



2023 | **IsDB Group
Private Sector
Forum**

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Sustainable Finance Innovation: Partnerships and Leveraging Resources for Private Sector Sustainability

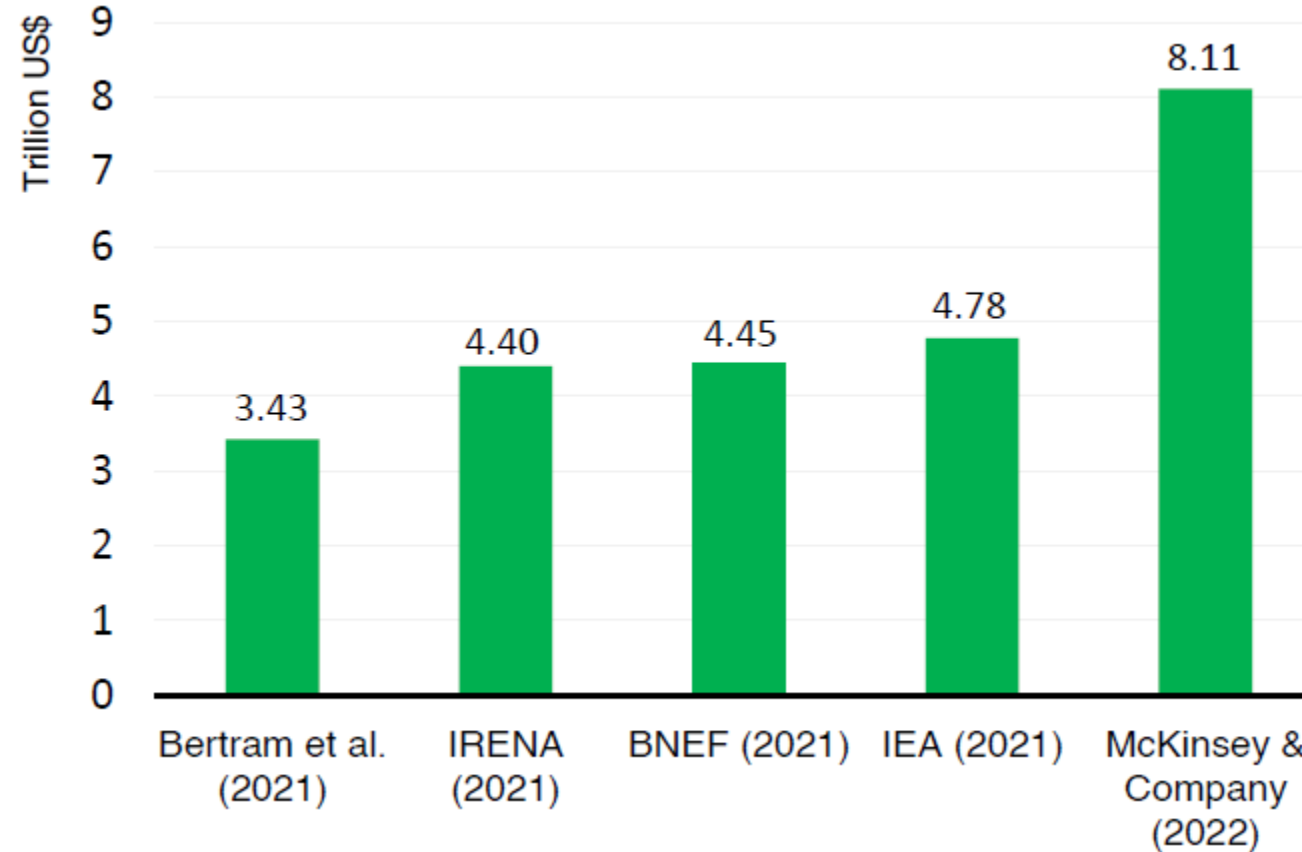
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Transition investment requirements are unprecedented

Figure. Average annual global investments in selected net-zero scenarios, 2021-2050.

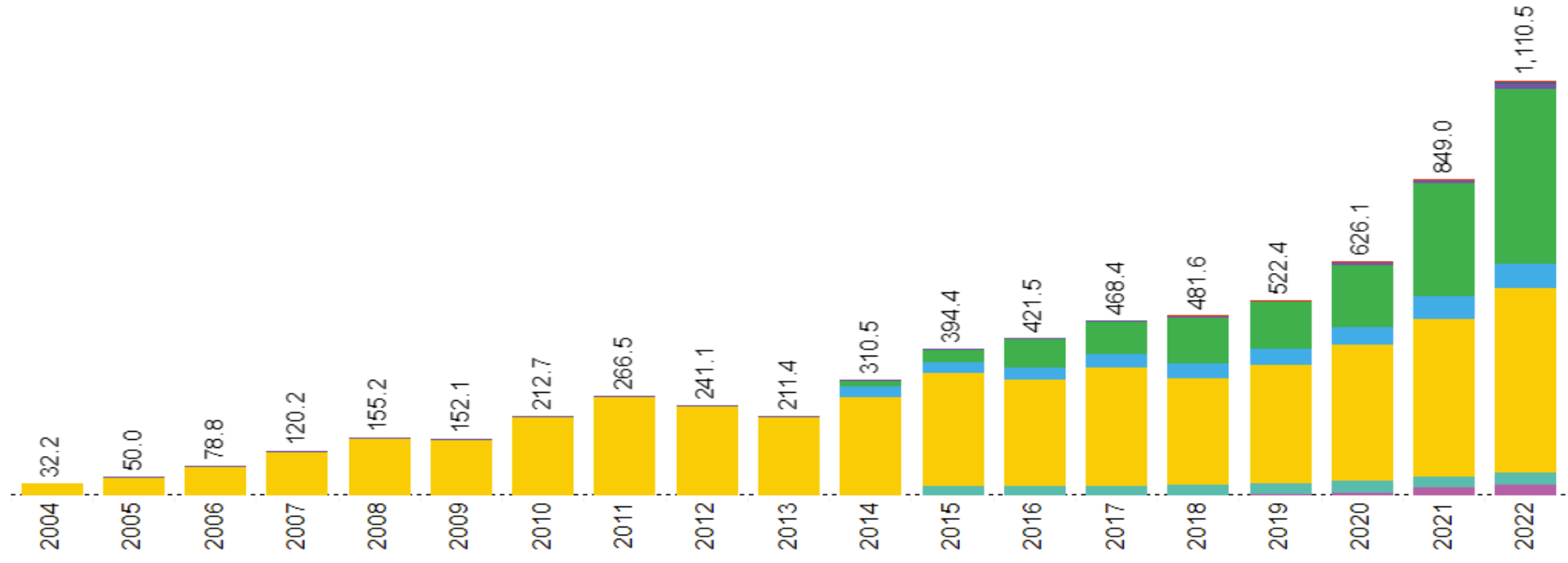


Source: Authors' calculations based on Bertram et al. (2021), BNEF (2021), Gielen et al. (2021) labeled as IRENA in the figure, IEA (2021a) and McKinsey & Company (2022).

Note: The reported investment figure for Bertram et al. (2021) is the average investment from five models, assuming a linear interpolation up to 2050. Total investments across models range between US\$2.2 trillion and US\$ 4.6 trillion in the year 2030 and between US\$3.0 trillion and US\$5.8 trillion in the year 2050. The reported investment figure for Bloomberg NEF (2021) is the average investment across scenarios, ranging between US\$3.1 trillion and US\$5.8 trillion. The investment value for McKinsey & Company (2022) is based on the reported cumulative investment of US\$275 trillion, excluding forestry.

Actual investment levels are significantly low

Figure. Transition Investment Trends, \$ Bn



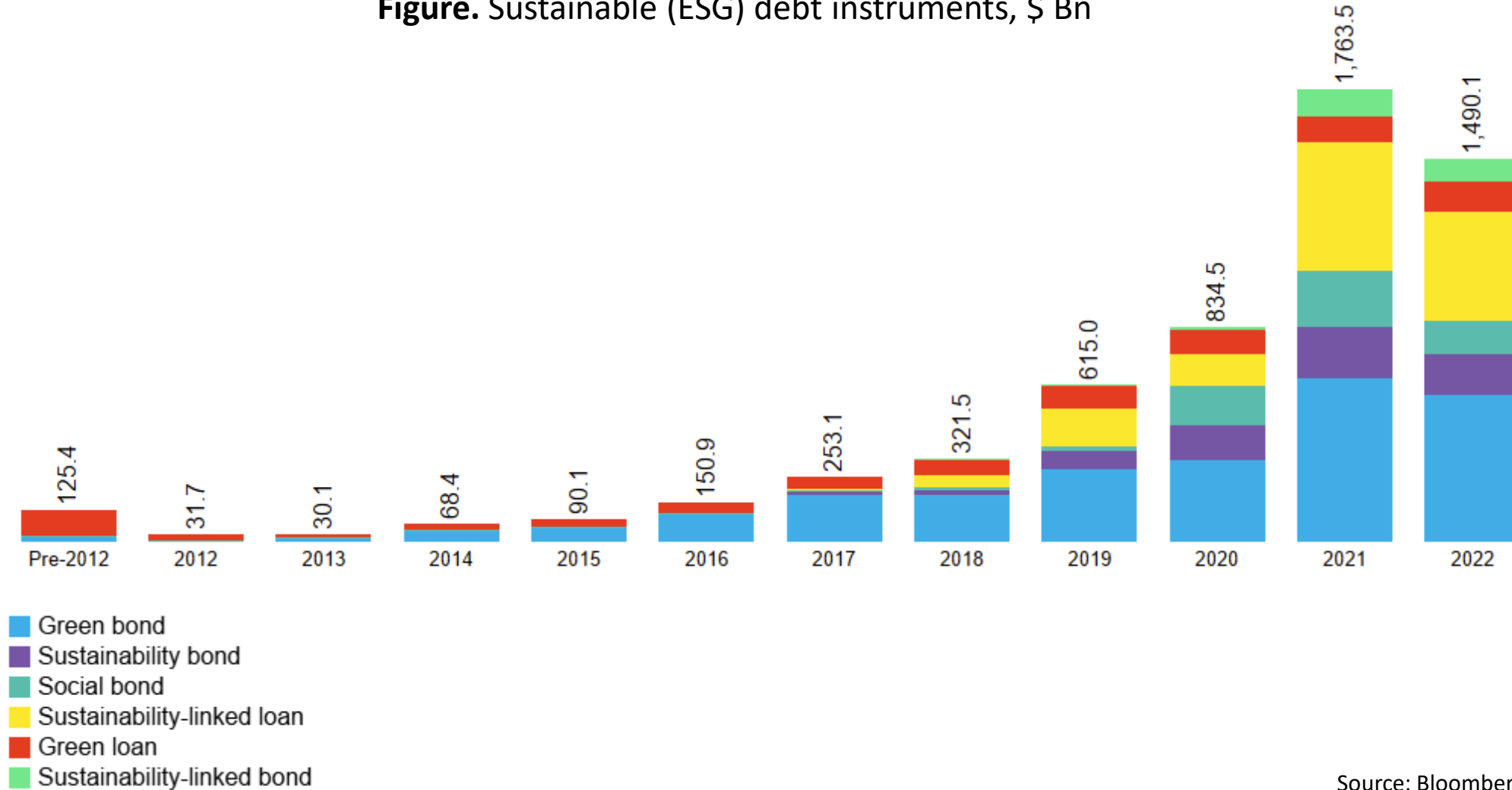
Technology - Supersector

- Hydrogen
- CCS
- Energy storage
- Electrified transport
- Electrified heat
- Renewable energy
- Nuclear
- Sustainable materi...

Source: Bloomberg NEF

Available finance remains to be low

Figure. Sustainable (ESG) debt instruments, \$ Bn



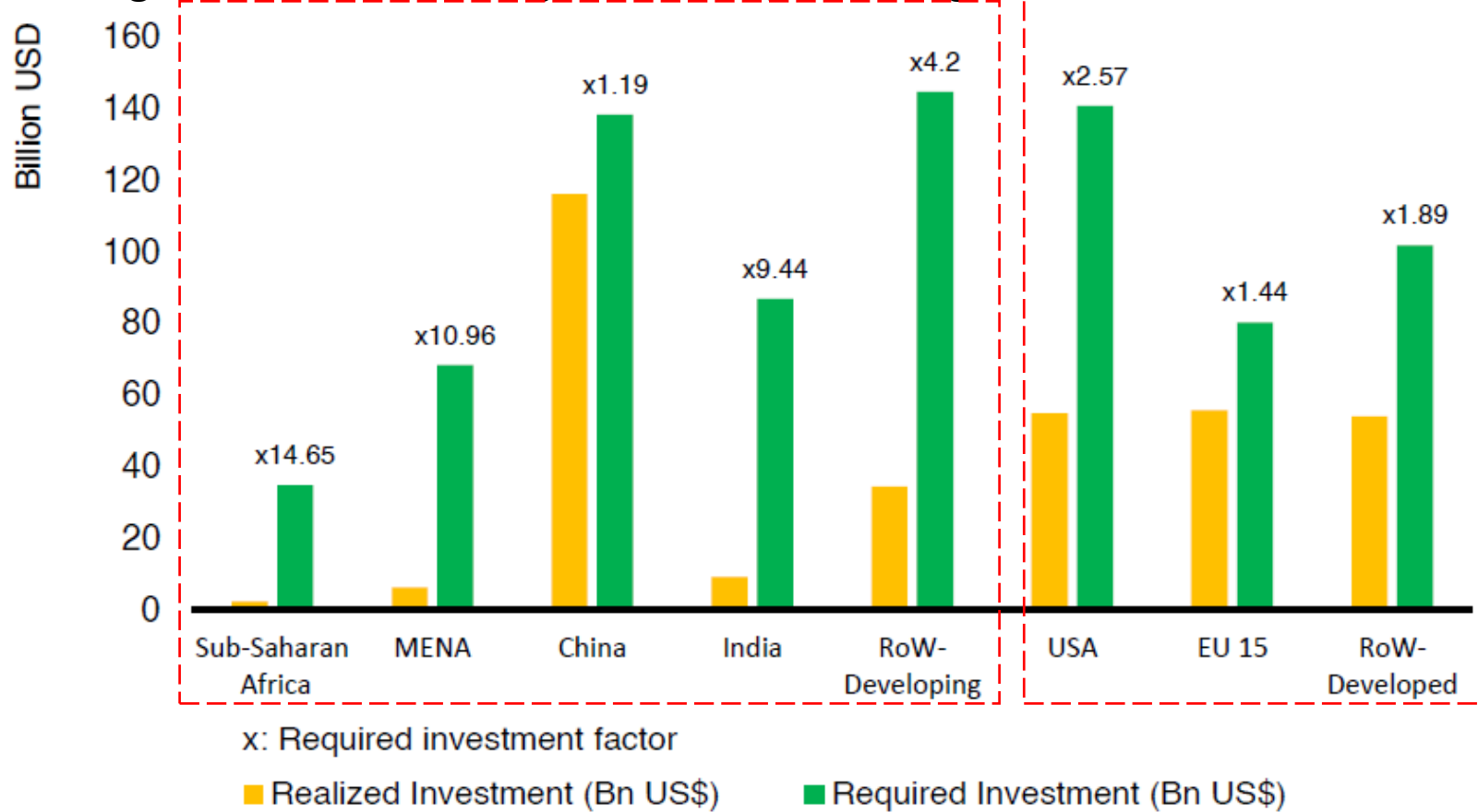
Source: Bloomberg NEF

A Modeling Exercise: country-level investment gaps

Authors: F. Yilmaz, F. Alswaina, F. Belaid, M. Hejazi, M. Luomi and S. Soummane

Sustainable energy transition gaps by region

Figure. Sustainable energy transition gaps by region and selected countries.

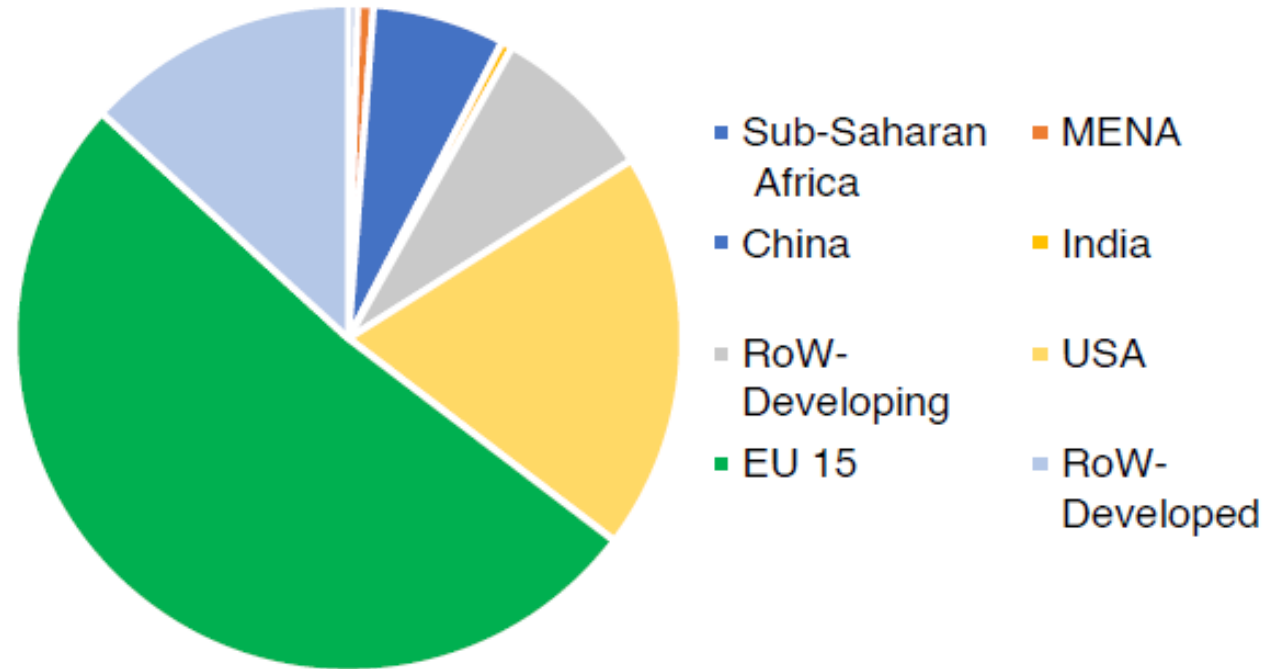


Source: Authors' calculation from the Bloomberg, World Bank and Ou et al. (2021).

Note: Realized investment is the average sustainable energy transition investment flows into the power sector between 2019 and 2021, from Bloomberg. The required investment is the average investment flow needed to achieve the Paris Agreement-compatible scenario in the model. "x" is the additional investment needed to achieve the required level. "RoW Developing" is the rest of the developing countries, and "RoW-Developed" is the remaining developed countries. "Sub-Saharan Africa" contains all of the continent except the north, which is covered in "MENA." "EU15" contains Austria, Belgium, Germany, Denmark, Spain, Finland, France, the United Kingdom, Gibraltar, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Sweden. Clean investment numbers in the figure include hydro, geothermal, bioenergy, solar, wind and nuclear investments. CCUS investments are not included due to data shortages.

Global ESG flows by country and country groups

Figure. Share of ESG funds by selected countries and regions.



Source: Auhtors' construction from Bloomberg NEF.

Note: The figure displays the group or country shares of average ESG flows in the last three available years (2019, 2020 and 2021) in the data source. The instruments included in the calculations of average ESG flows are green, social and sustainability-linked bonds and loans "RoW Developing" is the rest of the developing countries, and "RoW-Developed" is the remaining developed countries. "Sub-Saharan Africa" contains all of the continent except the north, which is covered in "MENA." "EU15" contains Austria, Belgium, Germany, Denmark, Spain, Finland, France, the United Kingdom, Gibraltar, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Sweden.

Overall, the global sustainable finance landscape

1. Urgent needs to significantly scale up: **Insufficiency => Scaling-up collectively**
2. Flows are unequally distributed: **Inequality -> Redistribution**
3. Varying standards create issues: **Uncertainty -> Consolidation**

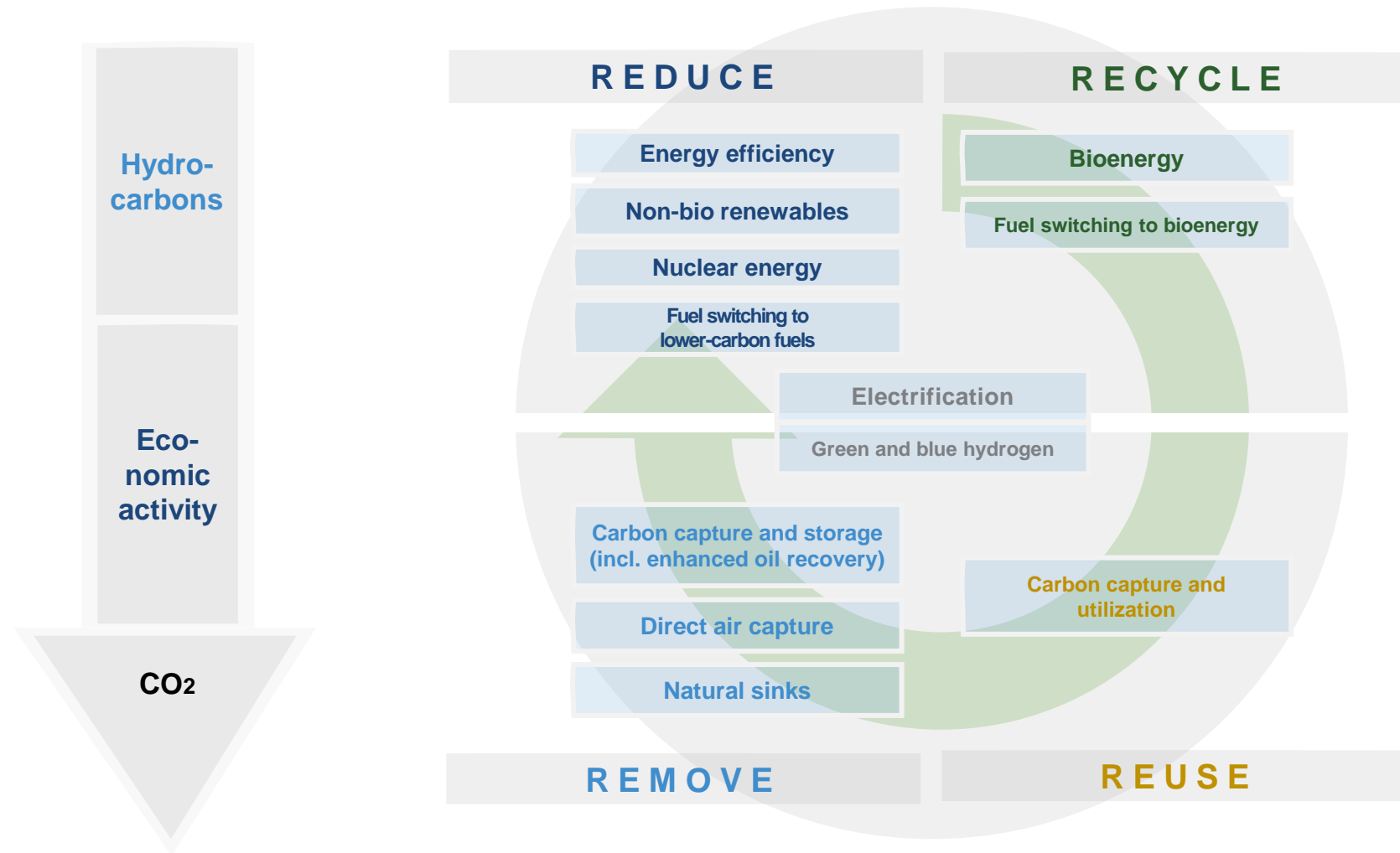


A Practical Policy Tool: The Circular Carbon Economy Index

<https://cceindex.kapsarc.org/>

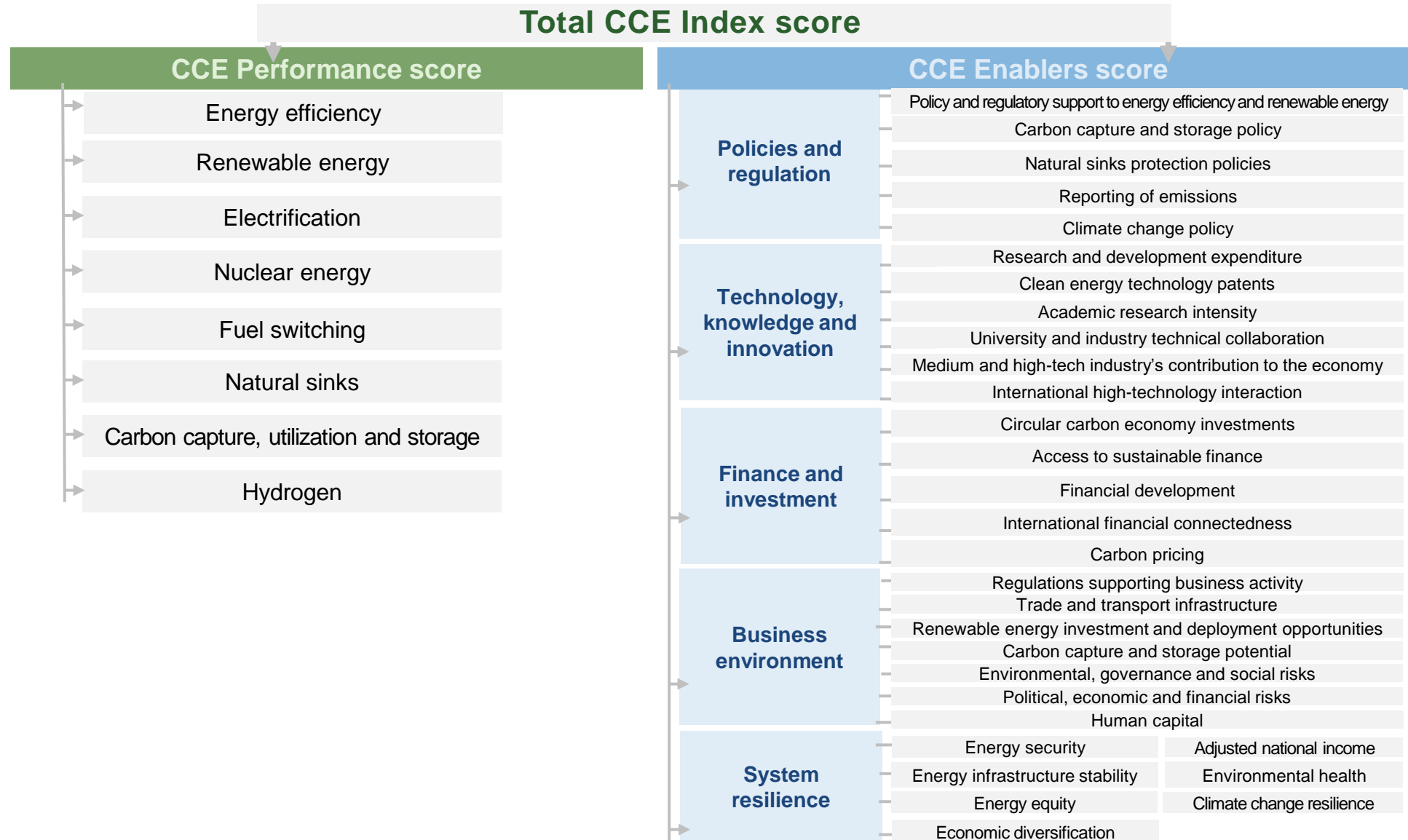
Authors: M. Luomi, F. Yilmaz and T. Alshehri

From a linear to a circular carbon economy



Source: Luomi, Yilmaz and Alshehri (2022),
<https://cceindex.kapsarc.org/>

2022 CCE Index indicator framework



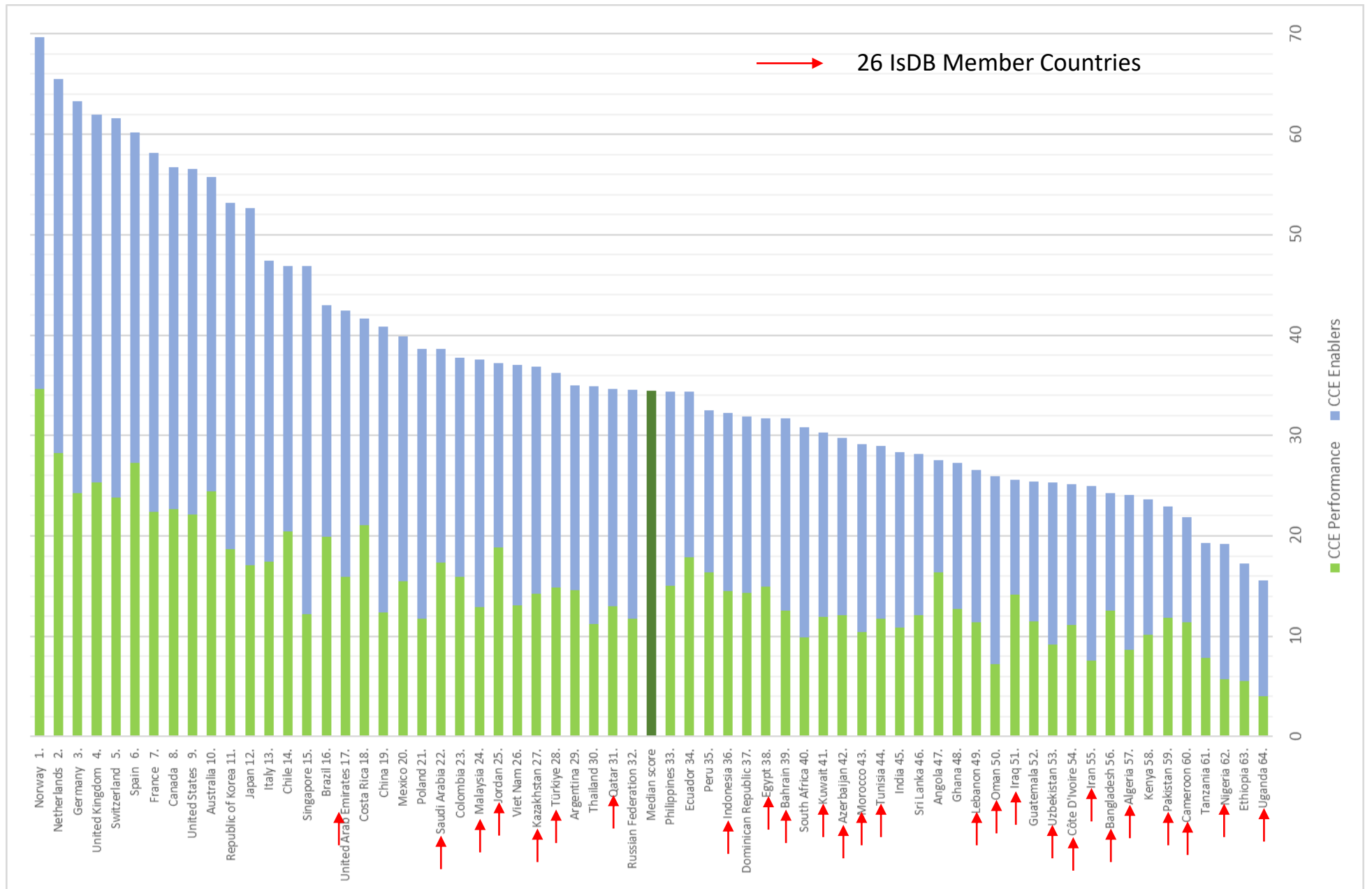
The 2022 CCE Index scores

Top five countries:

1. Norway
2. Netherlands
3. Germany
4. United Kingdom
5. Switzerland

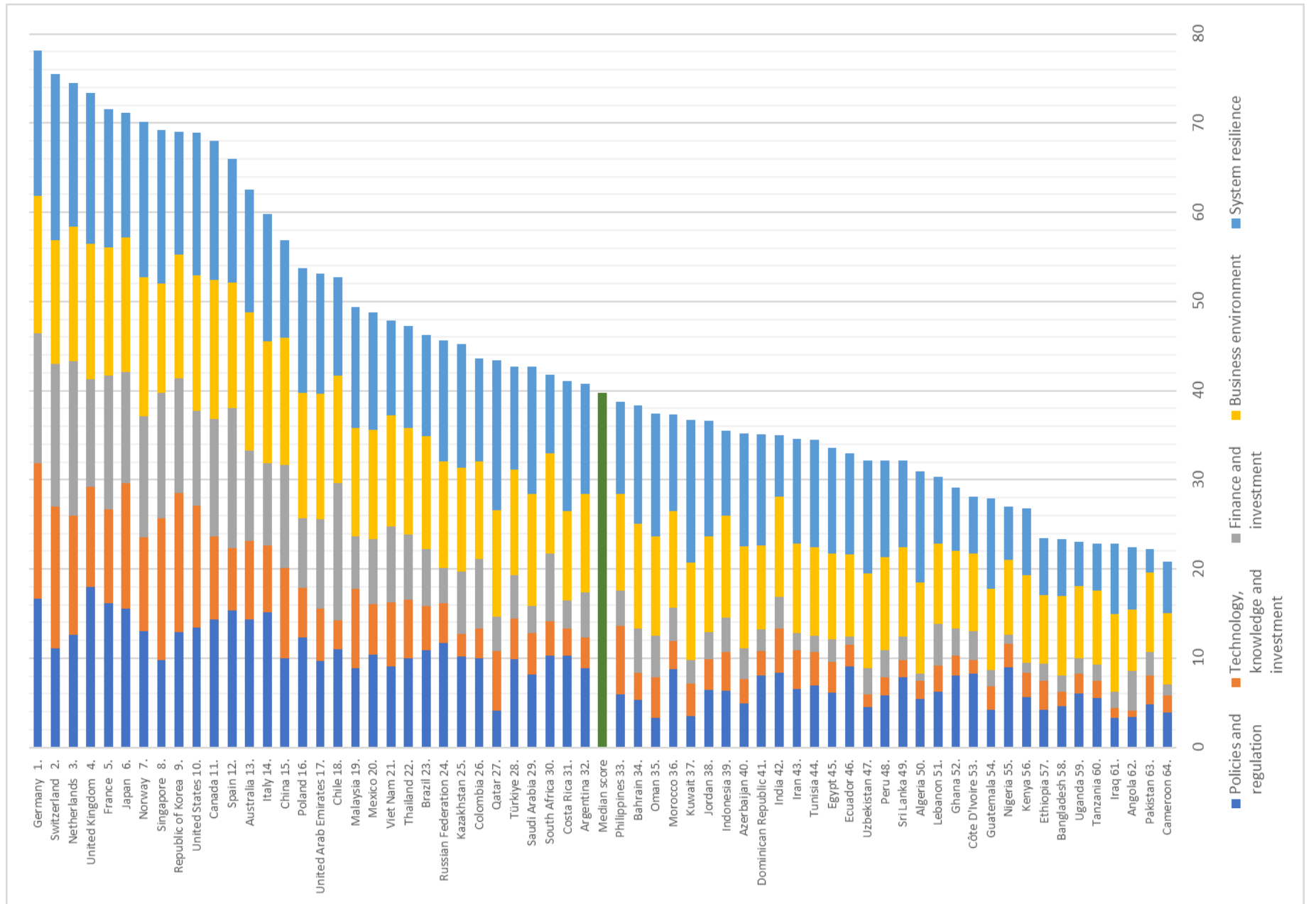
Bottom five countries:

60. Cameroon
61. Tanzania
62. Nigeria
63. Ethiopia
64. Uganda



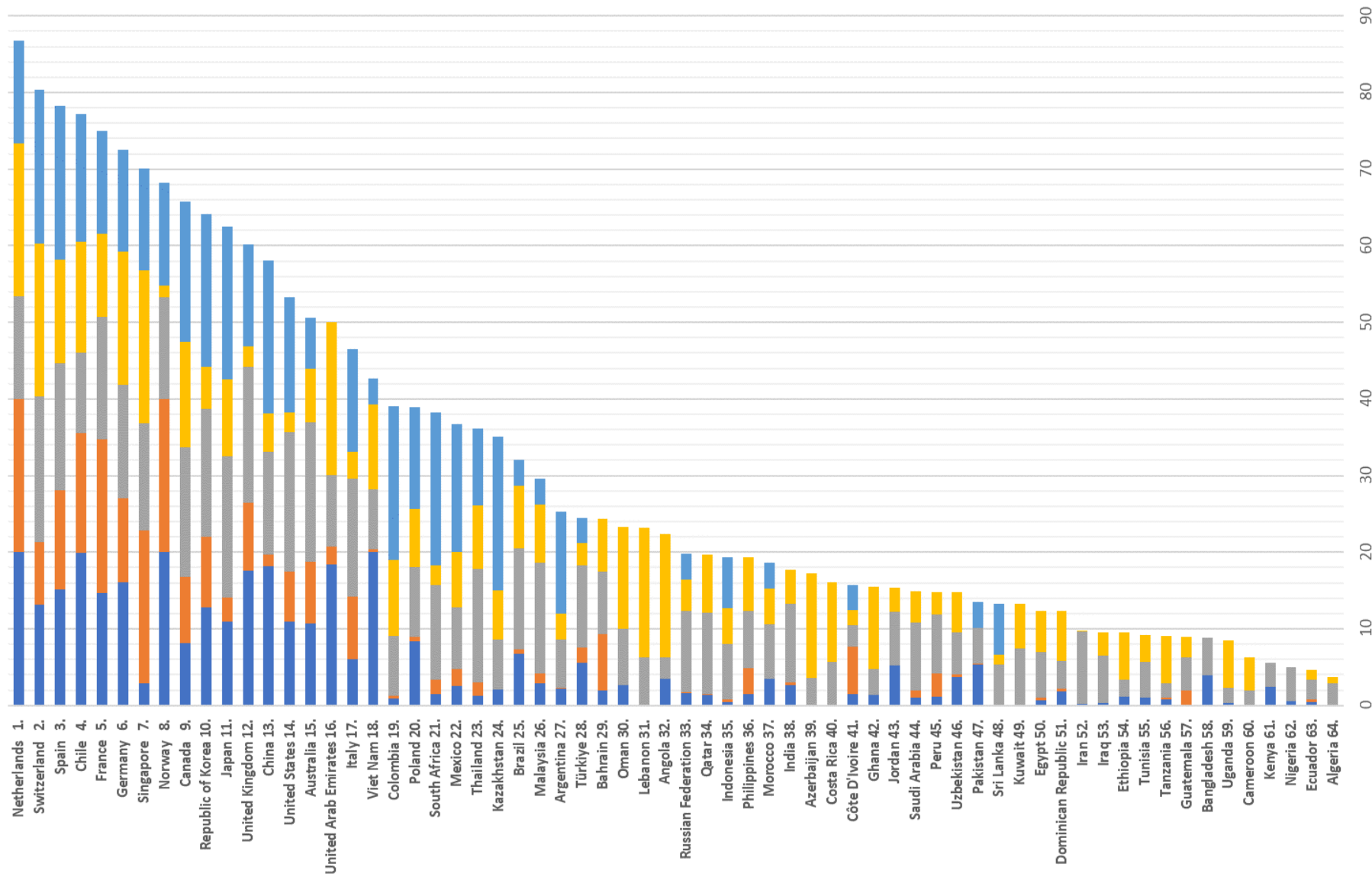
The 2022 CCE Enablers scores

- Policies and regulation
- Technology, knowledge and innovation
- Finance and investment
- Business environment
- System resilience



2022 Finance and investment dimension scores

- Carbon pricing
- International financial connectedness
- Financial development
- Access to sustainable finance
- Circular carbon economy investments

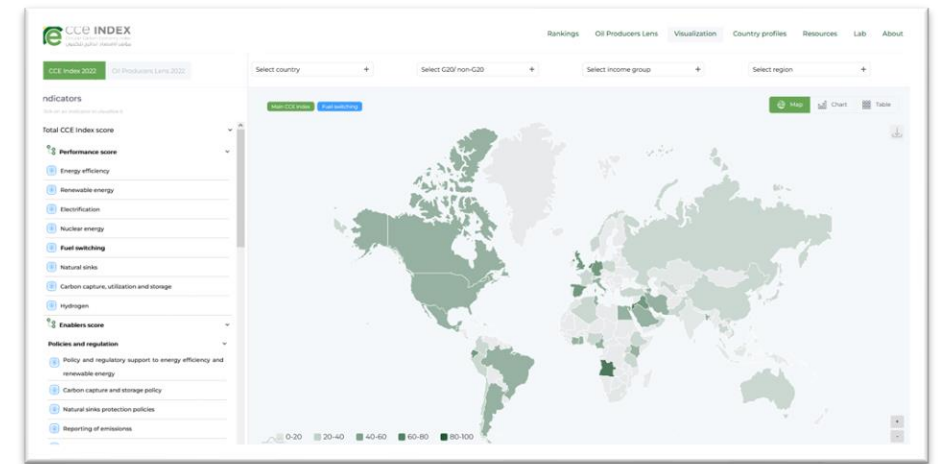
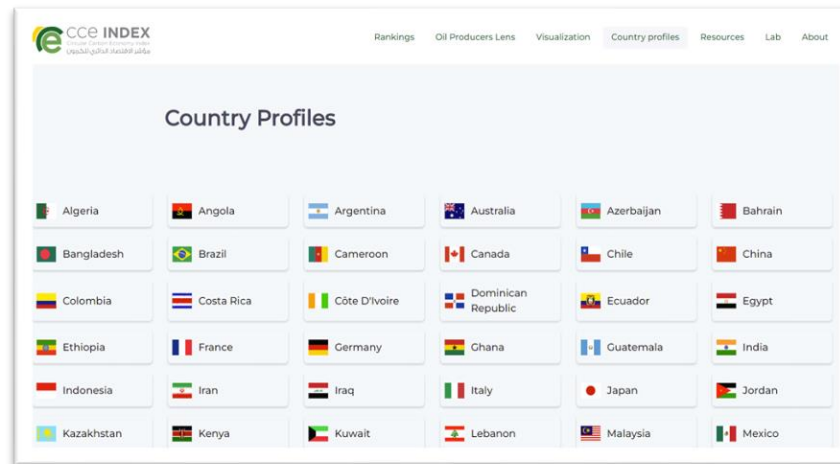
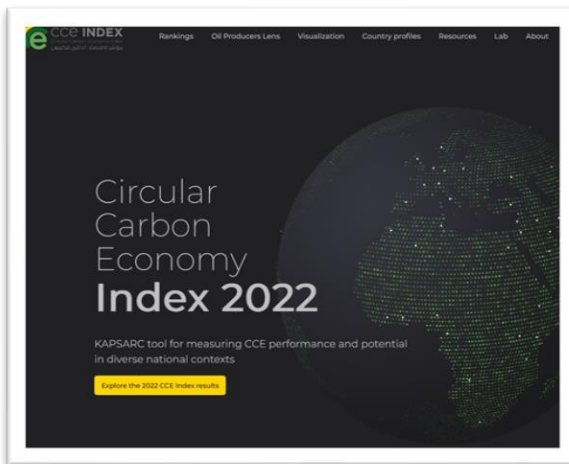


Overall, country level gaps are large

1. Access to sustainably finance is particularly limited in many countries
2. Tools like carbon markets are not widely utilized
3. Transition investment outlook needs significant improvements

<https://cceindex.kapsarc.org/>

Please check the website for country-level data visualization, analysis, and policy simulation tools





Thank You!

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