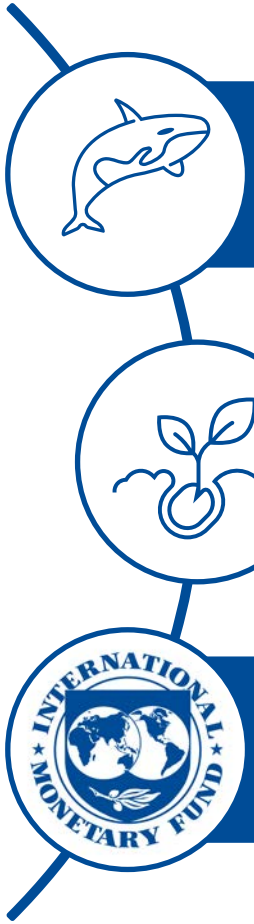
STATISTICS

NATURAL CAPITAL ACCOUNTING

JANUARY 6, 2023

Bert Kroese
Chief Statistician & Data Officer,
Director of the Statistics Department, IMF

Agenda



Statistical foundation for natural capital accounting

Progress in implementing natural capital accounting standards

IMF activities & natural capital accounting

Statistical Foundation for Natural Capital Accounting

Recent IMF Blogs—Why We Need to Go Beyond GDP?

How to Scale Up Private Climate Finance in Emerging Economies | October 7, 2022

Further Delaying Climate Policies Will Hurt Economic Growth | October 5, 2022

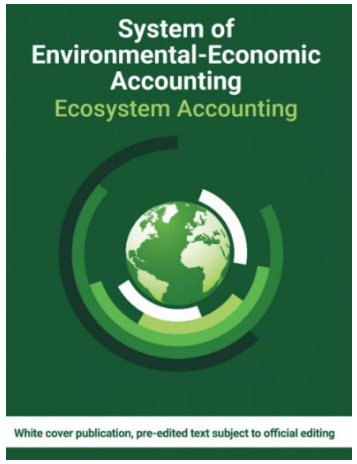
Achieving Net-Zero Emissions Requires Closing a Data Deficit | August 23, 2022

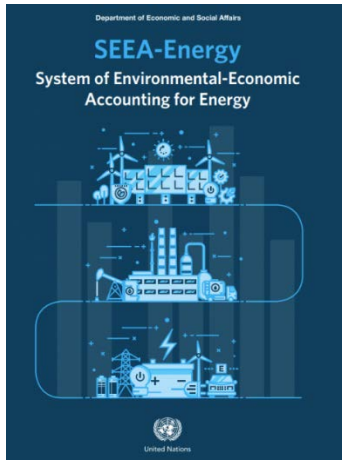
Public Sector Must Play Major Role in Catalyzing Private Climate Finance | August 18, 2022

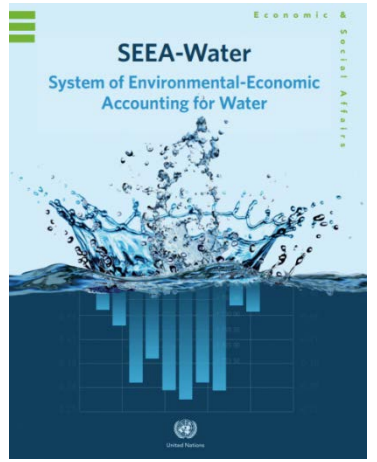
Climate Change Mitigation Will Cause Large Adjustments in Current Account Balances | August 16, 2022

How Europe Can Protect the Poor from Surging Energy Prices | August 3, 2022

System of Environmental-Economic Accounting







Agriculture, Forestry and Fisheries

Air Emissions Accounts

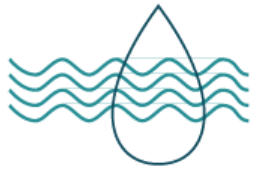
Energy

Environmental Activity Accounts

Ecosystem Accounts

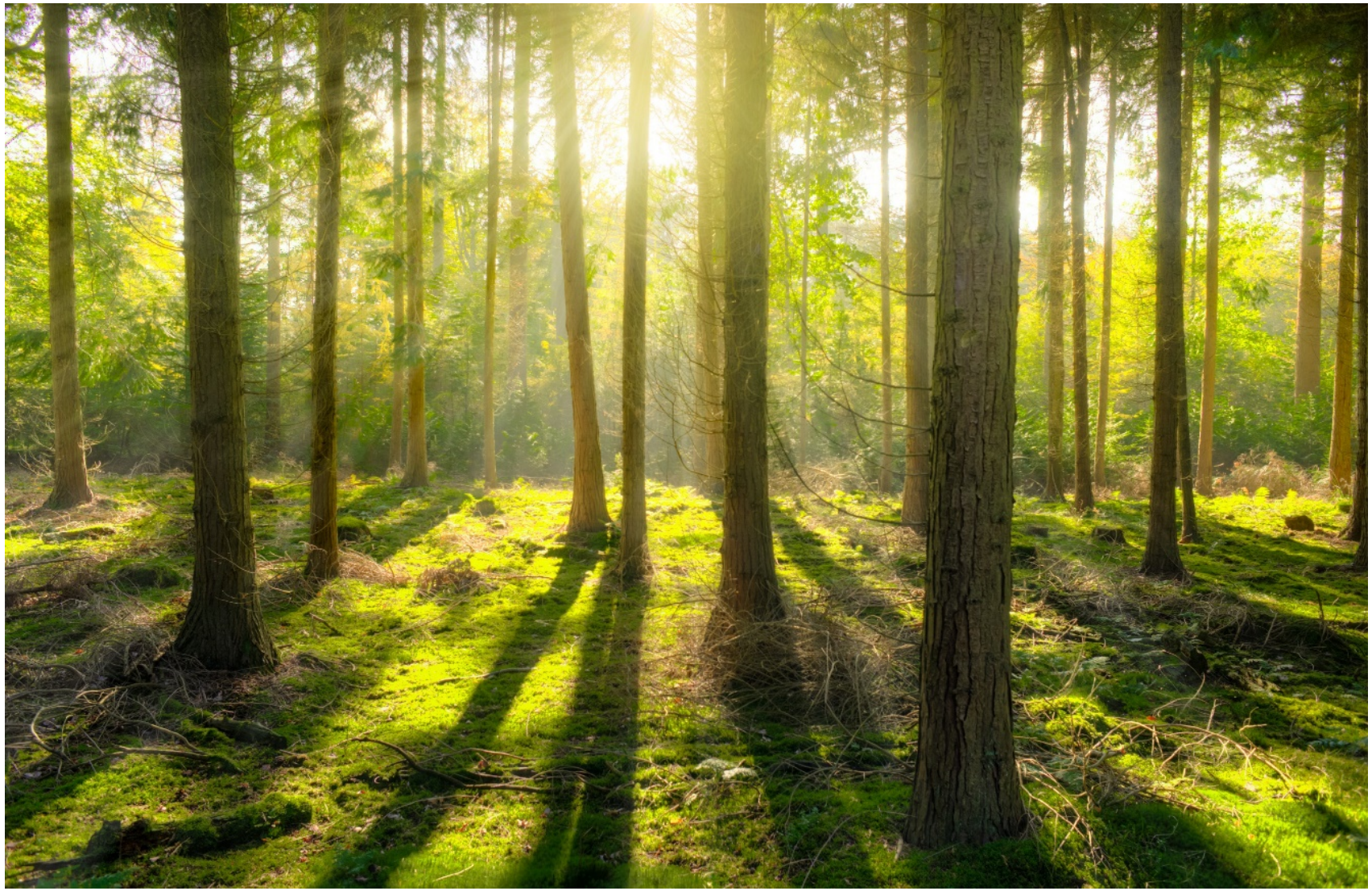
Land Accounts

Material Flow Accounts



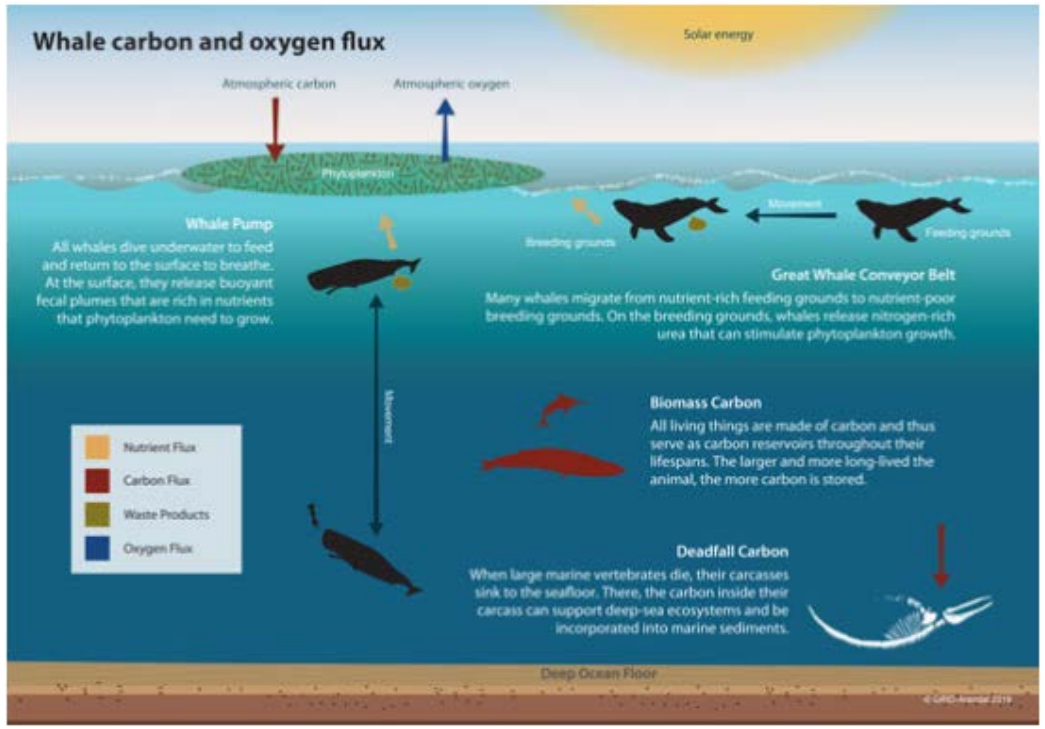
Water

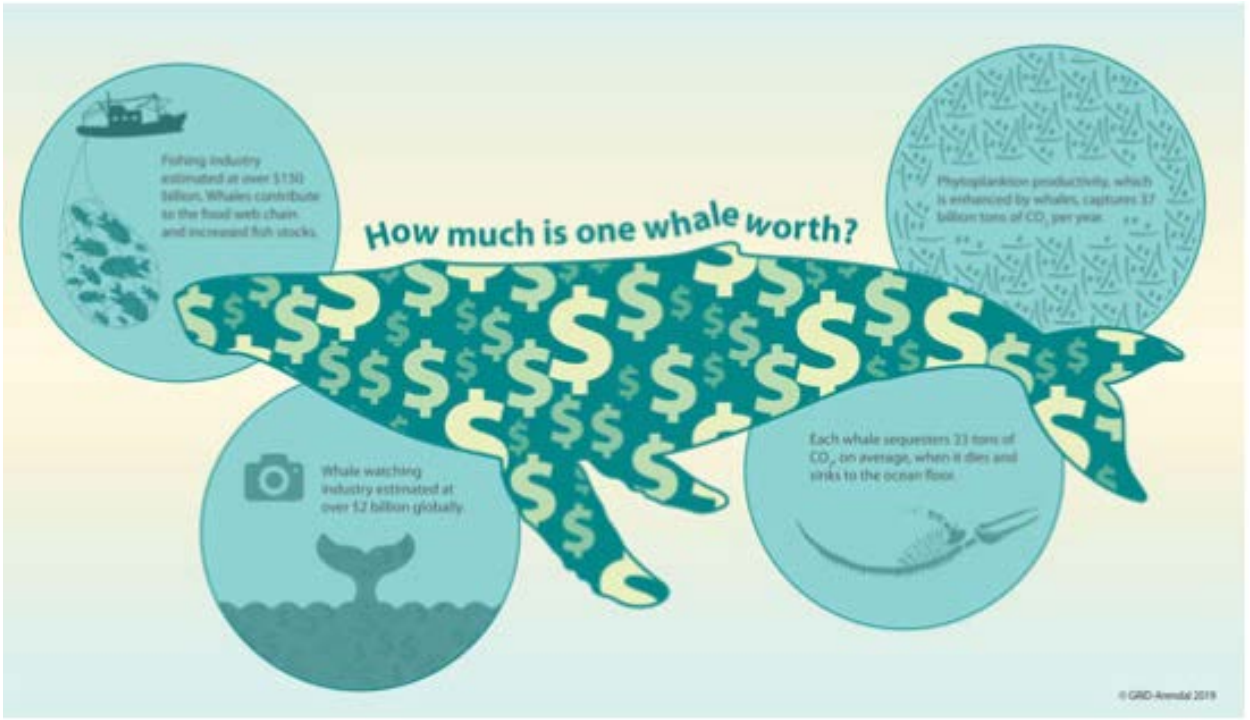
Conserving Ecosystems to Fight Climate Change



Restoring Ecosystems to Fight Climate Change

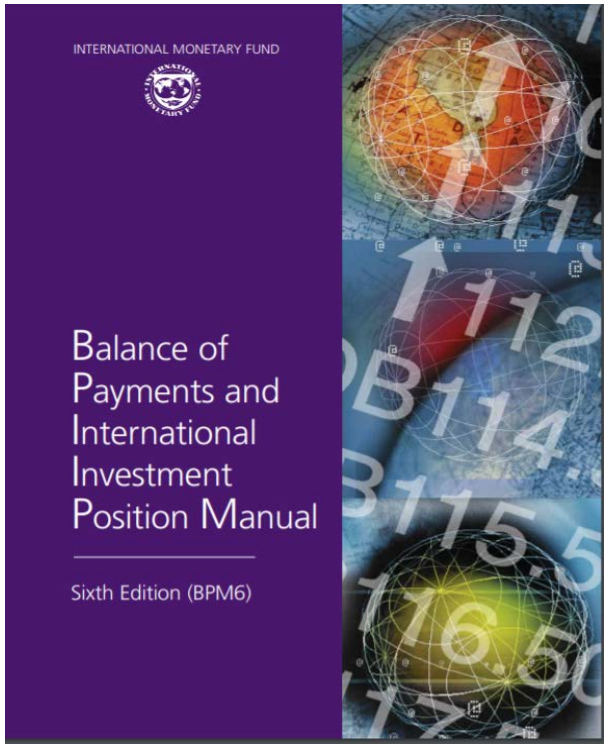
"Our conservative estimates put the value of the average great whale, based on its various activities, at more than $2 million, and easily over $1 trillion for the current stock of great whales."

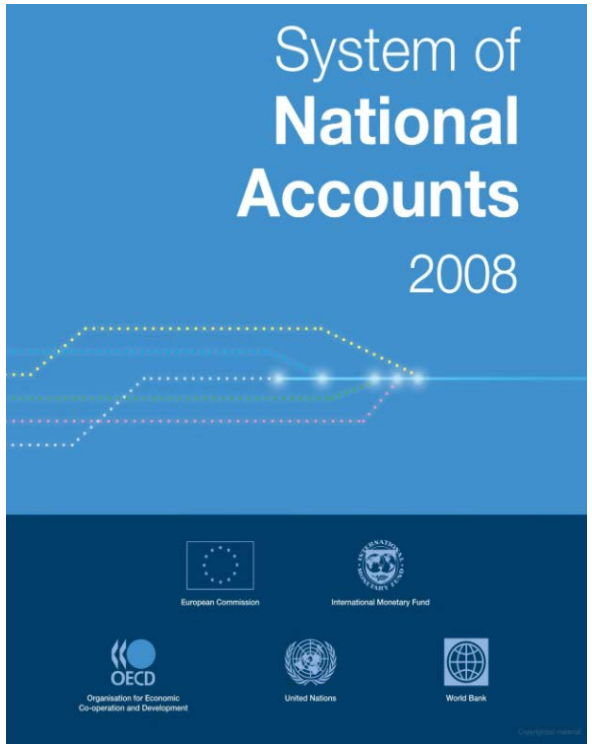




[Nature's Solution to Climate Change - Ralph Chami, Thomas Cosimano, Connel Fullenkamp, and Sena Oztosun]

Going Beyond GDP (SNA 2008) and BOP (BPM 6)





AN.212 Mineral and energy reserves

AN.2121 Non-renewable mineral and energy resources
- AN.21211 Oil resources
- AN.21212 Natural Gas resources
- AN.21213 Other mineral and energy resources

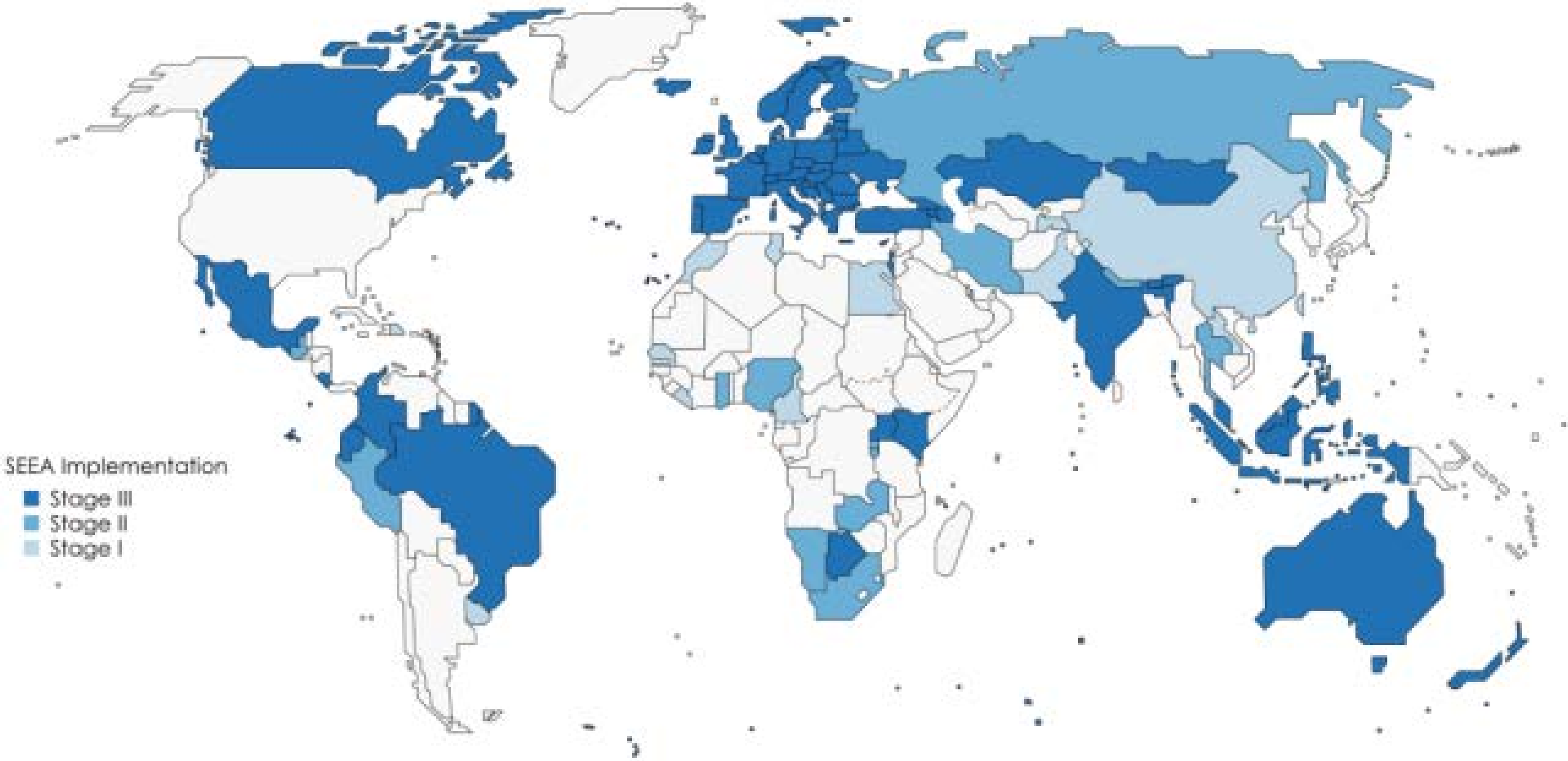
AN.2122 Renewable mineral and energy resources
- AN.21221 Wind energy resources
- AN.21222 Solar energy resources
- AN.21223 Water energy resources
- AN.21224 Geothermal energy resources
- AN.21225 Other renewable energy resources

"Valued using social rent, Dutch wind energy resources were estimated to be worth more than 5 billion euros in 2010 – a substantial sum, but still only 3% of the estimated value of the Netherlands' natural gas resources in that year."

(Statistics Netherlands, 2011 – Environmental Accounts of the Netherlands 2010. The Hague: Statistics Netherlands)

Progress in Implementing Natural Capital Accounting Standards

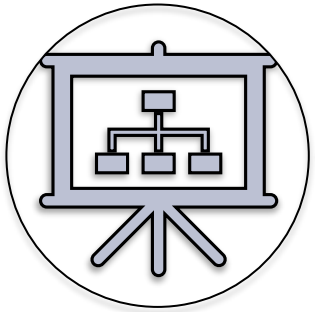
Status of Implementation of SEEA



Towards Natural Capital Accounts - Challenges

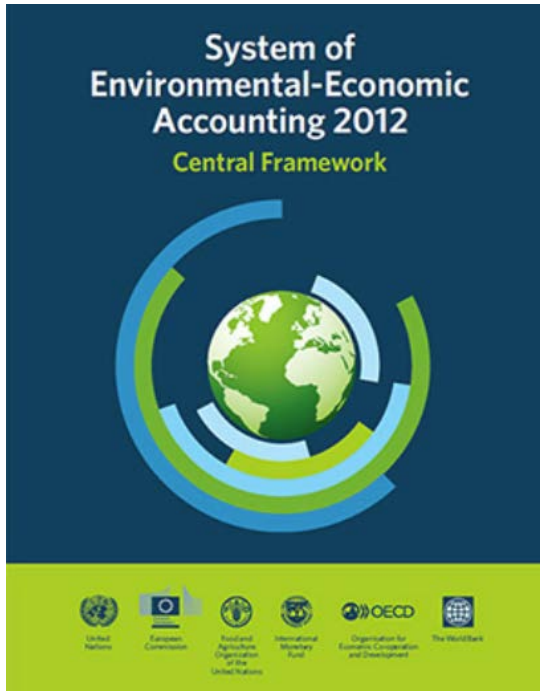
Conceptual

Methodological



Operational

Towards Natural Capital Accounts - Coordination



National Institute for Public Health and the Environment
Ministry of Health, Welfare and Sport

WAGENINGEN
UNIVERSITY & RESEARCH

Ministry of Agriculture, Nature and Food Quality

PBL Netherlands Environmental Assessment Agency

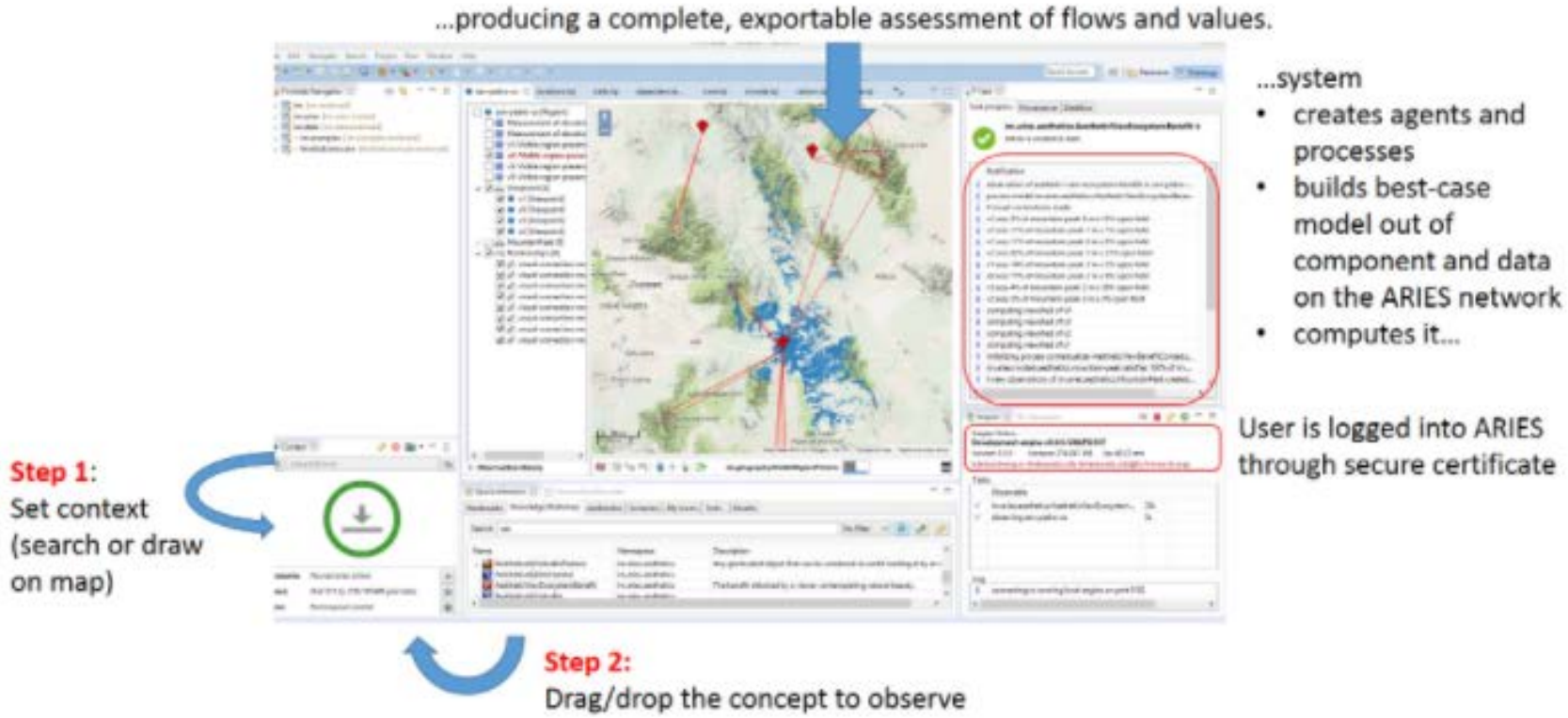
Statistics Netherlands

Government agency

Towards Natural Capital Accounts - Cooperation

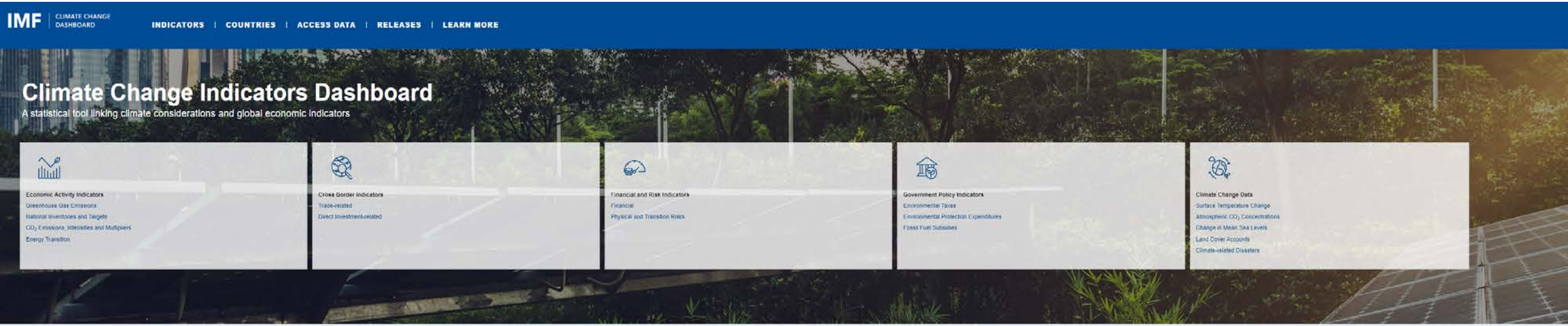
A possible way forward to support members….

ARIES, while young, stands out as the first real-world tool for social-environmental systems modeling, using knowledge and models built independently by many actors and endorsed by the scientific community to produce holistic outputs, making evidence-based environmental decision making easier and more effective.



IMF Activities & Natural Capital Accounting

Mainstreaming Natural Capital Statistics at the IMF



Latest Updates

NEW CHART

Explore the new chart of Bilateral Trade Flows of Environmental Goods and Low Carbon Technologies

NEW DATASET: ENERGY TRANSITION

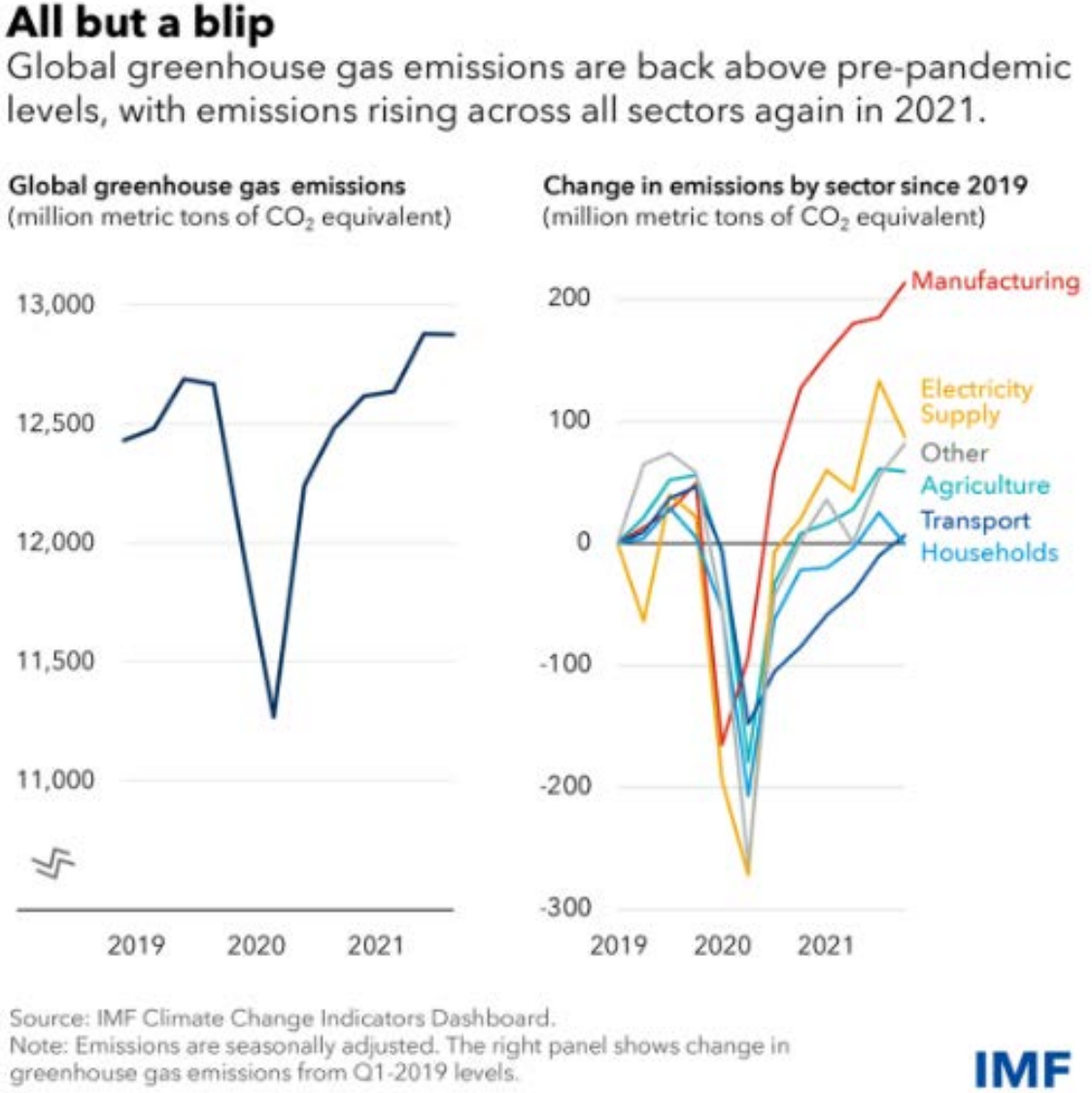
28% of the World's Electricity Supply came from Renewables in 2020, compared to 18% in 2000

DATA UPDATES: INFORM RISK INDICATORS

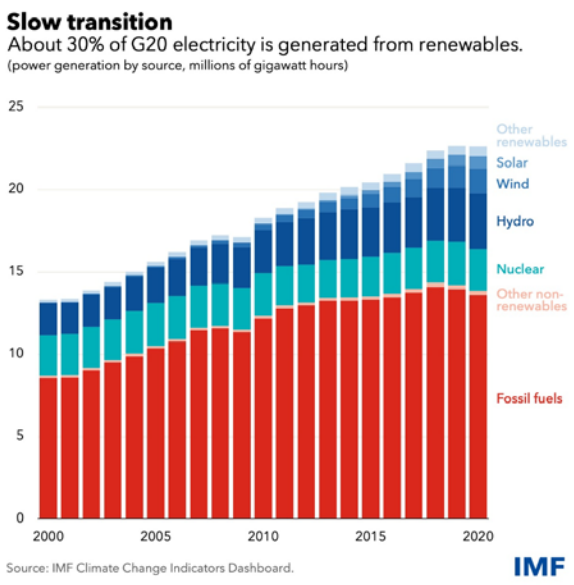
Physical Risks associated with Climate Change are the Highest in Africa

Mainstreaming Natural Capital Statistics at the IMF

The quarterly GHG emissions permits the IMF to better monitor progress towards targets in "real-time" and link economic activity with environmental impacts.

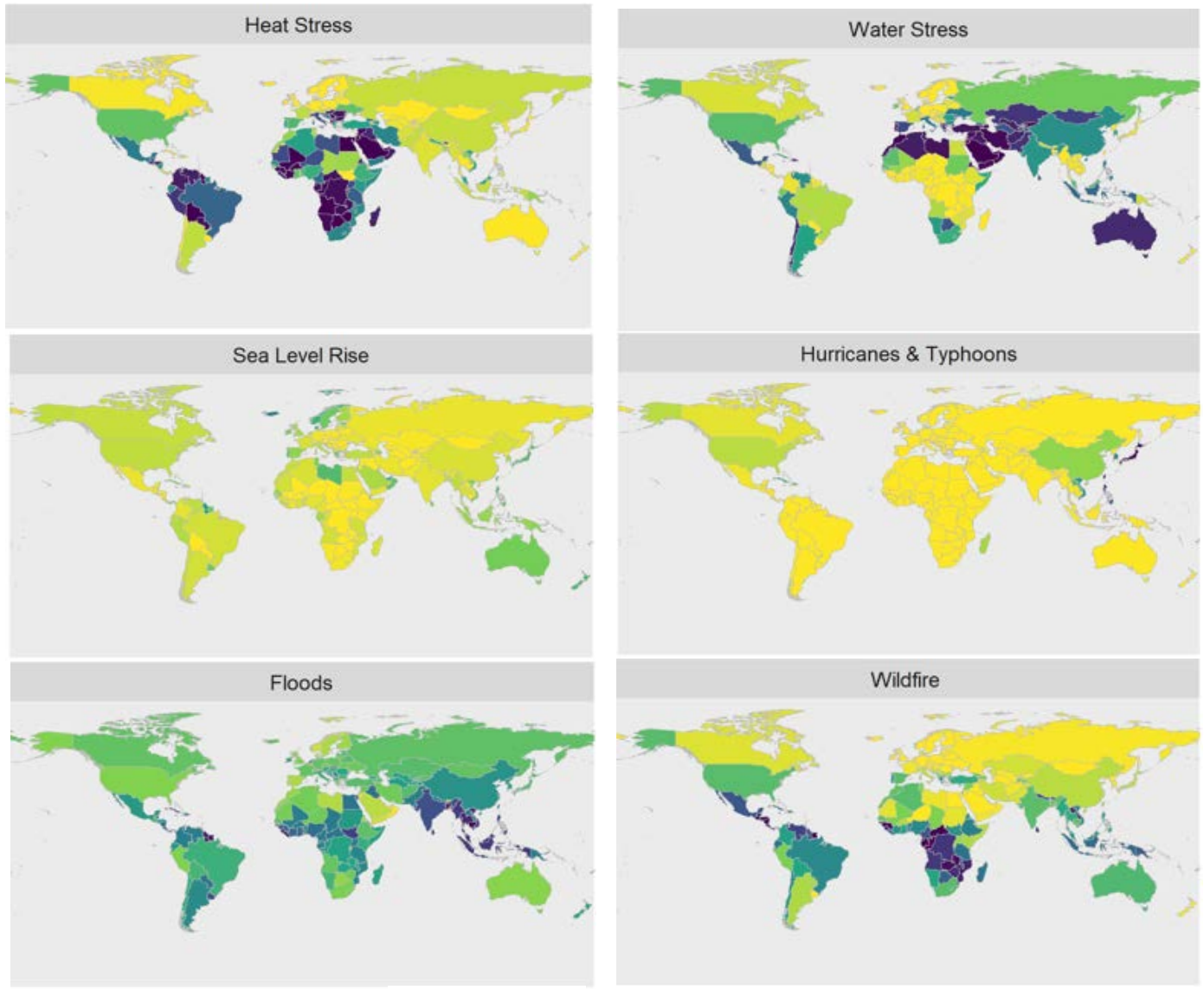


G20 Data Gaps Initiative



G20 Data Gaps Initiative

Data Gap
Rec. 1 Greenhouse Gas Emission Accounts and National Carbon Footprints
Rec. 2 Energy Accounts
Rec. 3 Carbon Footprint of Foreign Direct Investment
Rec. 4 Sustainable Debt and Equity Financing
Rec. 5 Physical and Transition Risk Indicators
Rec. 6 Government Climate-Impacting Subsidies
Rec. 7 Mitigation and Adaptation Current and Capital Expenditures



GDP at Risk by Climate Hazard

Sources: Moody's ESG Solutions; and IMF staff calculations.

Thank You