, Directorate-General for International Partnerships, n.a., **Egypt - Digital, Energy and Transport**.

[82] ECRF, 2023, **Opening the Global Gateway: Why the EU should invest more in the southern neighbourhood**.

drive private investments in Egypt's fossil gas and hydrogen sectors (as set out in the 2022 gas and hydrogen deals with Egypt) to support its clean energy transition. This could include: mapping public and private financing instruments to link European investors with Egyptian stakeholders; establishing a business forum on renewable energies; and facilitating business-to-business contacts between EU developers and financiers with Egypt's renewable energy sector. De-risking private sector loans would further stimulate investment in Egypt's clean energy sector, helping to mitigate Egypt's high cost of capital for solar and wind projects.

2. Scientific and technical cooperation on clean energy

Commissioner Varhelyi already announced at the EU–Egypt Association Council in January 2024 the launch of a Framework Agreement to enable Egyptian participation in EU programmes, notably including the Horizon programme for research and innovation. Both sides should maximise the potential benefits of this partnership. Such cooperation could foster greater scientific and technical engagement between EU and Egyptian experts on renewable energy deployment, as well as formalise regular engagements on policy and technical cooperation. If aligned with progress made on broader economic cooperation, it could also encourage technology transfers to Egypt.

Enhanced engagement to drive a closer energy relationship

The EU's recent intensification of energy cooperation with Egypt has paved the way for a more open and honest partnership of equals. The EU can establish the ministerial meeting on strategic energy matters suggested under the LNG deal with Egypt to make it the flagship moment for taking stock of cooperation on renewable energy, with a focus on delivering on each other's updated NDCs.

Regardless of the format of any future engagement, the substance of a strengthened partnership must be the focus. Treating Egypt as an equal is key: this means fully recognising Egypt's energy context, particularly its rapidly growing demand and ambitions to be an energy hub, while being honest about shared challenges such as energy poverty or increasing local buy-in to rolling out renewables. The EU has many of its own experiences to share with Egypt, particularly on dealing with rapid expansion of renewables and the politics and economics of phasing down fossil gas demand.

A regional approach

Finally, it is important to bear in mind the broader geopolitical context in which an expanded EU–Egypt partnership would take place. Saudi Arabia, the UAE and

the USA are also important partners for Egypt, including in its clean energy transition. The EU and its Member States should cooperate with this wider group of partners, working to pool knowledge and the mapping of joint opportunities, and encouraging the exchange of best practices on renewables specific to the MENA region, while considering the potential for broader regional clean energy cooperation through an equivalent to the East Mediterranean Gas Forum.

About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics, and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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