Open-Source Climate (OS-C)
Overview
Tapping the Massive Power of
Open Source to Accelerate the
Climate Transition with Better
Data and Analytics

May 2023





## Members & Partners

#### PREMIUM MEMBERS







#### **GENERAL MEMBERS**





















#### **ASSOCIATE MEMBERS**













#### **PARTNERS & DATA PROVIDERS**



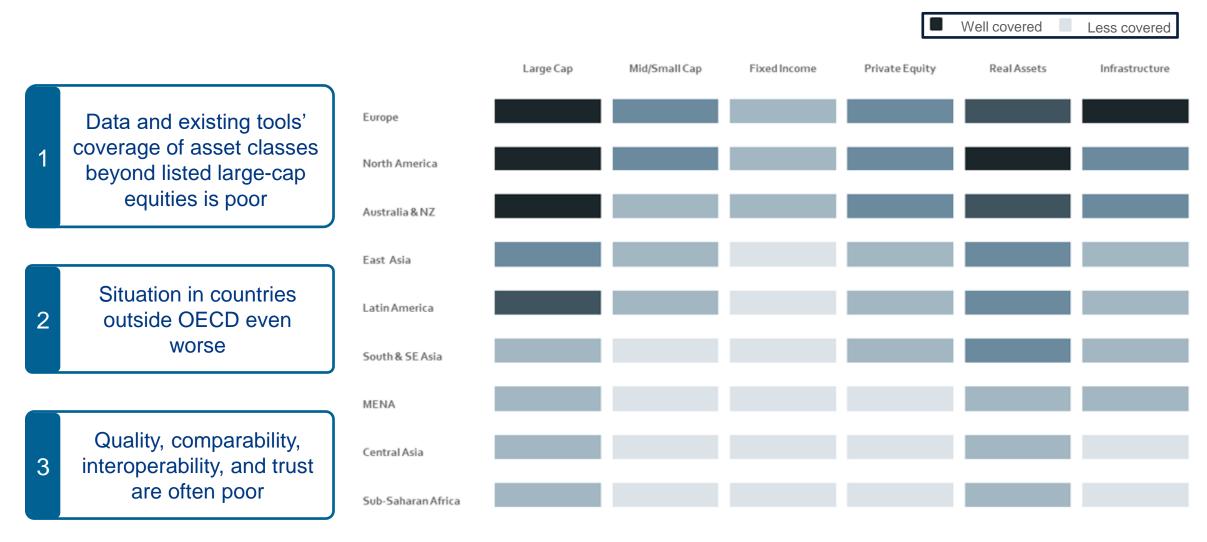








# Problem: investors lack data coverage, quality, interoperability required for scaling climate impact



#### OS-C proposes concrete measures to address climate risks and opportunities



tools to drive change

Governments

## Solution: OS-C is uniquely able to breakthrough by...



## building a world-class shared platform ...



## through community collaboration ...



## that is **truly open source**!\*



Employs cutting edge technology architecture, IT backbone, and "data as code" approaches



Builds trust through publicly transparent governance, open meetings, open dialogue



Linux Foundation governance structure and licensing enable sharing of effort, cost, and intellectual property.



A "public utility" of data and tools that can interact easily with private data and tools



Combines know-how and aligns interests among stakeholders – regulators, investors, banks, NGOs, academia



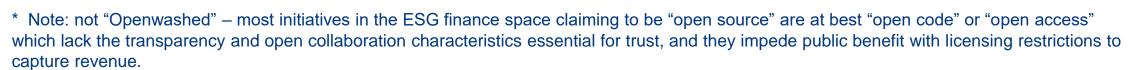
Data as code, accurate data provenance, interoperability



More accurate and forward-looking climate and ESG metrics as public good



Translates science & evolving accounting standards and methodologies into code



# OS-C operating model leverages open source principles

**COMMUNITY INPUT** 



**PLATFORM** based on Red Hat's Operate First



**SHARED ADVANTAGES** 



Business leaders set goals



Data providers offer data and determine access

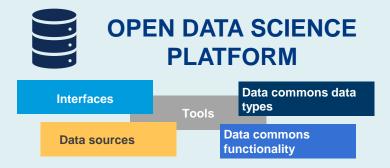


Develop and deploy models and tools



Monitoring and Management incl. review and audit before making updates

"Trust open communities with running and managing applications and infrastructure"



 Total open source visibility and participation in the configuration and deployment managed by OS-Climate



Maximal reliability and transparency



Increased scalability



Public record of all configurations and community discussions



Share costs, intellectual property, and effort

# OS-C: 3 main building blocks for a game-changing solution





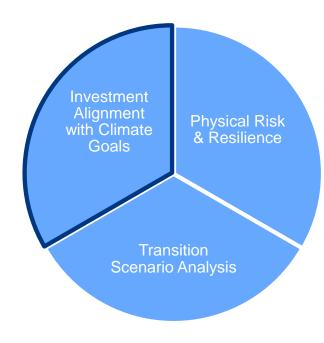




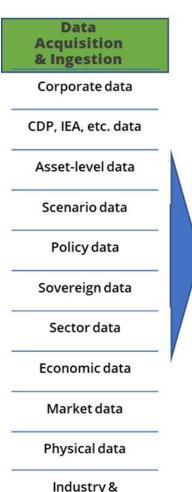
Climate factor data

Platform Infrastructure

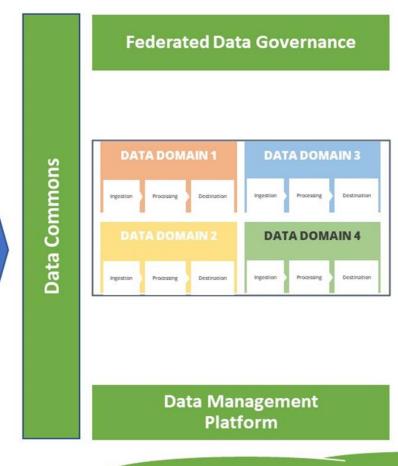
Company data

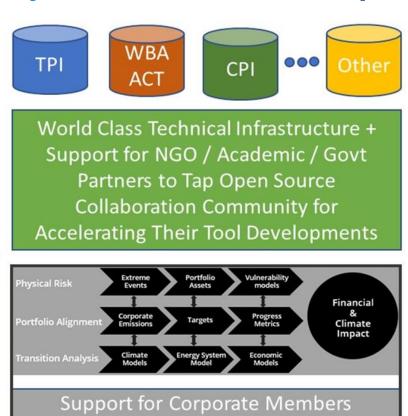


#### Data & Analytics Public Utility >> Global Impact



Technology data





**Developing Open Source Tools** 

USERS INCLUDE

> The Public

Net Zero Alliance Members

CA100+ and other Corporates

Comparison Engine

**Fool and Data** 

with Non-Technical User Interface

**IGOs** 

Policymakers & Regulators

NGOs, Scholars, Researchers

OS-Climate Cloud-Based Global Platform

**IMPACT: Closing the Data Gap** >> faster financial institution exit from laggards and reallocation into leaders + more effective investor and public engagement + clearer risk and incentive pricing >>> informs corporate strategy and planning >>> drives investment in resilience and Net Zero >>> **Accelerated reduction of Gigatons CO2E** 

Measure ROI by accelerated emissions reductions & resilience investment

#### OS-C's Public v. Private Benefit

#### **Public Good**

- Free, easy-to-use point of access to public data required for climate-aligned finance + advocacy.
- Federation services, connecting wide range of academic, Govt, NGO sources to financial decisionmaking.
- High Trust –
   independent
   scientific review as
   part of governance.

#### **Joint Benefit**

- Tools built by private sector independently but verified as science based & free for public uses (e.g., engagement, policy).
- Open collaboration space uniquely able to help the climate-finance community speed up convergence on, and implementation of, methods and standards.
- Transparently developed comprehensive roadmaps + model methodologies.

## Private Partnership

- Tools designed for institutional requirements for meeting Net Zero finance. Investment, and risk management (physical, transition, alignment, etc).
- Ability to leverage
   Data Commons with
   proprietary and
   licensed data
   Technical FTEs
   committed by
   members to jointly
   build solutions.

Measure ROI by speed and scale of net-zero aligned decisions and projected GHG mitigation & resilience impacts

Serve smallto-medium sized orgs & Global South



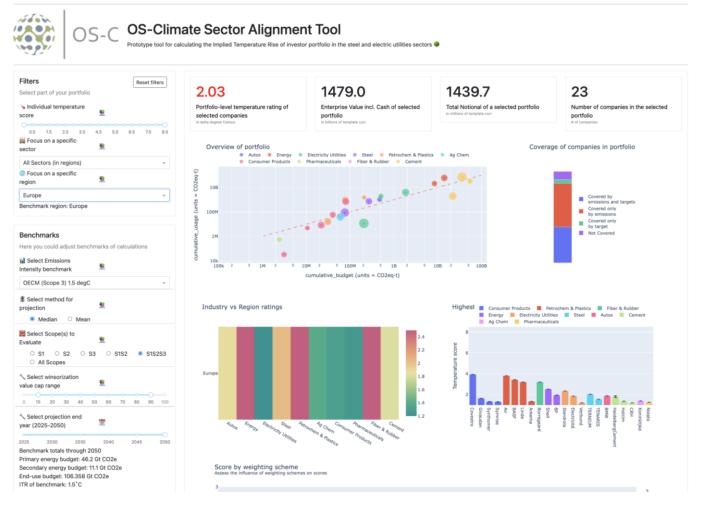
#### Sector Alignment Tool (SAT) -- Allianz Lead

Enable climate-aligned portfolio construction, securities selection, corporate engagement, etc.

# Tailored analytics for selected corporates across:

- Sectors (defined in benchmarks)
  - Regions (defined by user data.
- mapped to benchmarks)
- Scopes (S1, S1+S2, S1+S2+S3, etc.)
- Time horizon 2025-2050
  - Aggregation types (e.g. weighted average,
- enterprise value weighted etc.)
- և Scenarios (e.g. OECM, TPI)

#### SAT Tool generates portfolio level scores across different climate scenarios, sectors, and regions

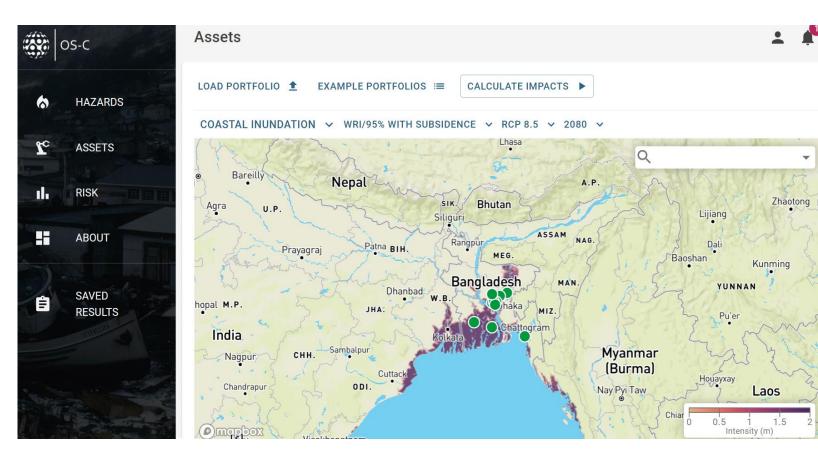




#### Physical Risk & Resilience (PRR) -- BNP Paribas Lead

#### Open-source models & end-to-end tools for range of potential use cases

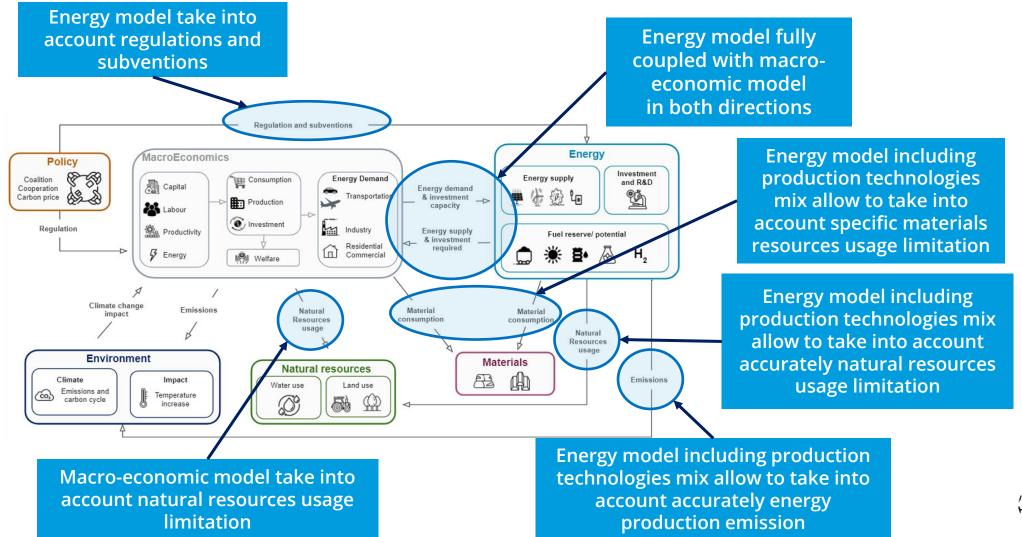
- Enhancing knowledge within organizations
- Origination of loans & investments
- Portfolio risk measurement
- Disclosures
- Resilience & adaptation measurement & finance
- Operational Risk
- Public benefit uses such as assessing risk & resilience opportunities for communities, infrastructure, crops, etc.





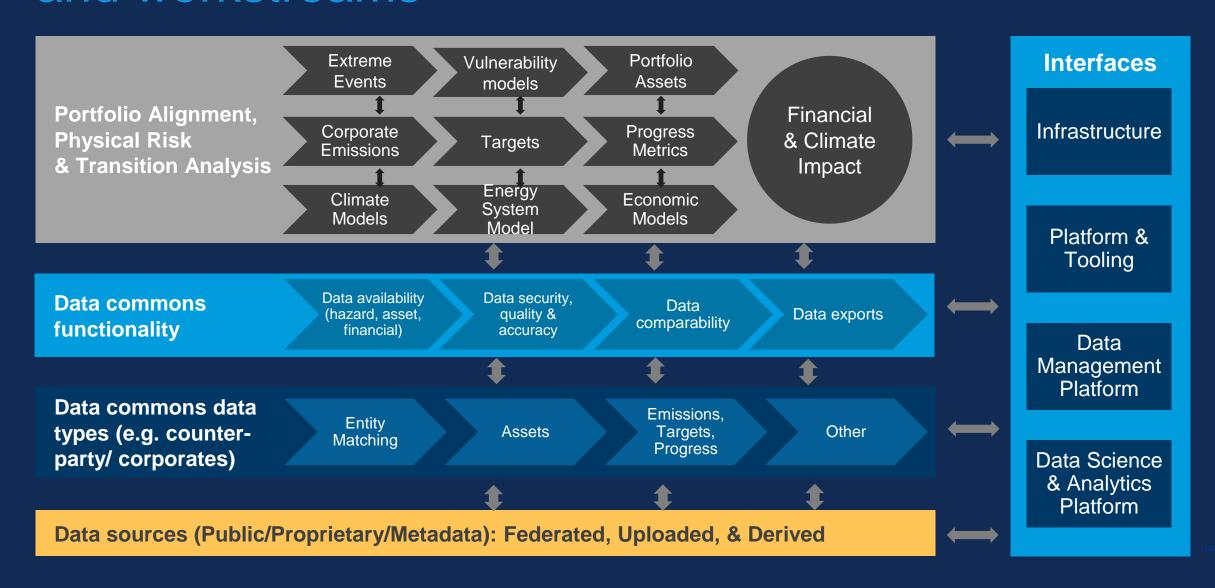
#### Transition Analysis Modeling Platform -- CapGemini Lead

Explore sustainable transition scenarios to enable transition-aligned strategy & investment decisions for corporates, financial sector, & governmental / intergovernmental agencies

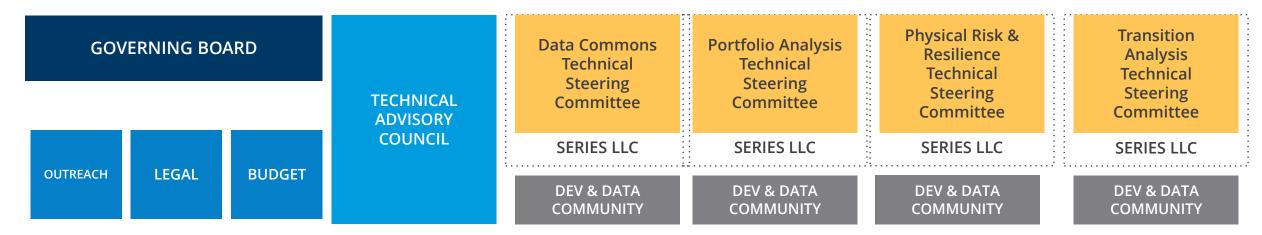


## APPENDIX

# OS-C is platform of interconnected components and workstreams



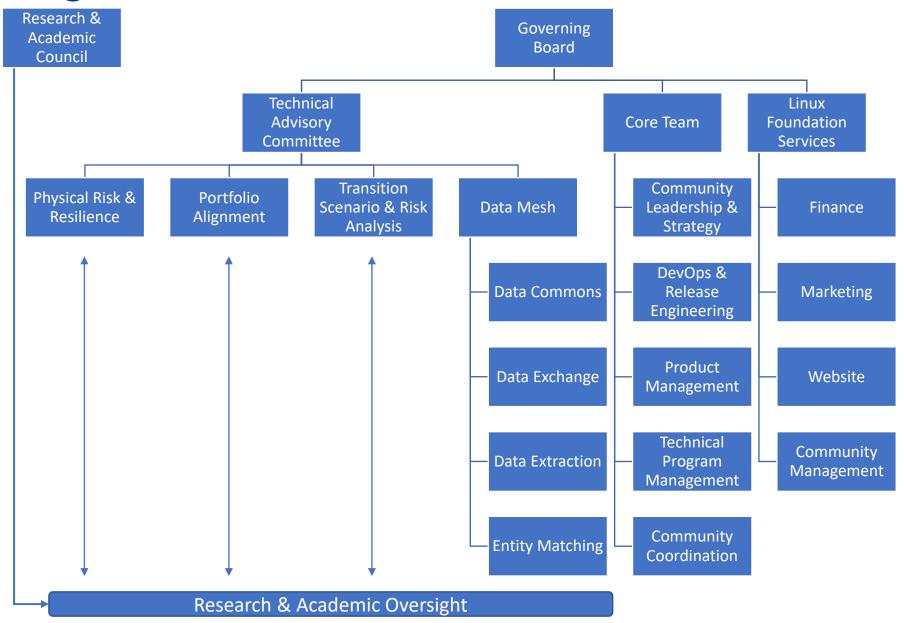
#### Governance structure and business model



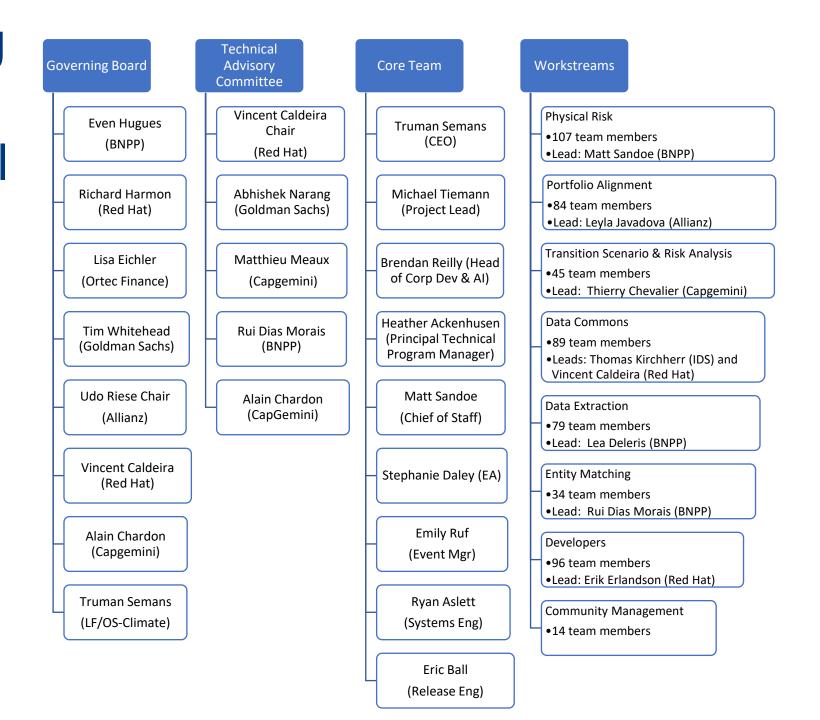
Business model: non-profit 501(c)(6) business association under the Linux Foundation (largest organizer of open-source tech initiatives globally); platform management and development funded by annual member fees plus philanthropic grants.

- Governing Board (fee-paying members + Academia, IGO, NGO) decides strategy, priorities, & budget.
  - ◆ Premier Membership: \$100K/year; General Membership \$30K/year; Associate Membership (Academia, IGO, NGO): \$0K/year
  - Meets every 3rd Wednesday of the month
- Technical Advisory Council (TAC) sets technical vision, facilitates collaboration among the Technical Projects, and recommends budget and technical decisions to Board.
  - ◆ Comprised of TSC chairpersons and Premier Members' technical delegates.
  - ♦ Meets 2nd and 4th Monday of the month
- Technical Steering Committees (TSCs) is responsible for technical oversight of each Project.
  - ◆ Data Commons Charter: https://docs.google.com/document/d/1yLL3fBkwe\_EC1EOtBHV7mAThIDVSA5dQnkl4ljnv0el/edit?usp=sharing
  - ◆ Physical Risk & Resilience Charter: <a href="https://docs.google.com/document/d/1TiHw4KL2sQIdUsvkKq0Eg-ju5T681nQC/edit?usp=sharing&ouid=111309013911865667965&rtpof=true&sd=true">https://docs.google.com/document/d/1TiHw4KL2sQIdUsvkKq0Eg-ju5T681nQC/edit?usp=sharing&ouid=111309013911865667965&rtpof=true&sd=true</a>
  - ◆ Portfolio Alignment Charter: https://docs.google.com/document/d/1I5Sdz0YODYA8uLO4NHMykYLtOsUHI5nK/edit?usp=sharing&ouid=111309013911865667965&rtpof=true&sd=true
  - ◆ Transition Analysis Charter: https://docs.google.com/document/d/1oApdAxwjM8 TCeHFgBE8GJp-JOeM6U21/edit?usp=sharing&ouid=111309013911865667965&rtpof=true&sd=true

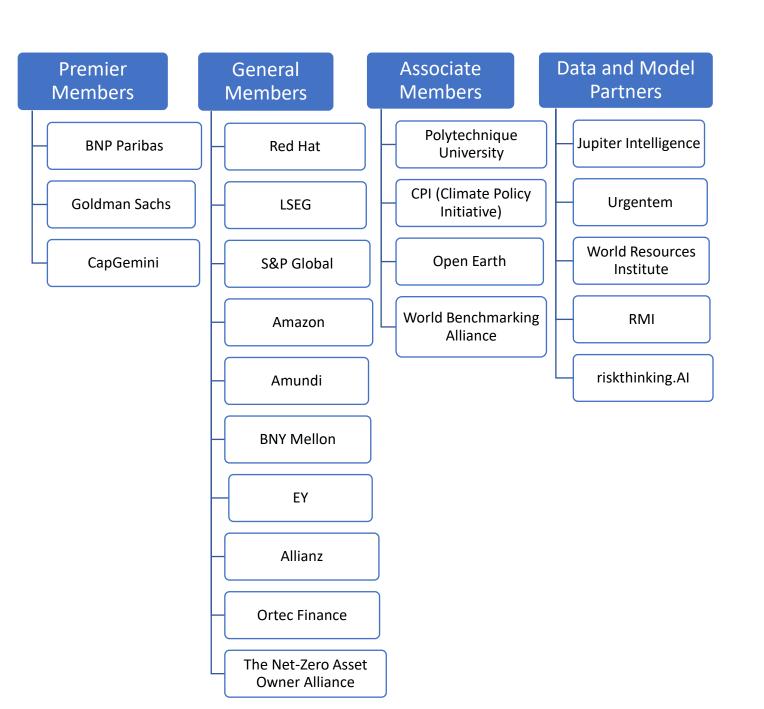
#### **OS-C Org Chart**



## OS-C Org Chart --Personnel



# OS-C Members & Data Partners



#### Research & Academic Council's Role

- An independent body whose governance role is set forth below and in the applicable charter for each Technical Project.
- Ensures that OS-Climate's data and tools continue to be science-based and to meet the highest standards of scholarship in the fields relevant for climate-aligned business and finance.
- Reviews key modeling methodological choices and assumptions to ensure that these align with current, peer reviewed scientific studies and scholarship.
- Helps Technical Projects identify and attract excellent scholars and experts to advise on, and contribute to, the Projects' detailed development work on data and tools.
- Advises the Governing Board on strategically important developments in the academic and research community, including relevant topics of debate, research projects, and initiatives.
- Anchor member of RAC Selection Committee: Rosina Bierbaum, Chair of the Global Environment Facility Science and Technical Advisory Panel, <a href="https://www.moore.org/people-detail?personUrl=bierbaum-ph.d">https://www.moore.org/people-detail?personUrl=bierbaum-ph.d</a>