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G20 FACTSHEET #7: GREEN INDUSTRIALISATION

Building a Fair and Sustainable Future

Introduction






Floods, droughts, wildfires, and rising temperatures are all urgent reminders that we need to act differently to protect our planet. As citizens, civil society, and social movements, we should all envision a world where workers thrive in decent working conditions, factories operate on clean, renewable energy, and governments and companies collaborate with each other to adjust their practices and mitigate the impact of climate change. This is the promise of green industrial policy (GIP), if implemented correctly. As G20 leaders discuss ways to adopt GIPs, we must ask ourselves: Will the adoption be fair for everyone?

For the G20 countries, this question requires special attention, and as activists, we must hold G20 leaders accountable. These countries have the power to shape global industrialisation, as many remain pioneers in many industries. As we strive to see positive shifts, we should ask ourselves whether global industrialisation efforts will impact people and the planet positively, and not leave vulnerable communities and countries behind.

What is green industrial policy?

GIP involves governments taking action by devising and implementing strategies that promote environmentally sustainable industries. Such policies seek to transform the global economy by investing in renewable energy, low-carbon technologies (for example solar or wind energy), and environmentally sustainable manufacturing processes (for example green steel and green fertiliser), while phasing out industries that emit greenhouse gases (GHGs) that are harmful to our planet.¹ Adopting GIPs would typically allow governments to take charge of the direction an economy is moving in, allowing countries to have a clear and courageous vision for the future success of its economic output.² Effective GIPs set the direction of research and development agendas of universities and firms and lending practices of financial institutions, to align the developmental objectives of a country with the growth of target industries. This alignment of objectives could also be achieved through structural transformation, where resources are redirected from low-productivity, labour-intensive activities to higher-productivity, skill-intensive ones.

GIP should be understood through the broader lens of industrial policy, which refers to strategic efforts that a country makes to encourage the structural transformation of an economy to improve productivity and competitiveness.³ Governments typically adopt industrial policy by prioritising specific industries through:

-  Targeted subsidies;
-  Making investments and offering low-cost development finance;
-  Protecting new domestic industries from global markets by imposing trade-related measures such as tariffs;
-  Cross-sectoral driven innovation through enhancing research and development; and
-  Using government buying power to support specific industries.

The battle between fossil fuels and renewable energy

Fossil fuel companies are often direct competitors to renewable energy sources. At times, the choice of using fossil fuels or clean energy is determined by the cost of these energy sources. Fossil fuels remain entrenched across the global economy.

THIS FACTSHEET IS PART OF OUR SERIES ON THE 2025 G20

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2. International taxation
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FACTSHEET #7



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FOSSIL FUEL SUBSIDIES are government handouts (including tax breaks) that make coal, oil, and gas artificially cheap for companies and end consumers.

Through lobbying, fossil fuel companies have benefited from tax cuts and little regulation, which continues to give them a competitive advantage over new, renewable sources of energy. The International Monetary Fund (IMF) has reported that fossil fuel subsidies amounted to \$7 trillion, or 7.1% of the world's GDP in 2022.⁴

This continued support for fossil companies ultimately reduces the return on investment in green technologies, making them less attractive to investors and consumers, thereby stagnating their market growth. Through the introduction of a well-structured GIP, governments can identify areas of renewable technology that require support, ensuring their output is affordable for consumers and companies, thereby facilitating their growth and development.

Green industrial policy is already taking place

With time, the world has become more accepting of energy shifts. Countries like the United States and China, as well as the European Union (EU), have started to embrace GIP through national and regional initiatives like the Inflation Reduction Act (IRA), the EU Green Deal Industrial Plan, and China's 14th Five-Year Plan.⁵ China and the EU are leading the charge through these initiatives and aim not only to reduce GHGs, modernise energy systems, and create jobs in green industries, but also to maintain their dominance in the global economy.⁶

These countries have recognised the importance of green industrial policies in maintaining their existing global economic influence. In this regard, China offers a good illustration of how a well-planned GIP can lead to economic growth. For years, the country has used government subsidies, tax breaks, and assistance in the development of technology and infrastructure to strengthen the growth of its electric vehicle (EV) industry.⁷ China has also streamlined the vehicle licence process of EVs compared to fossil fuel-powered vehicles, to boost domestic EV sales.⁸ The Chinese government's planning has also led to a strong EV export market. China currently produces the most advanced and cost-effective EVs in the world, presently leading the EV export market with its output accounting for 70% of global EV production.⁹

Challenges to green industrial policy

Although GIP could bring significant benefits, which may provide jobs while protecting our planet, its implementation faces considerable challenges.

THESE CHALLENGES INCLUDE

1. **RESISTANCE FROM VESTED INTERESTS** - People who have established businesses and

jobs that rely on fossil fuels, such as coal, oil, and gas, will instinctively oppose a shift to renewable energy sources that threaten their profits.

2. **FINANCING GAPS** - Developing countries, whose development was constrained by colonialism and neo-colonialism from the Global North, often lack sufficient financing to implement renewable energy solutions, such as solar or wind technology. This requires them to look towards debt financing options, which further exacerbates their debt dependency.
3. **SKILLS GAPS** - Due to limited resources dedicated to public services, developing countries lack the necessary skills to develop and implement certain green technologies.
4. **TECHNOLOGICAL BARRIERS** - Some clean energy solutions, such as hydrogen fuel cells, are still expensive or underdeveloped, and certain existing technologies are still protected by intellectual property, preventing developing countries from accessing them.
5. **WEAK STATE CAPACITY** - The government's ability to regulate, provide incentives and mobilise resources requires a capable, ethical, and dynamic state. This state capacity with adequate checks and balances is vital for effective and efficient industrial policy.

Beyond implementation challenges, global cooperation is necessary to ensure that developing countries are not left behind and to prevent the perpetuation of existing global power dynamics. Developing countries have been victims of an extractive relationship with developed countries, where they export raw material and import finished goods. As the world adopts green industrial policies, these colonial patterns must come to an end.

Moreover, developing countries have contributed the least to climate change, yet face the most significant challenges in adapting to the green industrialisation of the global North. For instance, the EU has introduced the Carbon Border Adjustment Mechanism (a tool which aims to set a price to pay for carbon emissions-intensive imports into the EU). The EU proposes that this adjustment is intended to accelerate the transition away from fossil fuels; however, it poses the risk of penalising developing countries for their emissions-intensive exports to the EU.¹⁰ Countries in the Global South, such as South Africa, rely on fossil fuel-intensive industries to drive their economic growth and create jobs. For South Africa to align with green industrialisation standards, it needs to phase out coal-generated energy and explore renewable energy sources such as solar and wind. However, this would be a difficult adjustment in the short and medium run since many people rely on coal-generated jobs to support their livelihoods.

For a just transition to renewable energy, the current multilateral system and the trade and investment regime should play a supportive role in the green industrial policy-making agendas of developing countries, so that GIP can lead to a convergence

between the Global South and the Global North, addressing the economic disparities between the two regions. Developing countries must have the space to transition in ways that do not unfairly constrain their growth.

Governments should also develop industrial policies that are transparent, accountable, and have clear objectives. The world needs to see a greater collaboration between governments and the private sector to identify constraints and opportunities of green technologies and industries.¹¹

Green industrial policy and the G20

The G20 is a crucial platform for discussing and shaping global GIP. The G20 comprises major emerging countries (some of which are part of the BRICS) and advanced economies (represented in the G7). The G20 also discusses climate financing, the shift to renewable energy, employment, and providing people with social protections to curb inequalities. Notably, in 2022, G20 leaders in Indonesia committed to a shift towards renewable, affordable energy and scaling up climate finance. Leaders recognised that this shift should still allow local communities to thrive while supporting developing countries.¹² G20 leaders affirmed this commitment in India in 2023 and supported the development of a sustainable hydrogen ecosystem as an alternative energy source through the 'G20 High-Level Voluntary

Principles on Hydrogen',¹³ In 2024, the Brazilian Presidency saw leaders commit to work towards green industrial planning and strategies to accelerate access to green technologies to help shape a path to energy that does not harm the environment.¹⁴

South Africa's G20 agenda, green industrialisation and critical minerals

CRITICAL MINERALS refer to raw mined materials like lithium, cobalt, platinum, and rare earth elements, which are essential for modern green technologies, such as batteries, solar panels, and wind turbines.¹⁵

Drawing on recent developments, GIP discussions feature as a priority for South Africa. The presidency has established a dedicated task force on Inclusive Economic Growth, Industrialisation, Employment, and Equality, which aims to develop G20 Principles on Green Industrial Policy. The same task force is also discussing a G20 Framework on Critical Minerals and G20 Principles for Inclusive Growth, Jobs and Inequality. It is the first time in the G20's history that green industrial policies are being negotiated explicitly, and it is a historic opportunity to develop common principles. As calls for a renewable energy future amplify,

2016 G20 Initiative on Supporting Industrialization in Africa and LDCs (Hangzhou Summit)

1. Promoting inclusive & sustainable structural transformation.
2. Supporting sustainable agriculture, agri-business, and agro-industry development.
3. Promoting investment in sustainable and secure energy infrastructure.
4. Supporting industrialization through trade and finance.
5. Promotion of science, technology, and innovation.

2020 September 2020 meeting on industrial policy for medical equipment procurement and vaccine development

1. Acknowledgement of the link between IP, trade and investment policies in the context of responding to the pandemic.
2. Commitment to sharing best practices on promoting targeted investments.
3. Discussed a Saudi-led Trade and Investment Working Group (TWIG) report on Special Economic Zones.

The G20 president (Indonesia) sought to institutionalize industrial policy as a permanent agenda item with the TWI

2024 Brazil convenes a G20 Independent Group of Experts to develop a report on the link between industrialization and decarbonization

Resulting report "A Green and Just Planet" advocates for green industrial strategies centered on bold, mission-oriented policies to achieve climate goals, highlighting:

1. State-driven, economy-wide transformation.
2. A whole-of-government approach.
3. Utilization of public procurement, subsidies, grants, loans, and state-owned enterprises.
4. Making financing conditional on achieving goals related to wages and labor rights.
5. Calls for WTO reform and the establishment of a global facility for industrial policy design and coordination.
6. A global financial architecture for accessing green finance, that protects national fiscal space.
7. Commitment to equitable green technology transfer.

Brazil launches "Nova Industria Brasil" during its presidency

2017 G20 Compact with Africa (CwA) (under the German Presidency co-chaired with South Africa)

Focuses on macroeconomic, business and financing frameworks to improve the investment environment in African countries. Guided by the core principles of:

1. Partnership and country ownership.
2. Reform orientation.
3. Private sector-led growth.
4. Transparency and accountability, i.e. tracking and monitoring.
5. Alignment with SDGs.
6. Inclusivity, i.e. generate decent jobs for youth and women.

2023 Voluntary High-Level Principles for Collaboration on Critical Minerals for the Energy Transition (New Delhi summit)

1. Human rights at the core of all mineral value chains.
2. Safeguarding the integrity of the planet, environment and biodiversity throughout mineral life cycle.
3. Justice and equity must underpin mineral value chains.
4. Development through benefit sharing, value addition, and economic diversification.
5. Fair and responsible investments, finance, and trade.
6. Ensure good governance through transparency, accountability, and anti-corruption measures.
7. Multilateral and international cooperation must underpin global action and promote peace and security..

Source: Sahay, Tim, Praveena Bandara, Jonas Nahm, Renato H. de Gaspi, Ishana Ratan, Bentley Allan, João Carlos Ferraz, Carlos Frederico Leão Rocha, Marta Castilho, Wilson Peres, Alvaro Ons, and Nimrod Zalk. 2025. *Principles for Cooperation and Competition in a World of Industrial Policy. Task Force 1 - Trade and Investment. T20 Policy Brief. South Africa.*

the demand for critical minerals used in renewable energy systems increases.¹⁶ African countries such as South Africa, the Democratic Republic of the Congo, Morocco, Guinea, Gabon, and Mozambique all possess sizable amounts of critical minerals. As industries shift to renewable energy, these countries should play a significant role in manufacturing. They should also leverage their minerals to drive an industrial project, which will create decent jobs for their people.

What would fair green industrialisation look like?

To achieve the true potential of green industrialisation, G20 governments should ensure their GIP principles are designed to tackle significant challenges like climate change, poverty, inequality, and economic underdevelopment while driving growth, creating jobs, and protecting the environment. For this to happen, G20 principles should prioritise the need to:

- Protect the environment and preserve it for future generations.
- Plan industrial projects across countries and communities (prioritising economically disadvantaged, especially women and children, as well as climate vulnerable regions) to ensure fair benefits for all.
- Focus on diversifying economies, particularly those dependent on natural resources, to foster economic transformation and address poverty.
- Support developing countries through technology transfer and capacity building, as well as fair trade agreements, to ensure everyone can participate in green growth.
- Create decent work opportunities with fair wages, strong workers' rights and skills development in renewable energy industries.
- Lower costs and risks encourage investments in renewable energy industries, especially in Africa and other developing regions.
- Develop a global value chain that enables developing countries to reduce their reliance on extractive industries, such as mining, effectively allowing them to build manufacturing capacity.
- Support surrounding communities to ensure that economic activities benefit local people.

Fighting for a fair green industrialisation in the G20 and beyond

The fight for a just and fair green industrialisation shouldn't just happen in government meetings; it should find resonance in communities, workplaces, and social movements around the world. As citizens, civil society, and social movements, we should:

- 1. Hold Leaders Accountable** - Demanding that our governments devise and implement national policies and international agreements that create an economy that provides jobs, protects the planet, and addresses national and local societal issues.

- 2. Advocate for the protection of your resources** - We should also utilise domestic platforms, such as parliament, to ensure that our leaders utilise our critical minerals to drive localisation, beneficiation, and the establishment of a sovereign wealth fund, thereby ensuring that the benefits from mineral resources are shared across the entire country over generations.
- 3. Discuss it at the local community level** - We should join grassroots campaigns that advocate for decent work, environmental protections, and monitor the ownership and development patterns of industries. We should develop these grassroots movements into global campaigns with similar movements across the globe.
- 4. Advocate for fair trade rules** - We should advocate for our countries to develop trade rules that do not perpetuate the growth and domination of a few countries.
- 5. Demand fair climate finance** - We must push our governments to advocate for increased funding for developing countries, which will enable them to invest in green technologies and energy transitions.

The debate does not end here

- **Is your job affected by shifts to clean energy, and how are your company and government planning to safeguard your livelihood?**
- **Are you currently involved in any grassroots movements monitoring your country's GIP?**
- **Is your government doing enough to secure a fair, renewable future?**

Endnotes

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