

7 REFLECTIONS ON GREEN INDUSTRIAL POLICY (AND ENSURING ITS SUCCESS)

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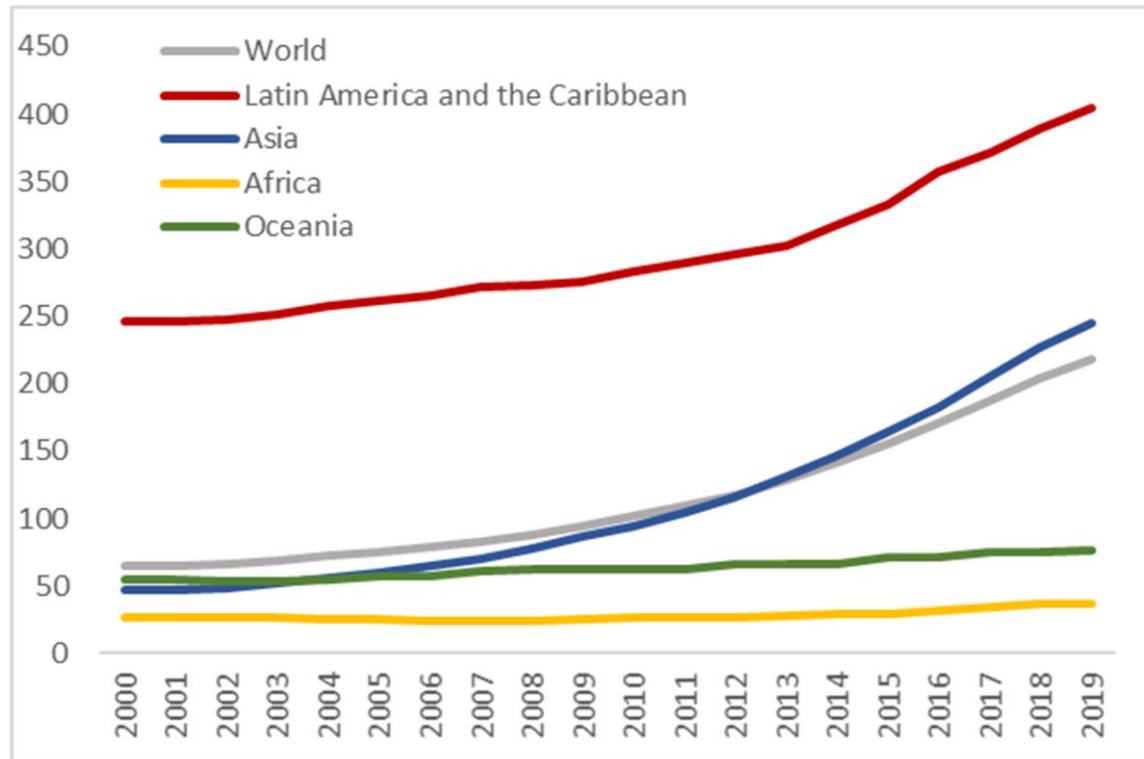
UNCTAD - Expert meeting

31 October 2023



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Renewable energy capacity by region, in kWh per capita

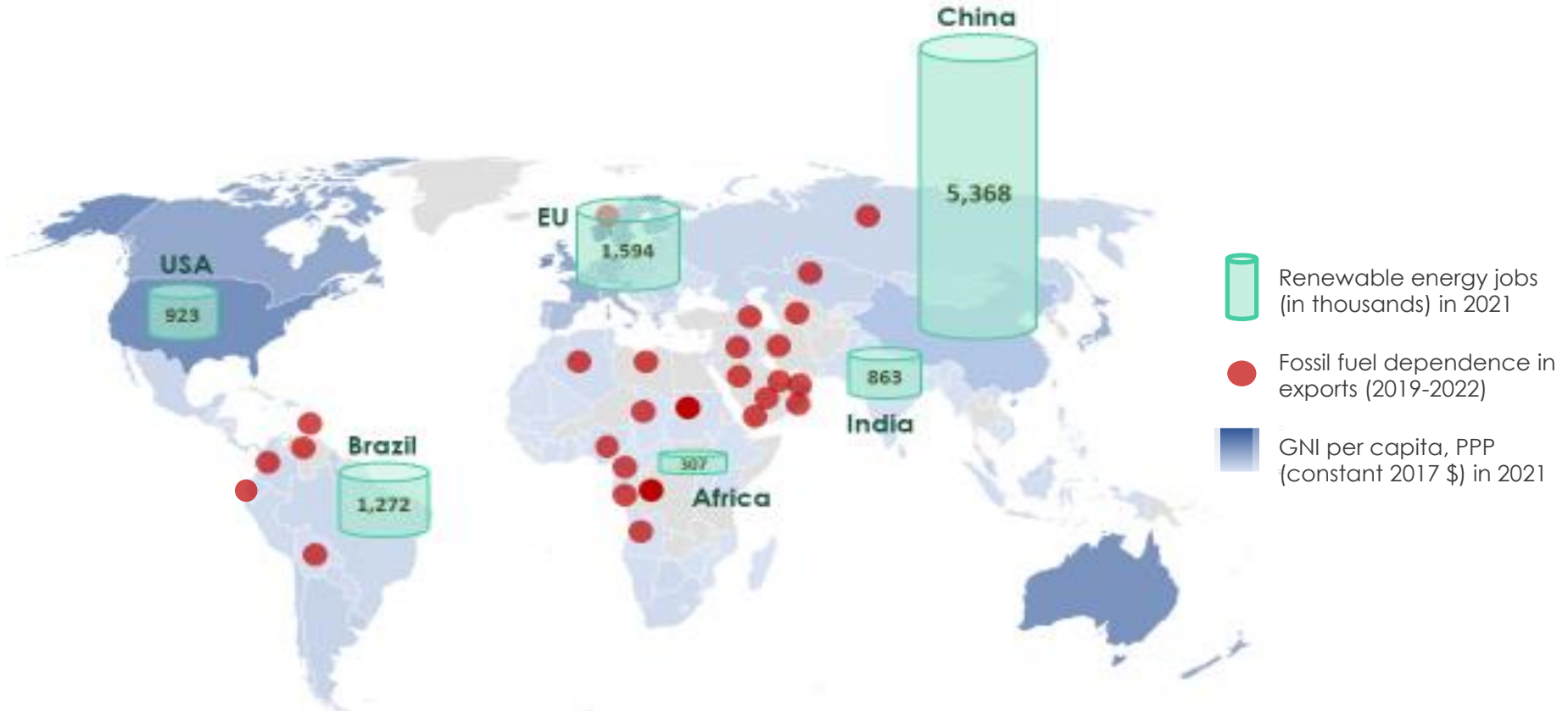


Source: Author's elaboration based on IRENA data

1. Green industrial policy are heavily promoted in already industrialised economies, and less where they are the most needed

Concentrated industrial benefits of low carbon transitions: jobs

- Concentration in the *quantity* of jobs, likely to increase over time under current conditions
- Differences in *quality* job gains (e.g. Brazil – Hoschtetler 2021)

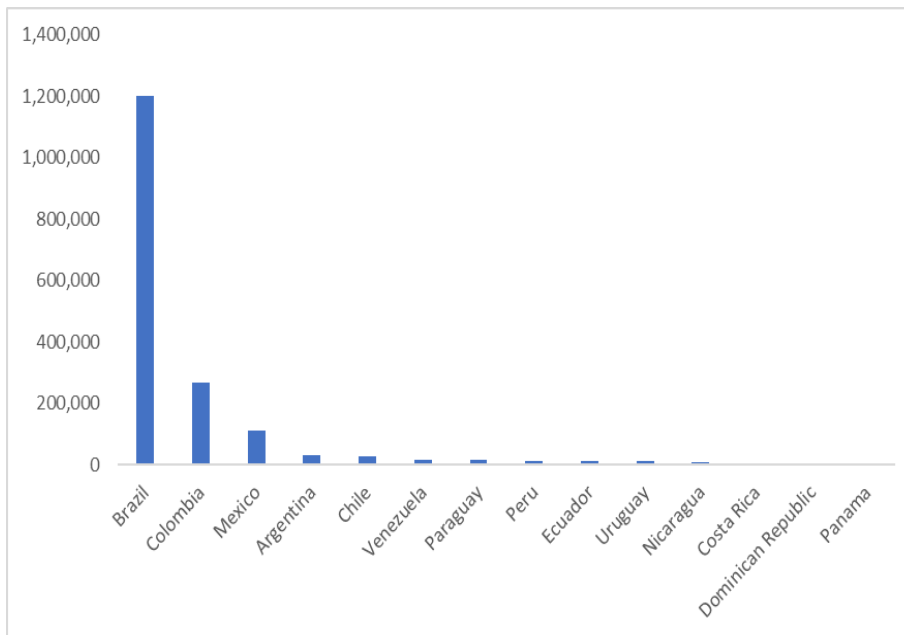


Source: compiled using data from World Bank, IRENA, and UN Comtrade

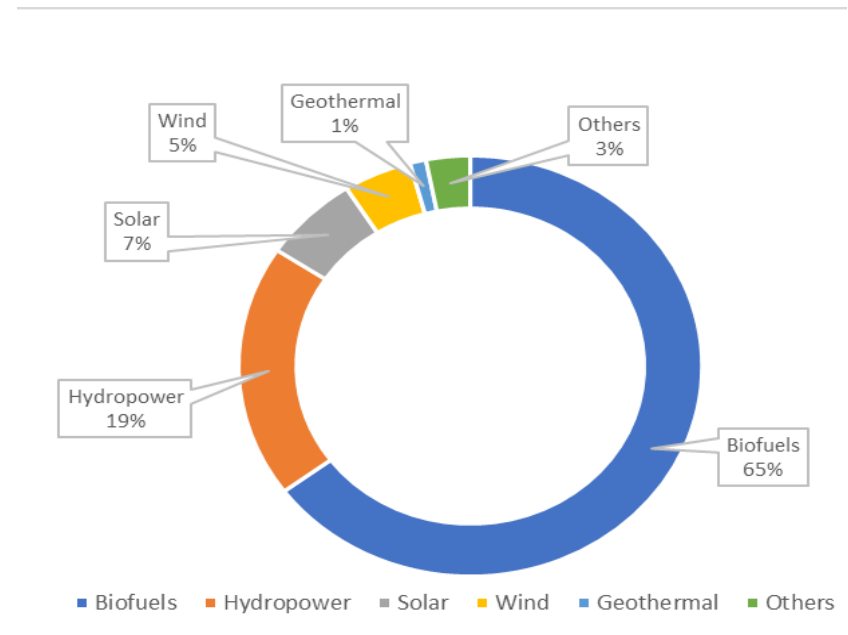
Concentrated industrial benefits of low carbon transitions: jobs

Latin America

Jobs in renewable energy sectors by Latin American country, as of 2020



Renewable energy employment in Latin America by energy source



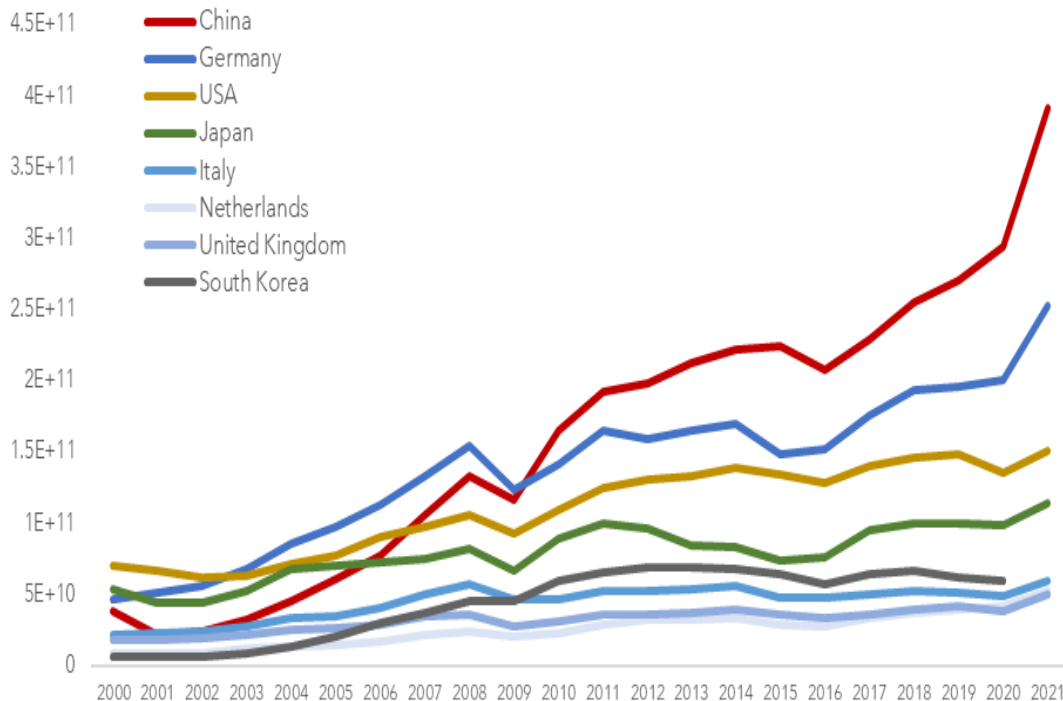
Source: elaboration based on data provided by IRENA

Concentrated industrial benefits of low carbon transitions

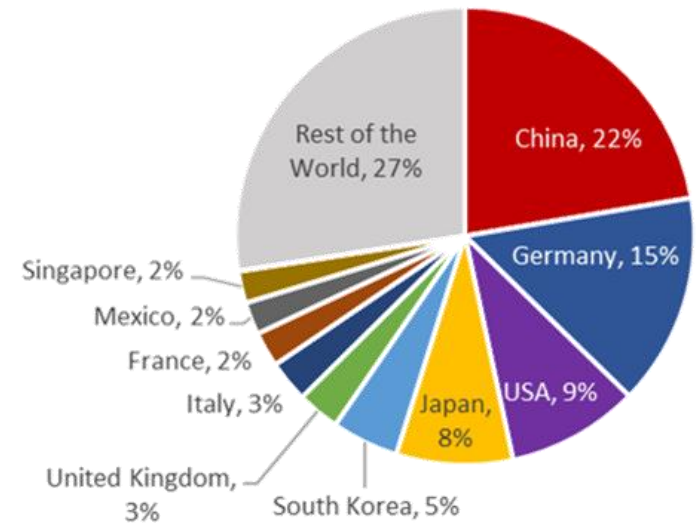
Export Markets

A handful of countries dominate the market

Low carbon technology exports by country 2000-2021



Export market shares of low carbon technology products (average 2019-2021).



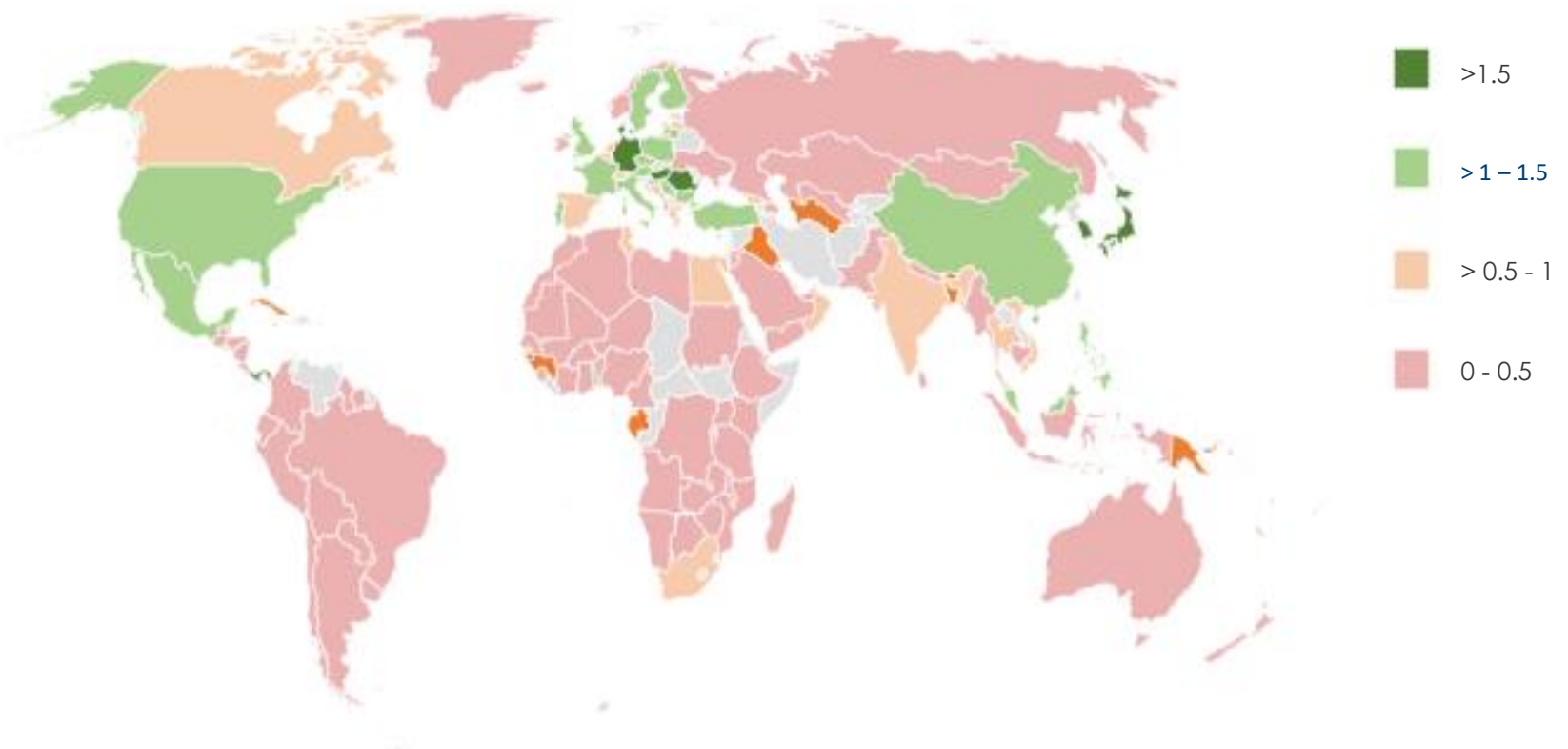
Latin America's integration in low carbon technology value chains

- Brazil's successes in the biofuels and wind turbine sector, through carefully crafted policy instruments
- Besides Brazil, integration to global value chains has been largely limited to the export of raw materials across Latin America
- Considerable hurdles remain in developing manufacturing capacity around renewables, including the volatility of demand, unstable energy politics and lack of market integration



Concentrated industrial benefits of low carbon transitions

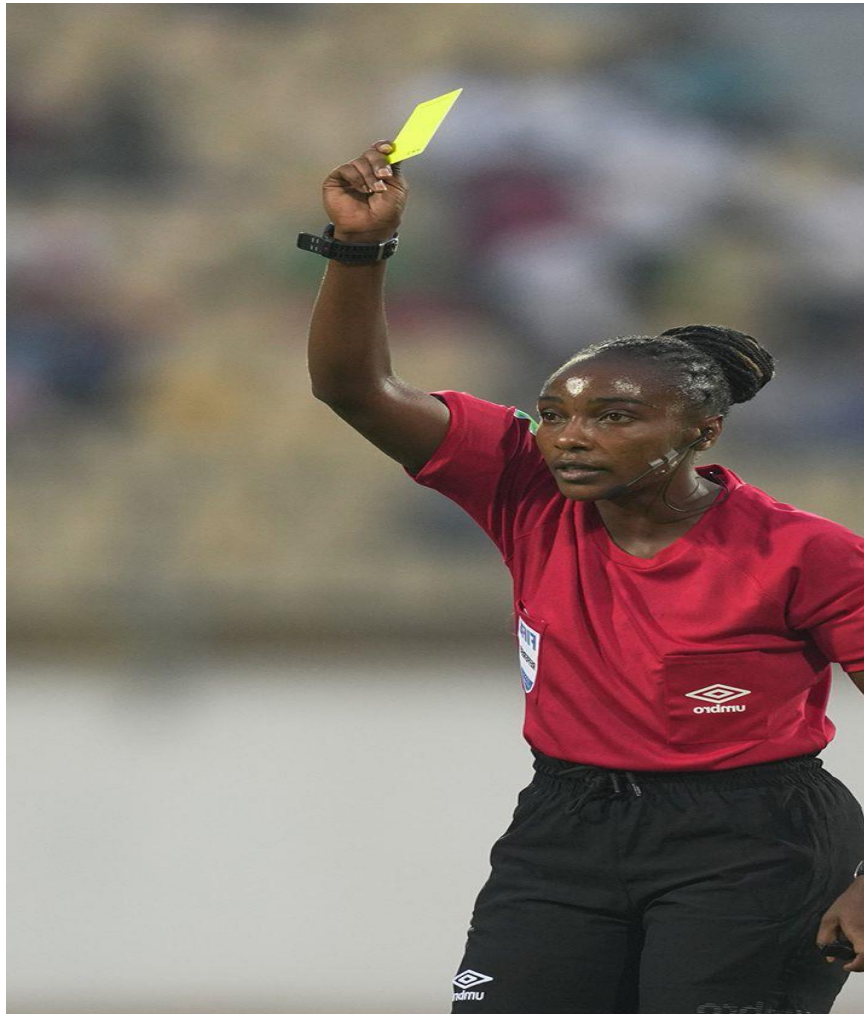
Revealed Comparative advantage in Low Carbon Technology Products & Environmental goods (2019-2021)



Source: elaboration based on IMF climate dataset

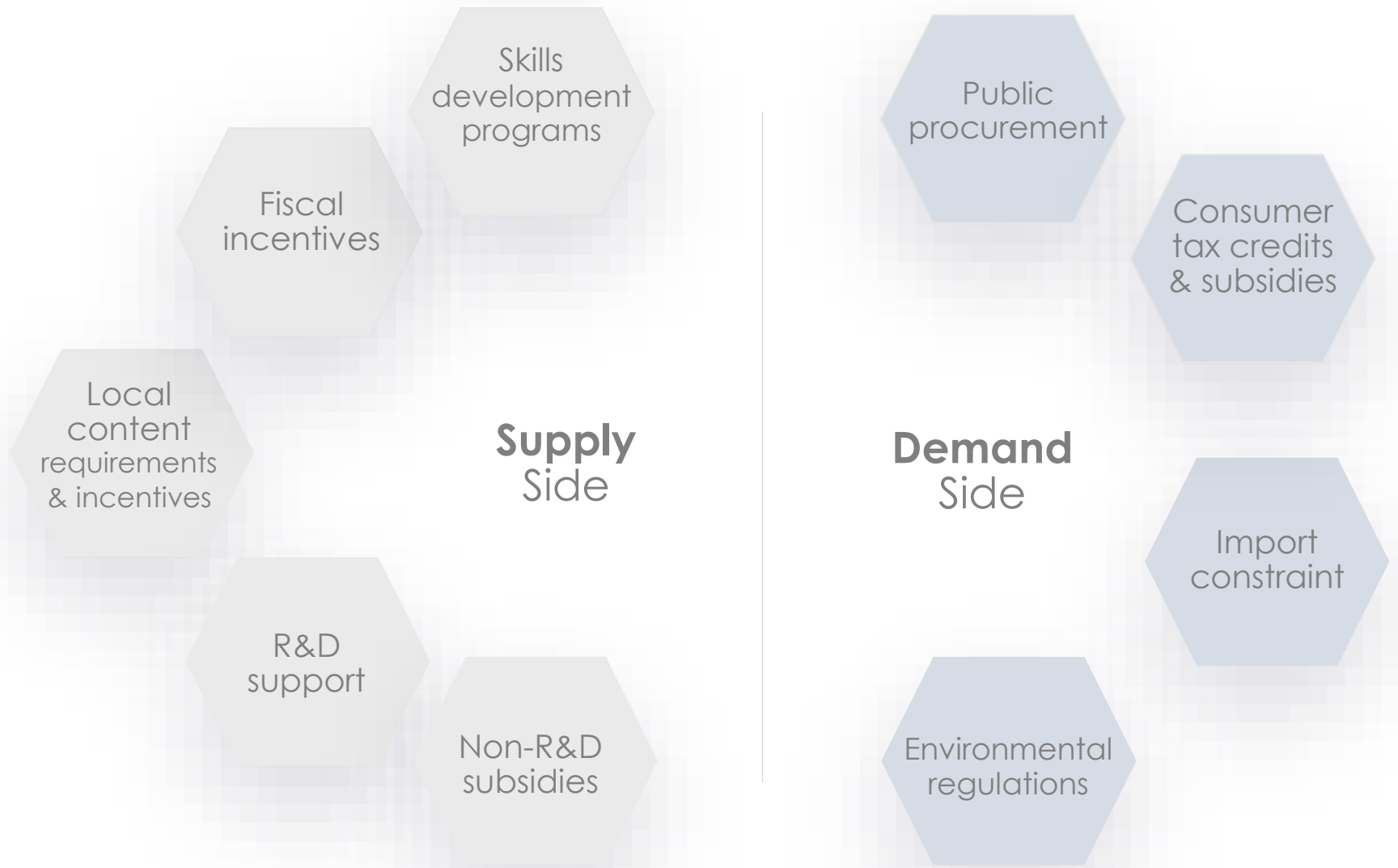
The role of the State for green economic transformation:

Referee...but also head coach!



2. Green industrial policy is not always good industrial policy

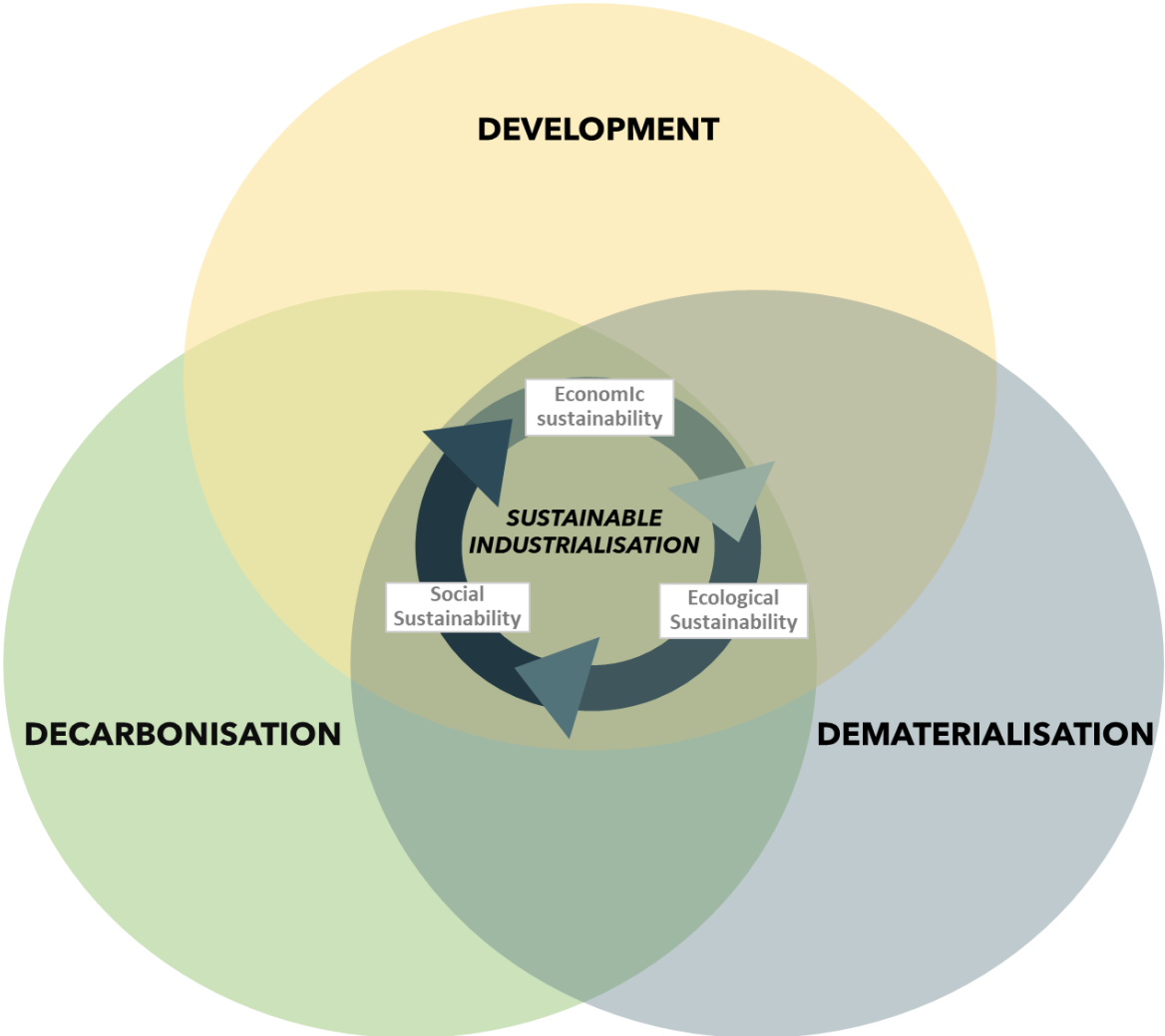
Policy toolbox for ecologically sustainable industrialisation



Source: Chang, Lebdioui and Alberton (forthcoming)

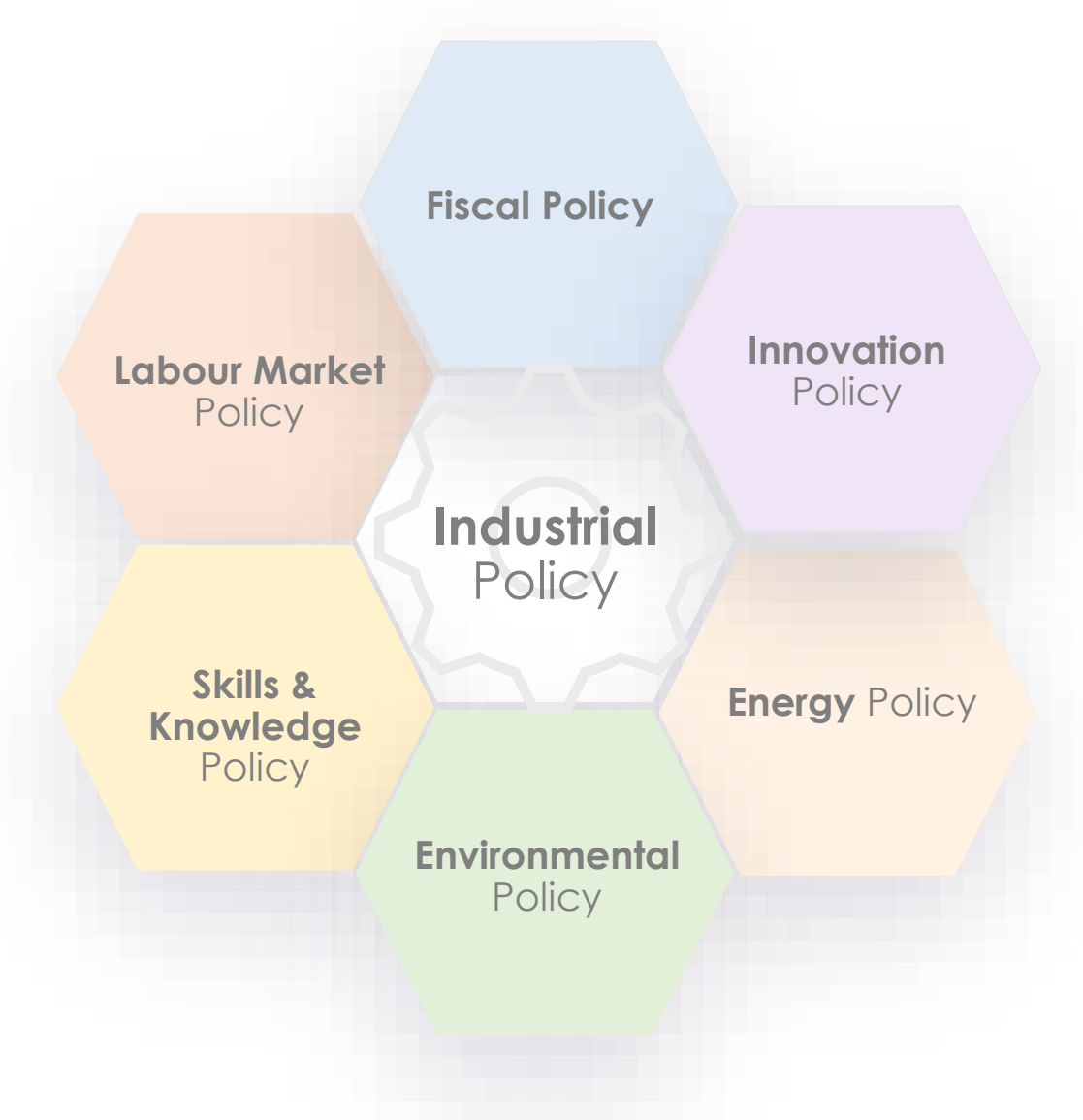
3. Not all green industrial policies are green

3D framework of sustainable industrialisation



4. Green industrial policy requires broader policy coordination and new organisational capabilities

Joined up Market Shaping Policy approach





**Industrial
Policy**

**Labour Market
Policy**

**Skills &
Knowledge
Policy**

**Environmental
Policy**

Energy Policy

**Innovation
Policy**

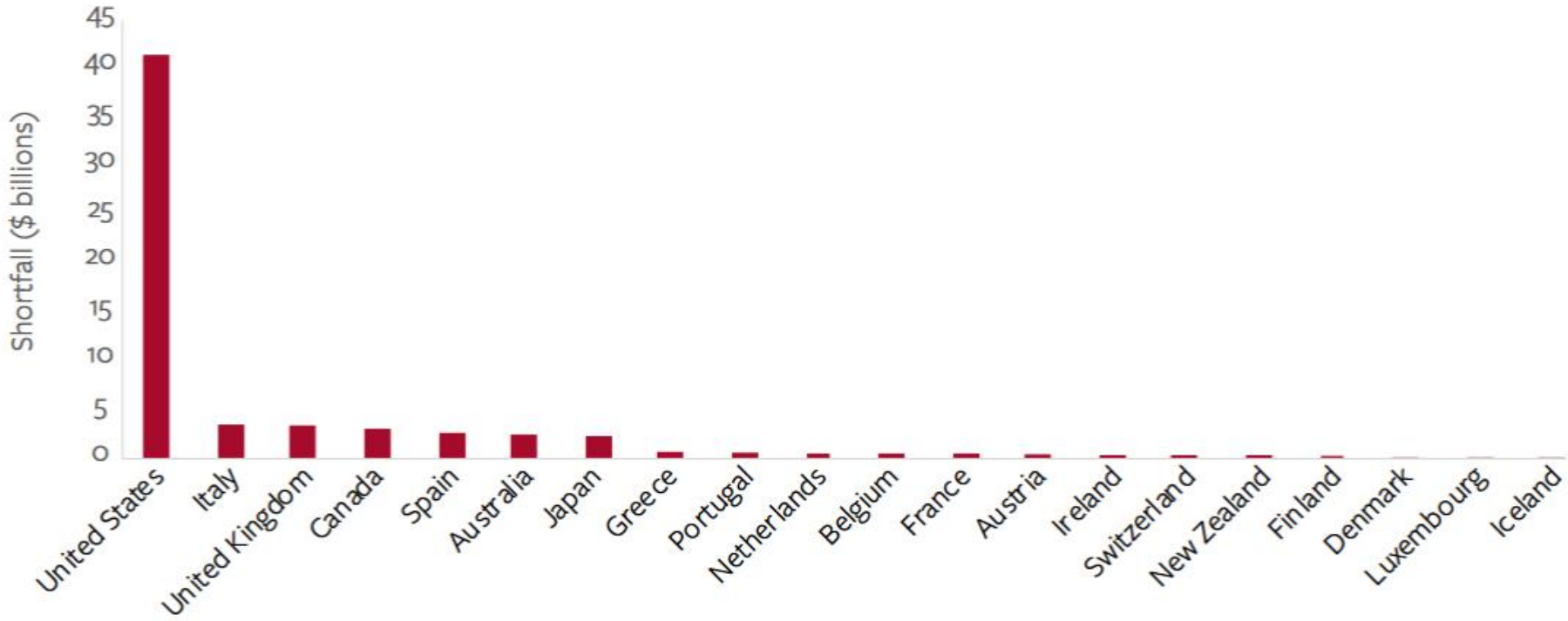
Fiscal Policy

Central
Banks

NDB

SWF

Figure 2 Shortfall between a country's climate finance contribution (2017–2018) and their fair share, using the composite index



Source: ODI, 2021

New organisational capabilities

- **Cross-ministerial commissions on green industrial policy**
- **Unit under the prime minister's office or Presidency**
- **Platform to transparently facilitate dialogue with businesses, civil society, environmental groups, fossil fuel lobbies...**

5. Without careful policy coordination, green economic transformations can exacerbate inequalities

Industrial policy tools might not be socially exclusive if they are not coordinated with social and education policies

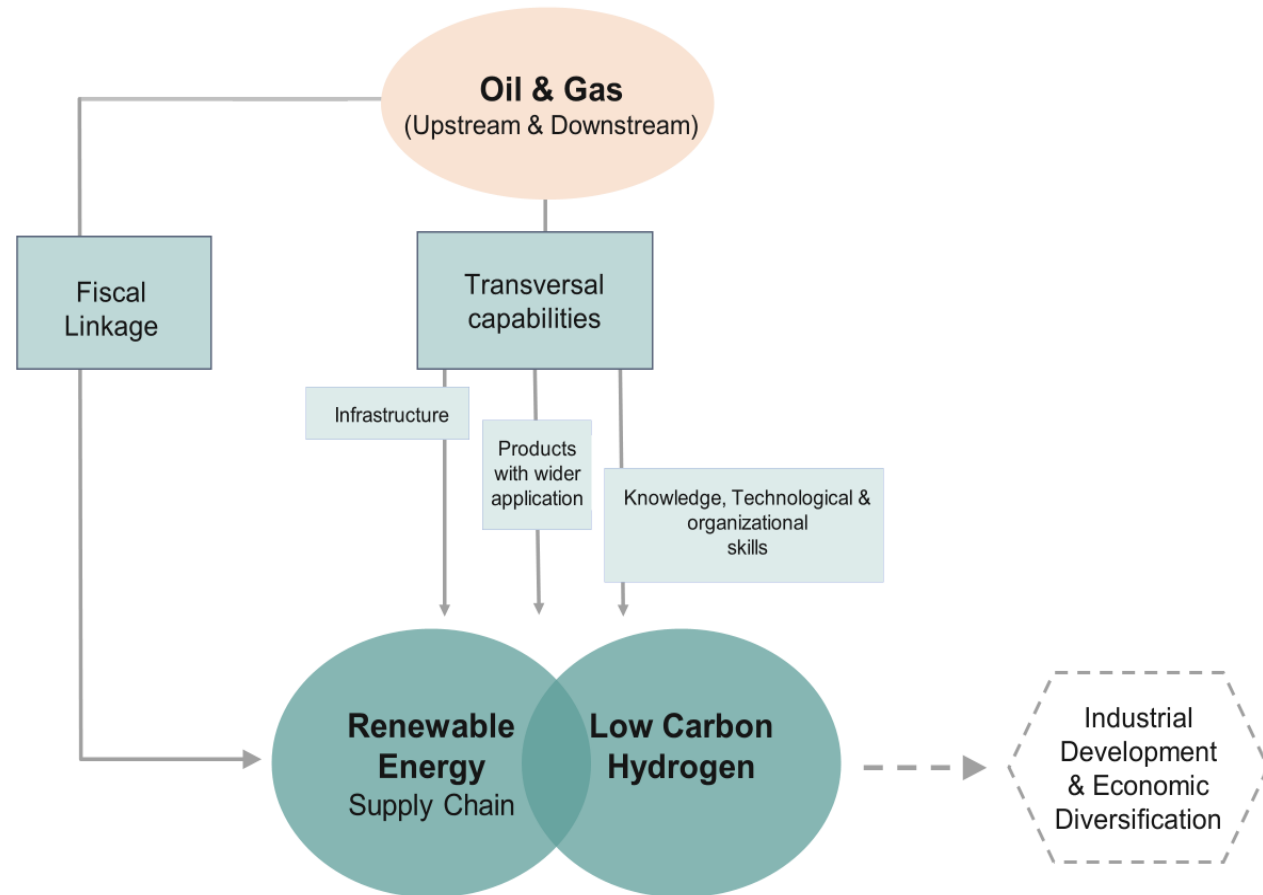
- Gender, income, sectoral and regional dimensions
 - Case of Costa Rica (*export sophistication with job opportunities for the few*)
 - Case of Mexico (*Integration in low skilled activities*)
- **Coordinating industrial, social, skills and labour market policies is necessary to tackle skills mismatches that may occur under green economic transformation**

6. Green economic transformations can take different forms, based on different starting points

- Path dependence of innovation (e.g. Brazil's wind turbine sector, China/ Malaysia's electronics capabilities)
- High competition in some sectors (solar panels)
- There are different ways in which nations can tackle green economic transformation beyond the manufacturing dimension.
- Crucial context of fossil fuel exporters

A repurposing agenda in fossil fuel-dependent economies

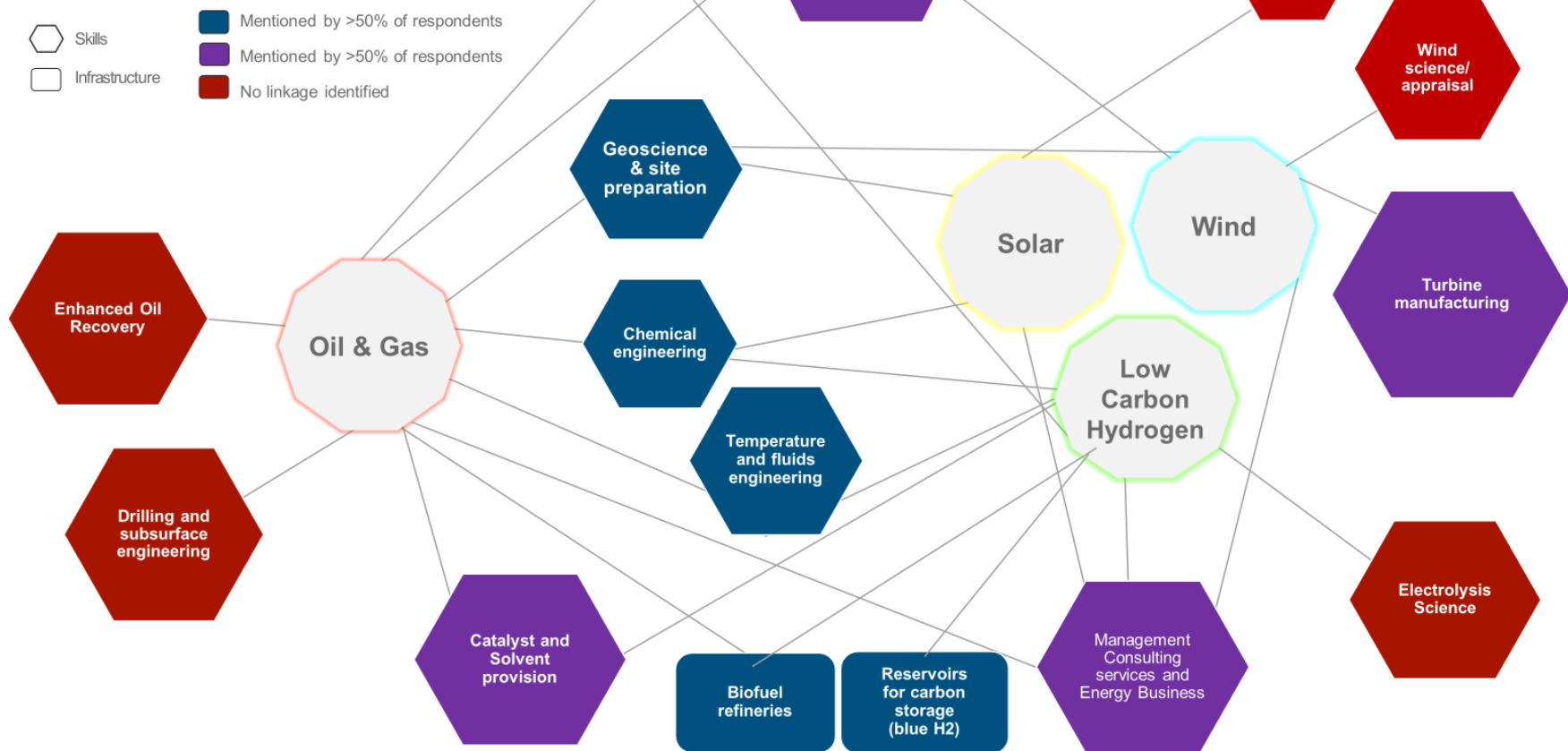
- Exploiting a 'dormant' comparative advantage in the fossil fuel sector to seize green windows of opportunity as part of global decarbonisation.



Source: Lebdioui & Bilek (forthcoming)

Results

Mapping of transversality of capabilities



7. For many countries, green economic transformation won't happen without regional integration

Green industrial policy with regional integration: *a Latin American Green Deal?*

- On the demand side, regional coordination of green industrial policies to reach economies of scale
- On the supply side, complementary strengths that can be fostered to build an efficient regional industrial ecosystem around low carbon technologies:
 - *from critical minerals abundance (e.g., Chile, Peru, Cuba)*
 - *to manufacturing capacity (e.g., Brazil, Costa Rica)*
 - *Low cost renewable energy potential (e.g. Chile, Mexico, Paraguay)*
 - *proximity to important trade routes (e.g., Panama)*



Green industrial policy with regional integration: a Latin American Green Deal?

Potential impacts across a range of economic sectors & examples of policies

