

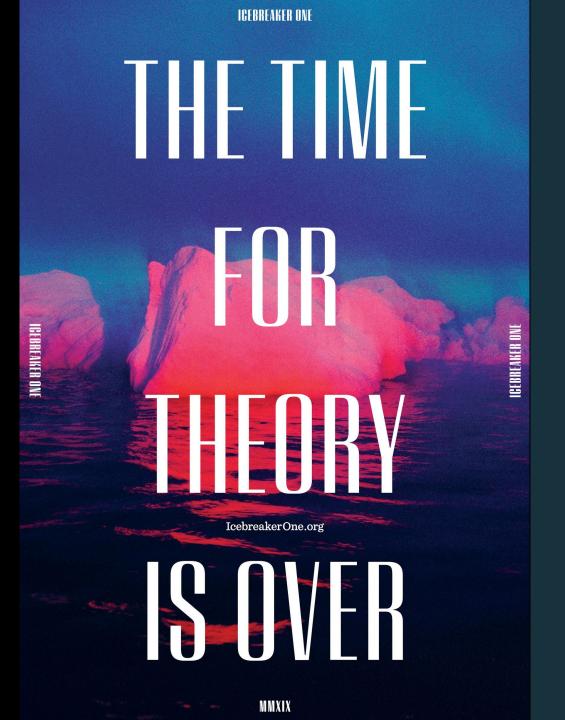
How data can make the transition to net zero a reality

London Climate Action Week Chatham House 29th June 2022 10:30am

climate arc







Access to most of the world's data is restricted.

This makes it hard to direct **investment** towards material net zero.

We are creating a web of net-zero data

Connecting **finance**, **industry** and **environmental** data.

Making data work harder to deliver net zero.



IB1

Understanding the data spectrum

LOW FRICTION

LOW

OPEN DATA

Open licence, low friction

SHARED DATA

Preemptive licence

Controls

CLOSED DATA

Not shared or bilateral licence. High friction. Open Data (any-to-any) can be used by anyone for anything for free. (e.g. Creative Commons, Open Govt. Licence)

Shared Data (many-to-many) has a preemptive licence for limited usage. (e.g. 'data as a service' with restrictions on use/audience)

Closed Data (some-to-some) uses custom contracts between actors. (e.g. bilateral contracts for a specific use/audience or that is not shared at all)



HIGH

Risk

LOW

Understanding data flow across the value chain

PLANNING & COMMITMENTS Targets; planning; investment; regulation; risk reduction; resilience; sustainability **REPORTING & MONITORING** DATA Disclosure; progress; ratings; tracking; utilisation; capacity; insights **DEMAND ANALYTICS & TOOLS** Risk identification; pricing; modelling; forecasting; optimisation; hazards; exposure **DISCOVERY AND ACCESS INTERFACES** Search and access for both humans & machines (e.g. via open APIs) **PUBLISHING & ACCESS RULES** DATA Standards & licensing that enable search, access control for open or restricted use of data **GOVERNANCE PUBLISHING & ACCESS PROCESSES** Web-based solutions for data publishing and access control **METADATA TAXONOMIES ONTOLOGIES MODELS METADATA** DATA **CODIFIED DATA & ALGORITHMS SUPPLY**

IMPACT

DECISIONS

APPLICATIONS

Products & services Analytics & insights Accounting & reporting Modelling & forecasting

DISCOVERY & ACCESS

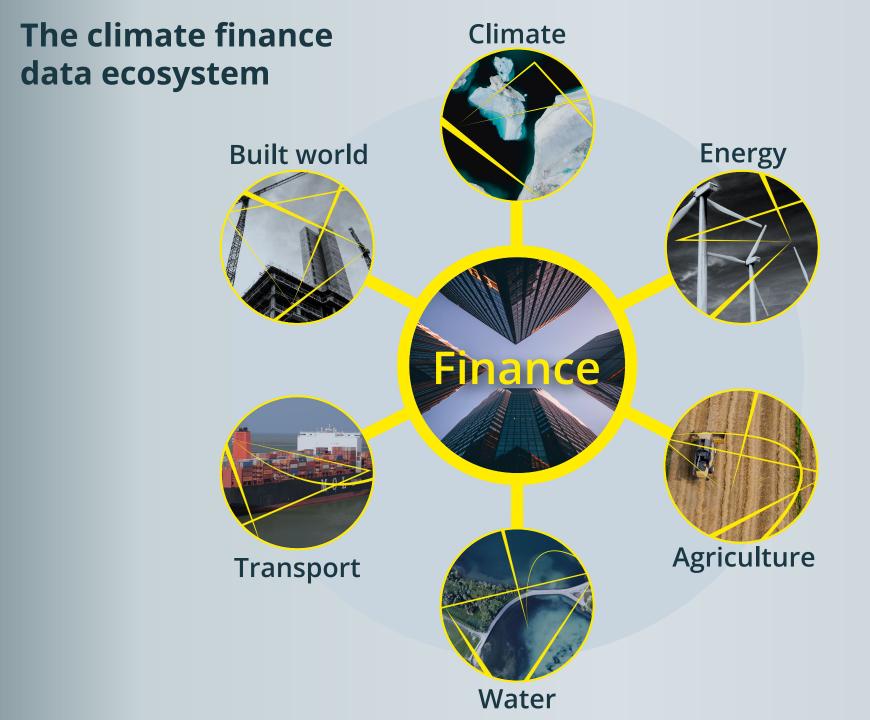
PUBLISHING RULES

Market practices Standards Policy Regulation Certification Analysis outputs are inputs into other parts of the data value chain.

DATA & ALGORITHMS

Methodologies Principles & practices Codified models Technical standards Outputs

Originators; sensors; providers; aggregators; registries



Input data

Asset-level footprint
Operational carbon
Embodied carbon
Geospatial
Environmental
Policy & regulation
Climate science

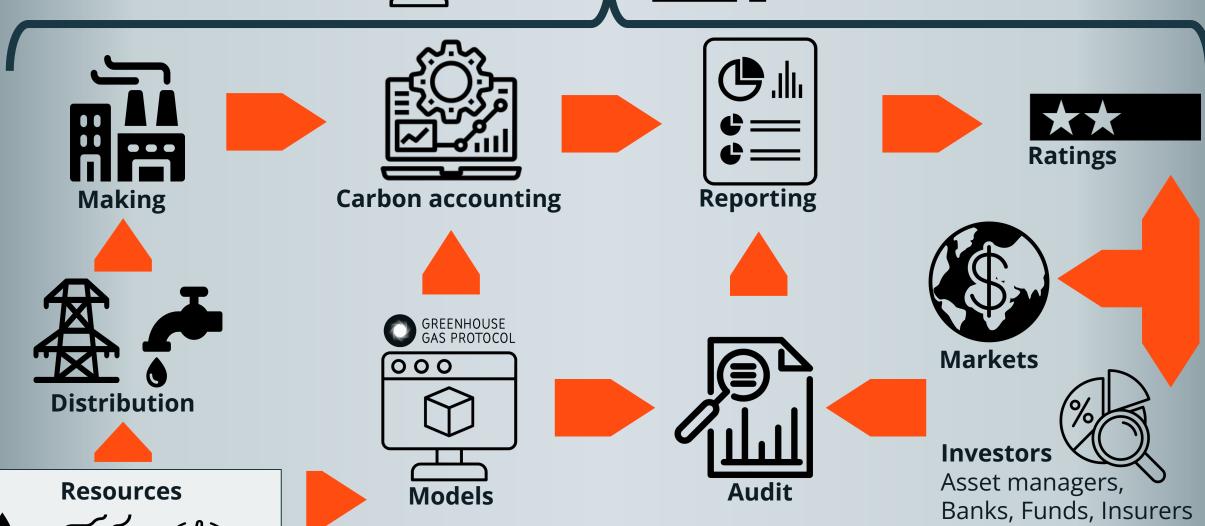
Modelled data

Risks
Hazards
Exposure
Vulnerabilities
Financial stresses

Output data

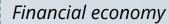
Emissions data Reporting (e.g. TCFD, SFDR) Risk ratings Financial forecasts













How the real economy meets the financial economy

Climate science

National targets Policy & regulation

Resource consumption

Resource distribution

Resource production (e.g. energy, materials, water)

Carbon accounting Risk modelling, forecasting and reporting

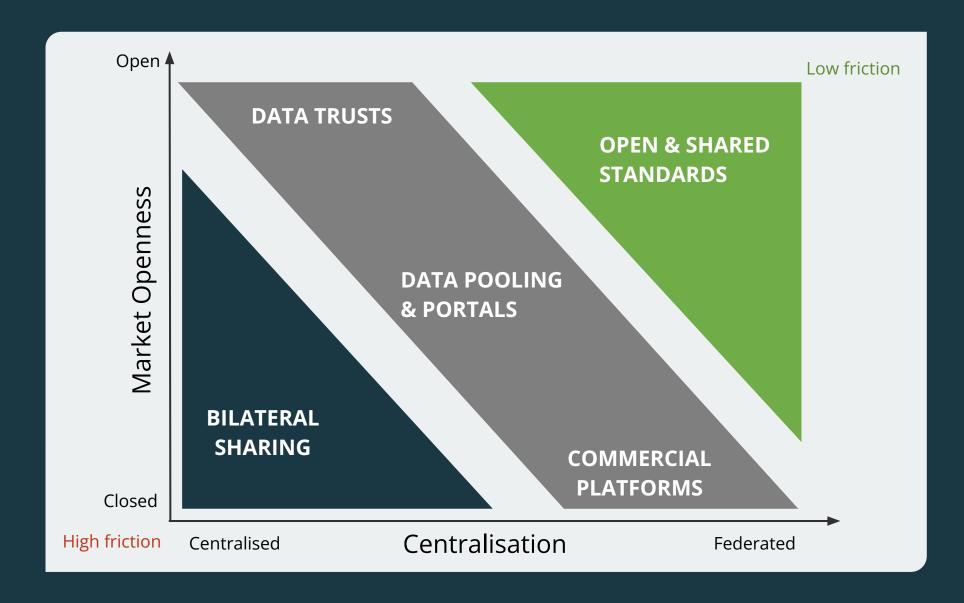
Ratings and risk profiling

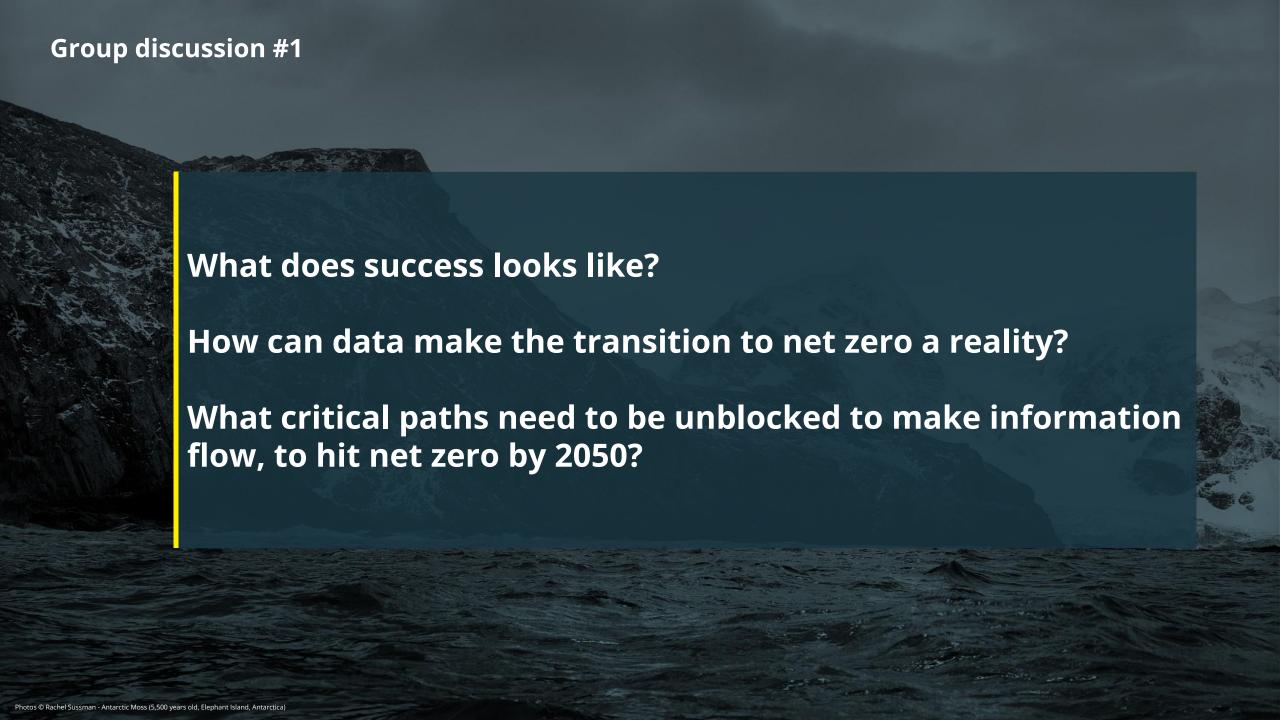
Net Zero investment

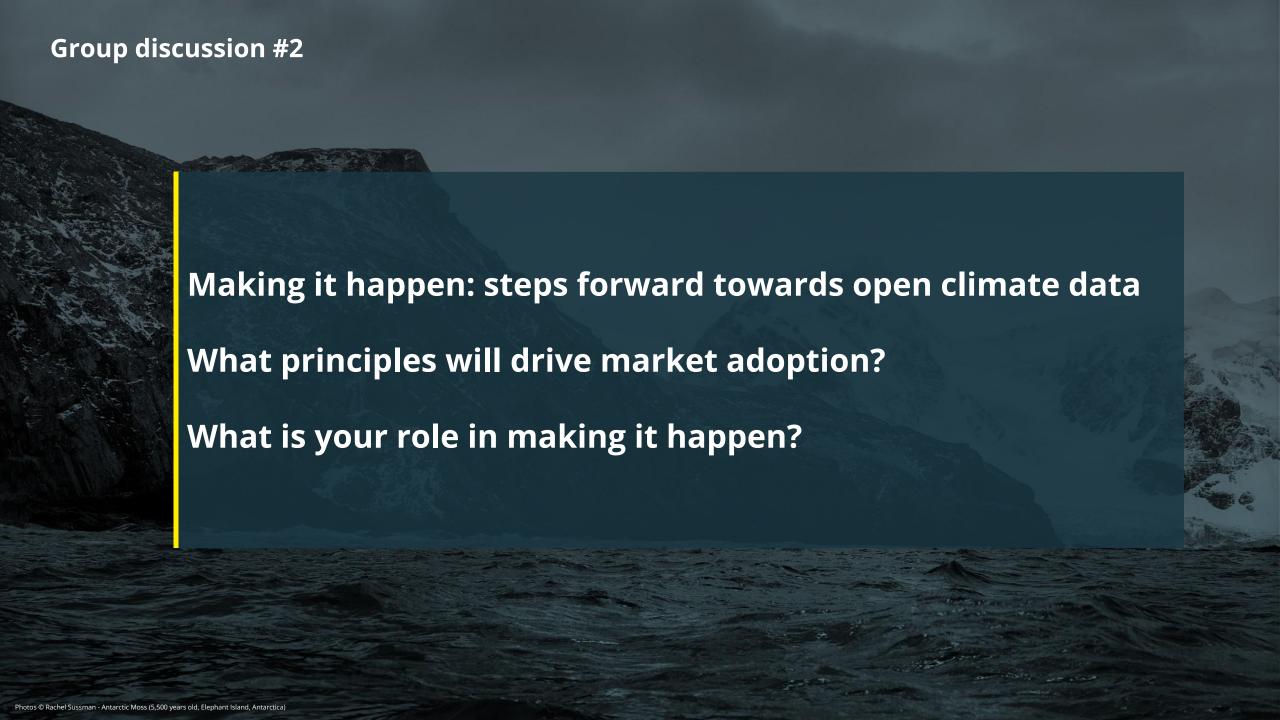
Taxonomies, methodologies, models, standards

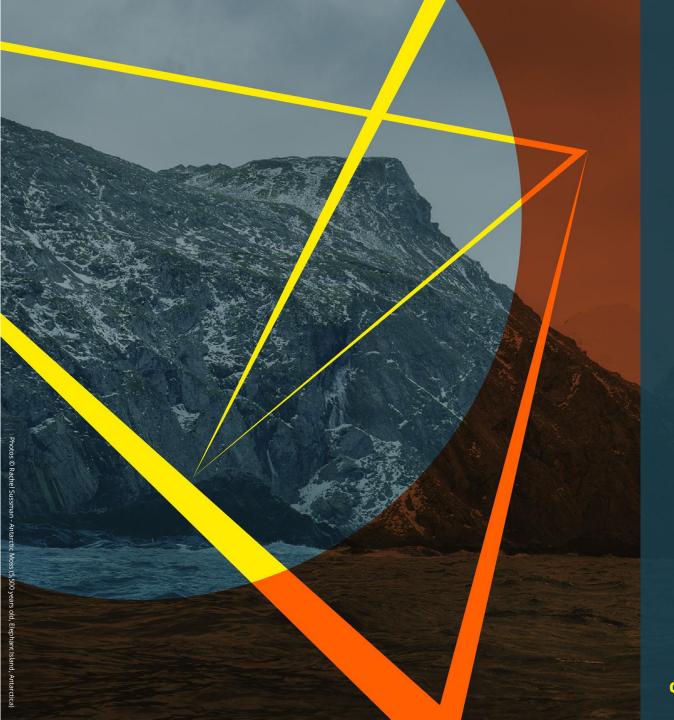
Audit, assurance, compliance

Market approaches for data sharing









Summary & next steps

climatearc.org // icebreakerone.org