

LinkedIn

@GavinStarks

@IcebreakerOne

To go far, we go together.

IB1.ORG

Join us.



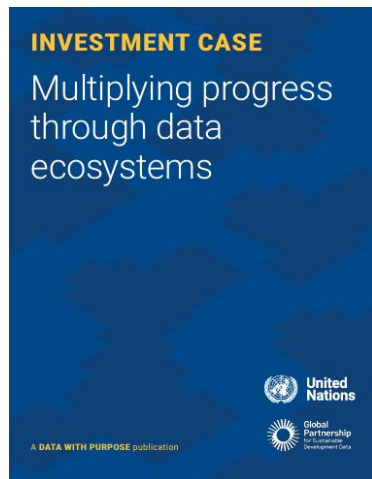
Why are we here?



**THE TIME
FOR THEORY
IS OVER**

Rethinking data

**“investing in data ecosystems yields
a 32x return in economic benefits”**



INVESTMENT CASE

**Multiplying progress through
data ecosystems**

Source: UN and World Bank report

<https://www.data4sdgs.org/index.php/resources/investment-case-multiplying-progress-through-data-ecosystems>

“Half of the world’s data is unused ‘dark data’

Bringing this into the light and making it useful represents enormous value”

Maria Korolov, CIO Magazine, 2022-08-11

**Our challenge is to sustain over 8B people
while hitting peak everything everywhere
(all at once)**

... Energy ... Food ... Water ... Climate ... Waste ...
... Education ... Shelter ... Transport ... Health ... Jobs ...

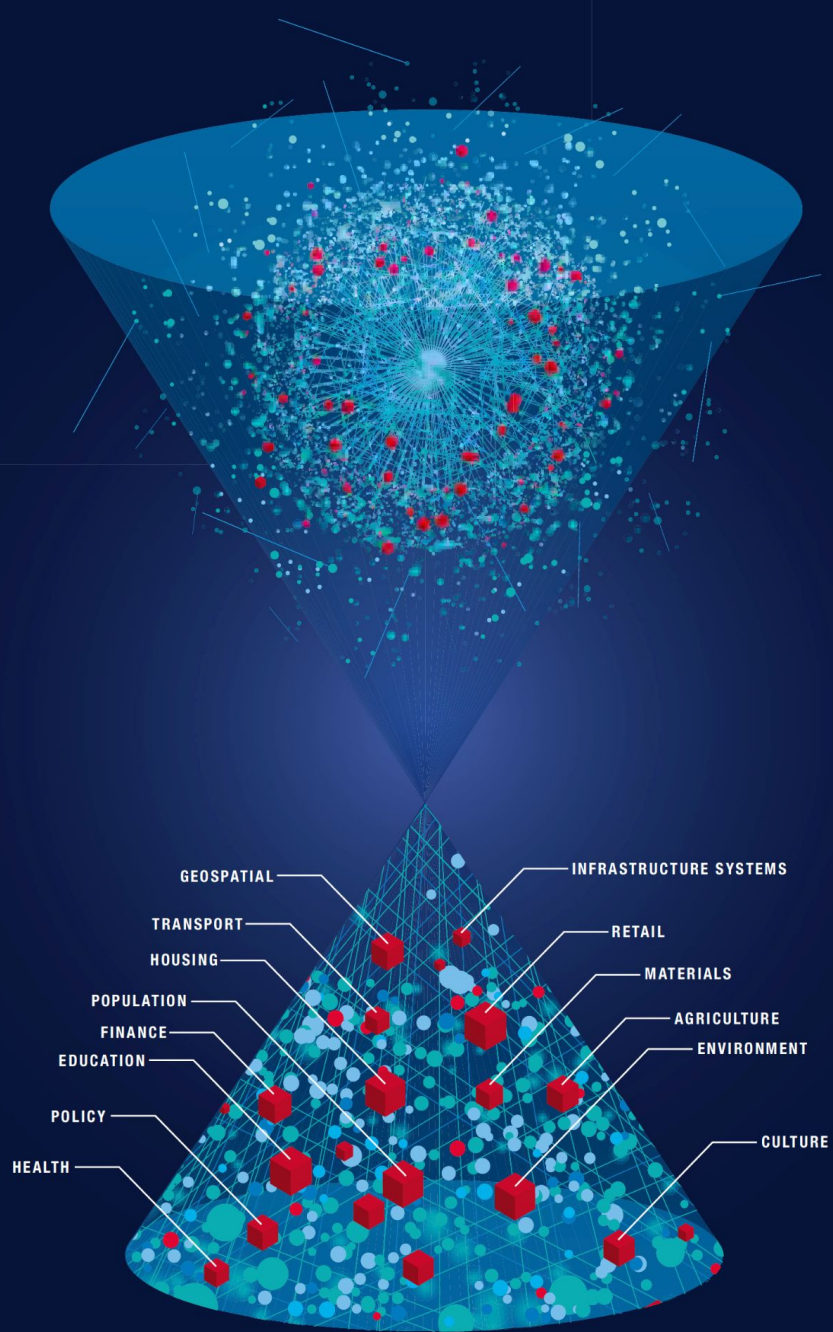


“

Missing **information flows** are one of the most common causes of system malfunction.

Adding or restoring information can be a powerful intervention, usually much easier and cheaper than rebuilding physical infrastructure.

— Thinking in Systems, Donella Meadows, 1993



There are more people online today
than existed when I was born
and more machines online than people

We are - *already* - digital first

What?

Does your
organisational design and culture
reflect a **digital** or a **physical** world?

Data ≠ technology

Data ≠ the new oil

Data unlocks business value

It increases in **value** the more it is **connected**

Bringing stability and trust to data sharing will enable the market to invest

We can't manage what we don't measure.

We can't act on what we don't trust.

Introducing the

Open Banking

Standard

Helping customers, banks
and regulators take banking
into a truly 21st-century,
connected digital economy

Regulated in the UK 2017

Within four years...

- ❑ 500+ fintechs
- ❑ copied in 80+ countries
- ❑ \$20B+ market
- ❑ \$120B projection for 2032

What is a Net Zero data ecosystem?



Input data

- Energy data flow
- Asset-level data
- Operational data
- Embodied carbon
- Policy & regulation
- Geospatial
- Environmental
- Climate science

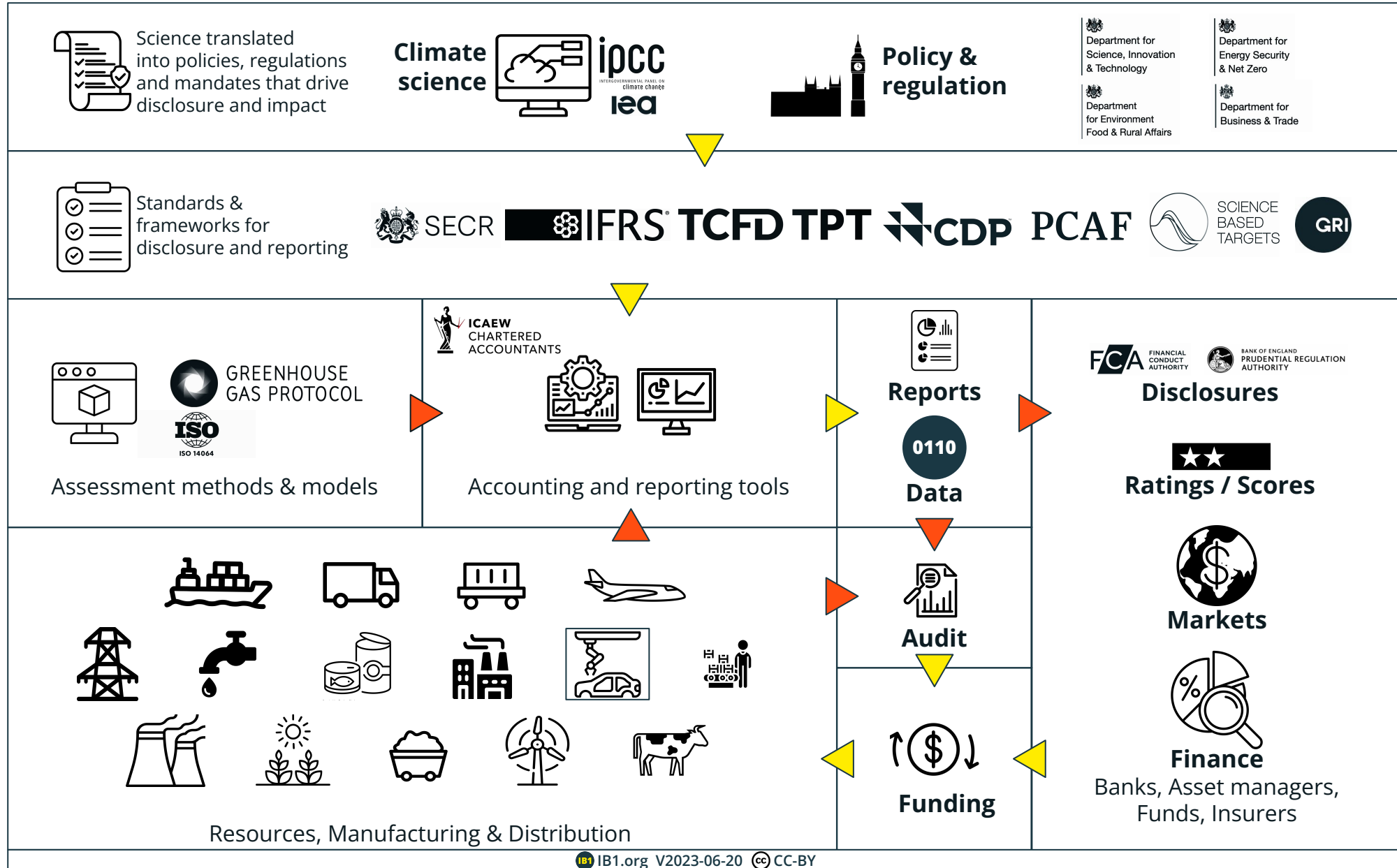
Modelled data

- Flexibility
- Demand response
- Energy efficiencies
- Grid optimisation
- Risks & hazards
- Exposure & vulnerabilities
- Financial stresses

Output data

- GHG/ESG reporting
- Financial risk ratings
- Financial forecasts
- Emissions data

Mapping data flows between the real and financial economies



Example



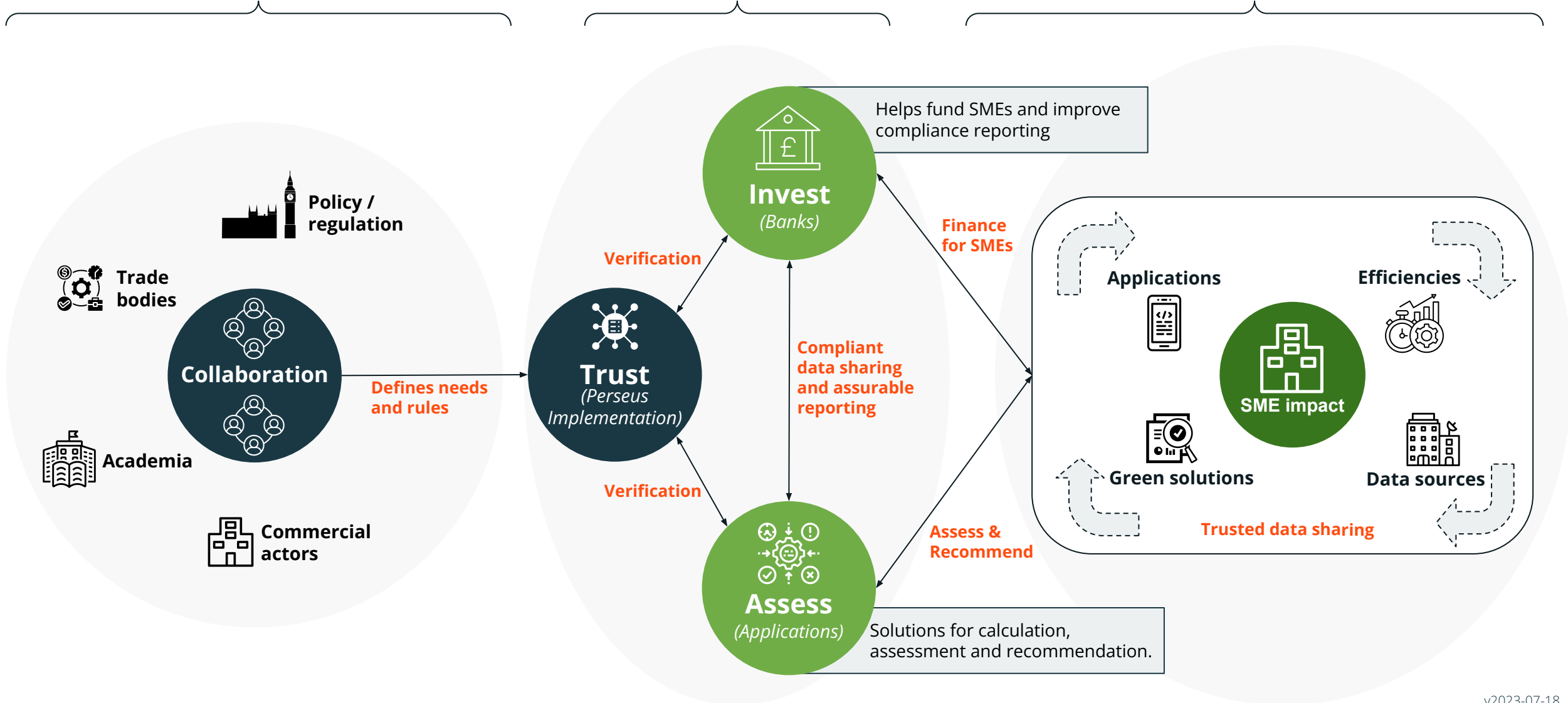
PROJECT PERSEUS

Enabling sustainability at scale with the Perseus constellation

Collaboration to co-define rules

Enabling infrastructure

Open market (users)





Department for
Energy Security
& Net Zero



“Your participation and support is essential to ensure the success of the project. I encourage you to join Bankers for Net Zero and support Project Perseus”,

Rt Hon Graham Stuart MP, Minister of State for Energy Security and Net Zero

INNOVATE | FINANCE



“Innovate Finance is delighted to support Project Perseus. FinTechs include the challenger banks and alternative lenders who provide over half all small business finance in the UK, software and RegTech solutions that enable banks and small firms to measure and report on emissions, and start ups and scale ups who need to measure and reduce their own emissions. Project Perseus is building data solutions that will enable everyone to achieve net zero faster across this ecosystem.”

– **Adam Jackson**, Director of Policy, Innovate Finance



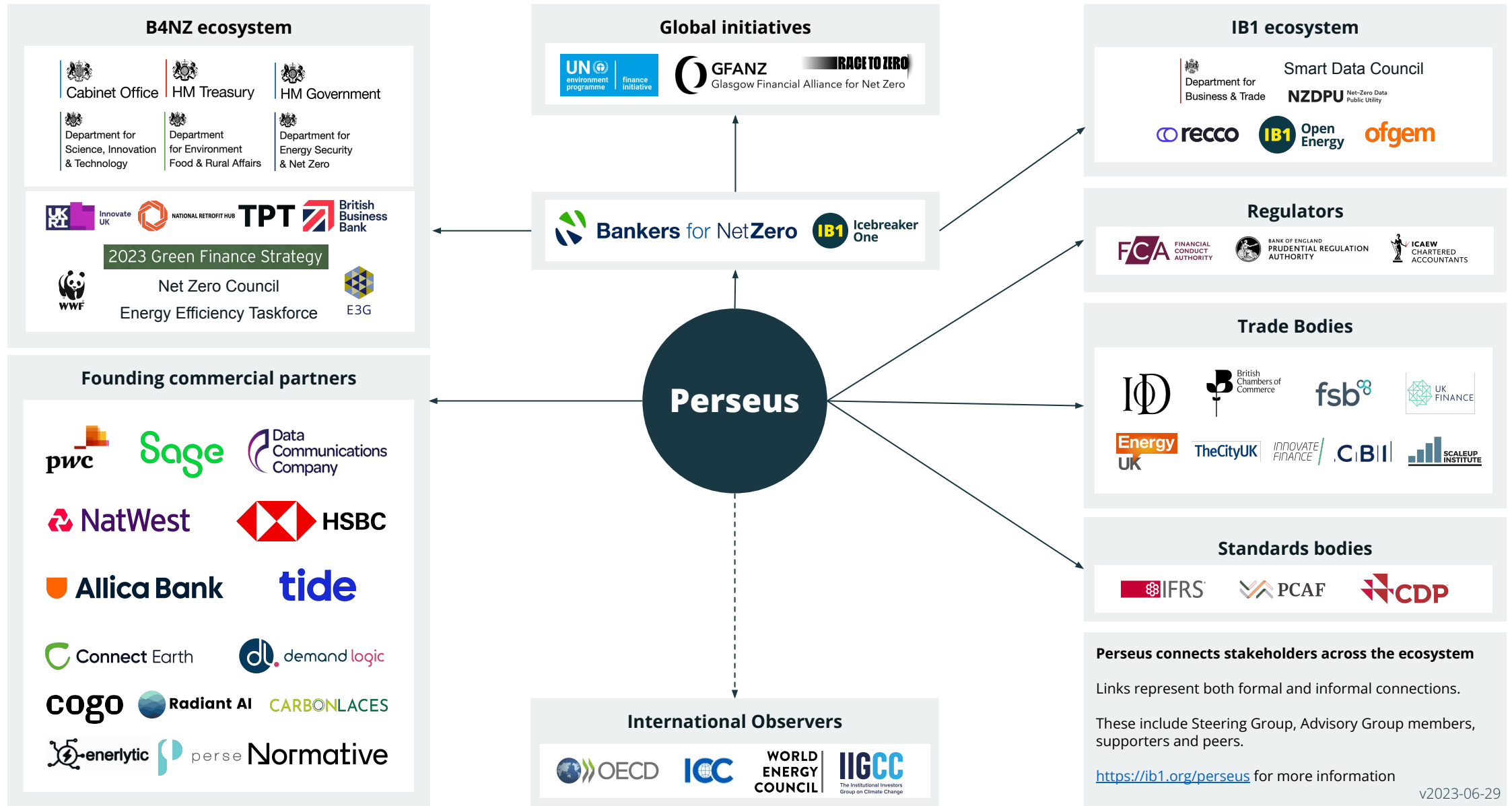
Perseus Steering Group



Observers

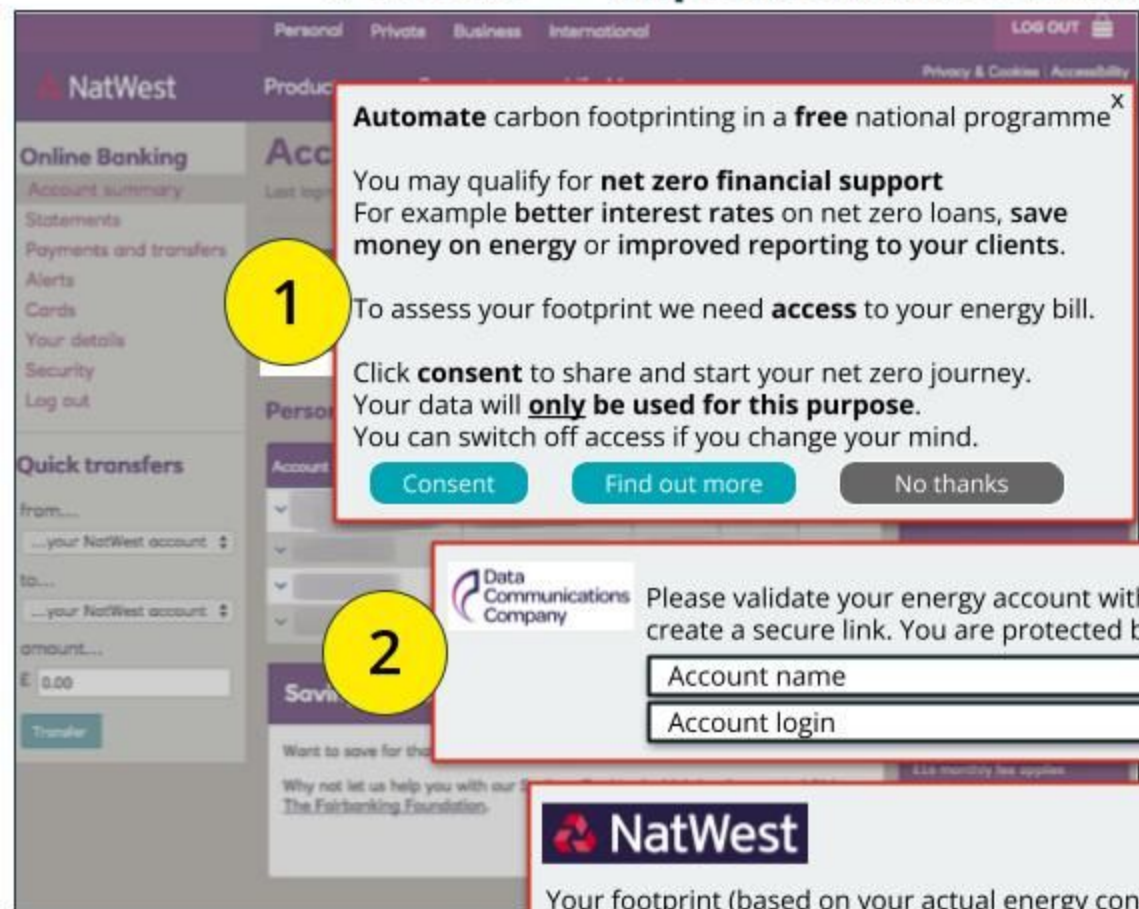


The Perseus Constellation



How?

Perseus — Implementation Example — what might this look like for a user?



1

Automate carbon footprinting in a **free** national programme

You may qualify for **net zero financial support**
For example **better interest rates** on net zero loans, **save money on energy** or **improved reporting** to your clients.

To assess your footprint we need **access** to your energy bill.

Click **consent** to share and start your net zero journey.
Your data will **only be used for this purpose**.
You can switch off access if you change your mind.

[Consent](#) [Find out more](#) [No thanks](#)

2

Data Communications Company

Please validate your energy account with your energy supplier to create a secure link. You are protected by an industry standard.

Account name

Account login

[Connect](#)

3

NatWest

Your footprint (based on your actual energy consumed)

	Energy (kWh)	Carbon (kg)	Info
2023 March:	1,000	413	Baseline
2023 Apr:	900	(371)	Projected with efficiency measures
2023 May:	800	(320)	Projected with tariff amend
2023 Jun:	700	(200)	Projected with heat pump installed

[Next Steps](#) Assured by **pwc** Powered by **Sage Earth**



In this example, a bank (e.g. NatWest), energy company (e.g. SmartDCC) and carbon accounting solution (e.g. Sage Earth) are all part of a **Trust Framework**. The process has been co-designed by all parties, and assured by an auditor (e.g. PWC). **Any company** can join the same framework.

1

The SME user should be able to quickly assess:

1. the potential value to them of getting involved
2. how this might benefit them directly
3. how it might benefit everyone
4. that it will be very low effort for them to start
5. that they are in control

2

This is a replica of the **consent management** process used in Open Banking to connect bank accounts.

Instead this is connecting an energy company account to the bank (or the bank's carbon accounting solution, acting on behalf of the bank).

The user is protected by **Trust Framework** rules that all participants (including government) have co-developed.

3

Using existing accounting systems (e.g. Sage Earth) the bank can begin the customer journey to relevant financial incentives. Other third parties can assure or audit the process to build trust in the whole system.

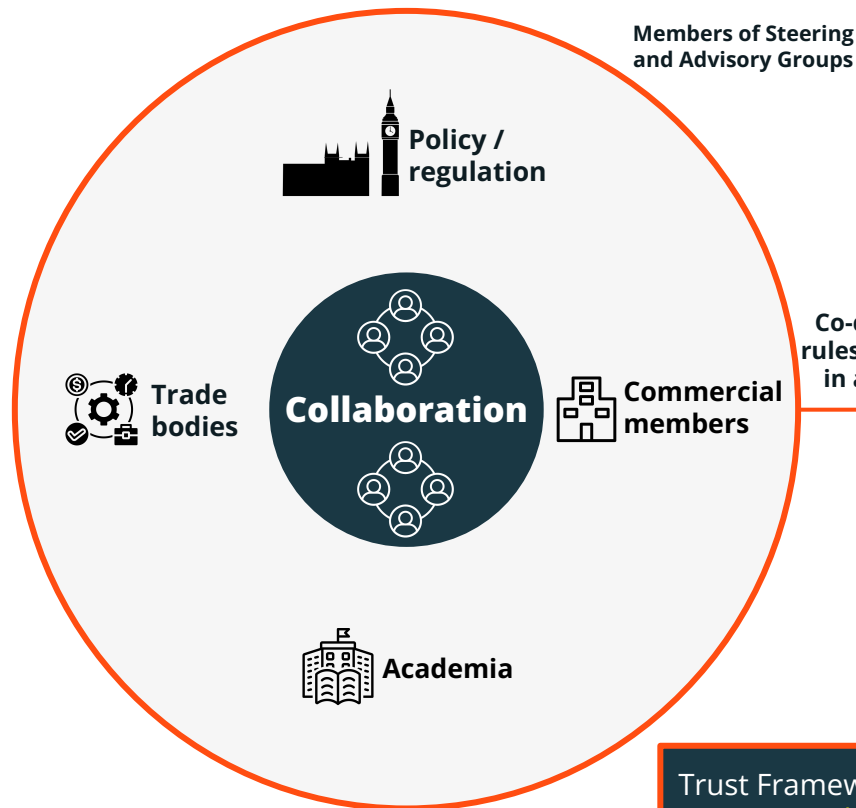
The **Trust Framework** unlocks the data **flow**, not what happens next (e.g. analysis). That's up to the open market.

NB: all brands used here are for illustrative purposes only

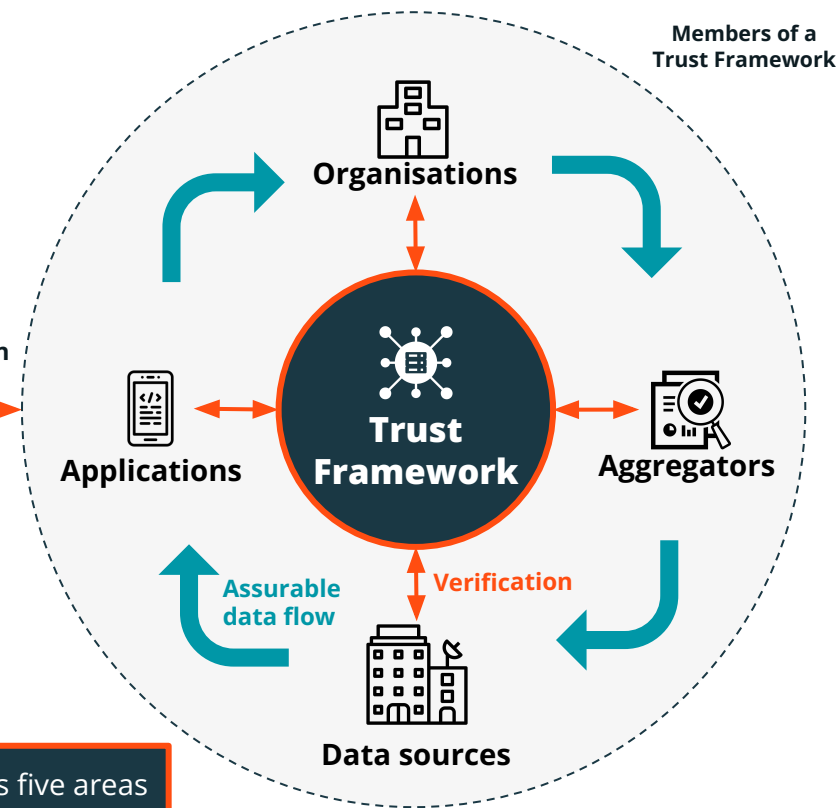
We help you collaboratively design rules that deliver trust, and save you time and money

A **Trust Framework** is an effective way to implement and automate the adoption of **rules** for data providers, aggregators and users, to share data securely at market-wide scale. It enables **assurable data flow** between organisations peer-to-peer and **verifies** that organisations and their data sharing are compliant with the rules.

Collaboration to co-define rules



Open market (data providers, aggregators and users)

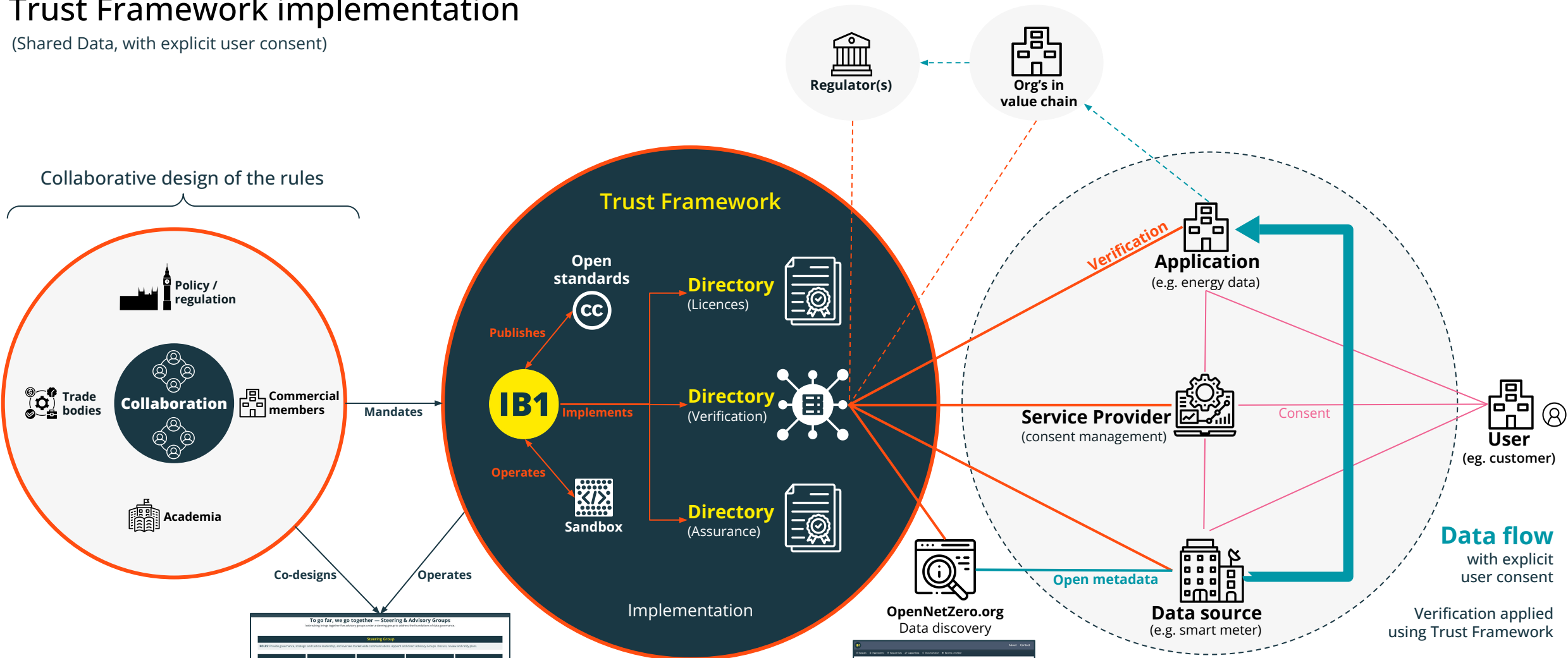


Co-designs and defines rules for implementation in a Trust Framework

- Trust Framework rules address five areas
1. User needs & impact
 2. Technical infrastructure
 3. Data licensing & legal
 4. Engagement & communications
 5. Policy

Trust Framework implementation

(Shared Data, with explicit user consent)



To go far, we go together — Steering & Advisory Groups

Steering Group				
User Needs, Maturity, Impact	Technical Infrastructure, Technical standards & systems	Data Licensing & Legal, Legal enforcement & consent	Engagement & Communications	Policy
<p>Identify user needs, maturity, and impact through user research, surveys, focus groups, interviews, and other stakeholder engagement activities.</p> <p>Identify the maturity of the system and the impact it will have on users, stakeholders, and the wider ecosystem.</p>	<p>Identify the technical infrastructure, standards, and systems required for the system to function effectively and securely.</p> <p>Ensure that the system is built on a secure and resilient foundation, and that it is able to scale and evolve over time.</p>	<p>Identify the legal and regulatory requirements for the system, and ensure that the system is compliant with all applicable laws and regulations.</p> <p>Develop a clear and concise data licensing and legal framework that is fair, transparent, and easy to understand.</p>	<p>Develop a clear and concise communication strategy that is tailored to the needs of the different stakeholders involved in the system.</p> <p>Engage with stakeholders through a variety of channels, including workshops, focus groups, and public consultations.</p>	<p>Develop a clear and concise policy framework that is based on the principles of transparency, accountability, and user control.</p> <p>Ensure that the policy framework is consistent with the system's values and mission, and that it is able to adapt to changing circumstances.</p>

Icebreaking processes
(Steering, Advisory and Working Groups)

Icebreaking
Process to co-define rules through collaborative, multi-stakeholder engagement

Licences
Codified rules (legal, technical, rights, liability, communication, policies)

Verification and Assurance
Tests to what levels organisations and/or datasets are compliant



Trust Framework for data sharing at market-wide scale

- **Cohesive** common rules
- **Interoperable** common processes
- **Legal** framework data rights, liability, redress
- **Controlled** assured, secure, consent management
- **Universal** open to the whole market



**Connect
Don't
Collect**

LinkedIn

@GavinStarks

@IcebreakerOne

To go far, we go together.

IB1.ORG

Join us.

