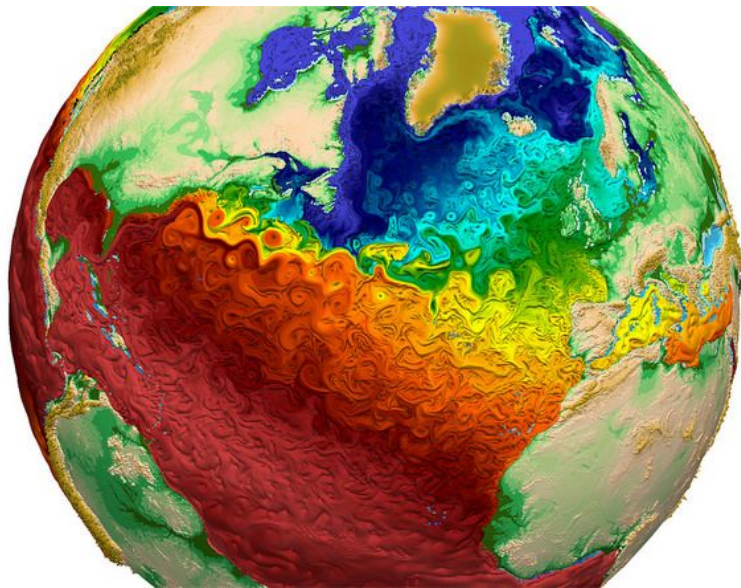


Disrupting the Destruction of our Natural World with **Openness**



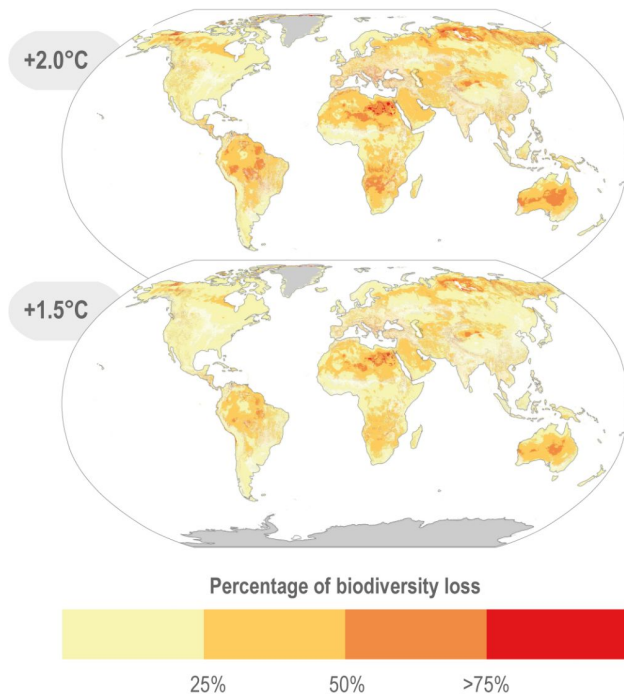
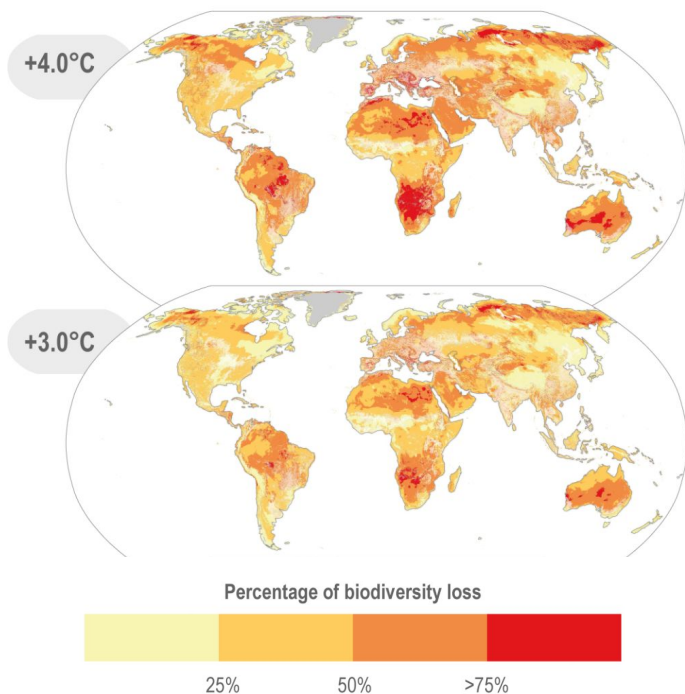
Tobias Augspurger

OpenSustain.tech

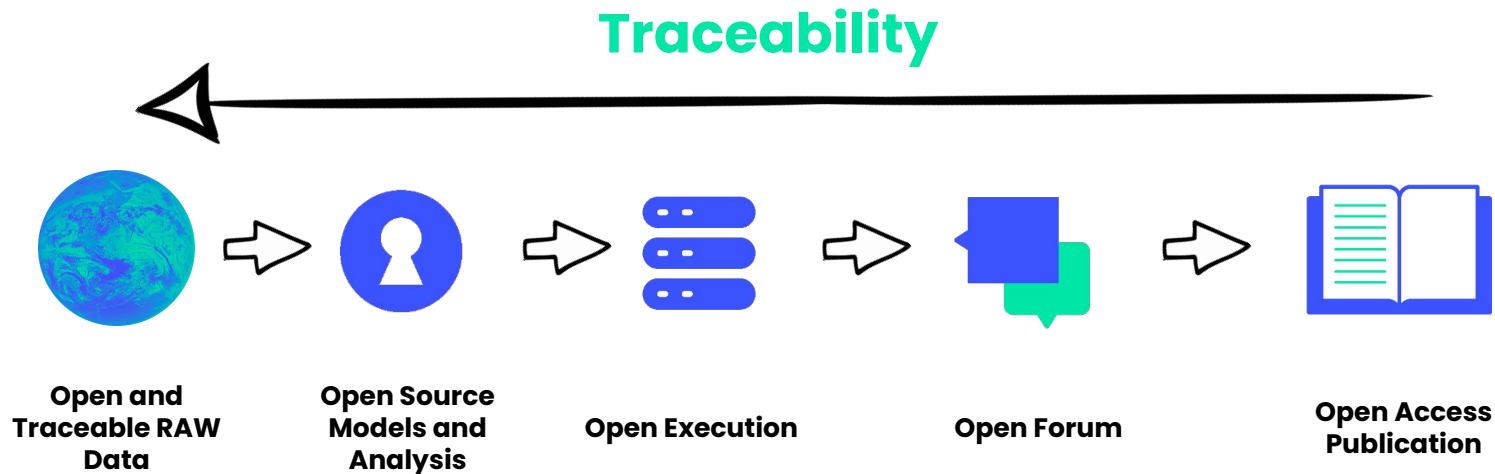
Traceability & Accountability

Image Source: Energy Exascale Earth System Model

Why are these forecasts **trustworthy**?

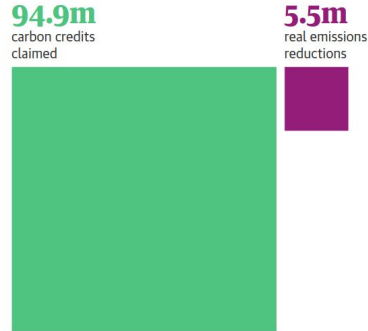


Environmental Facts by Open Science



Open Science creates a shared understanding of sustainability and reveals sustainable intentions.

Pseudo Science in Business Sustainability



Guardian graphic. Source: The Guardian analysis based on a significant percentage of the projects as looked by West et al studies and Verra registry (accessed in August 2022). All figures are estimates. West et al 2023 is a pre-print. Note: Verra's claims versus analysis of independent scientific studies



Core Problem Today: False prophets and false numbers

**Renewable Energy Is
unreliable and too expensive**

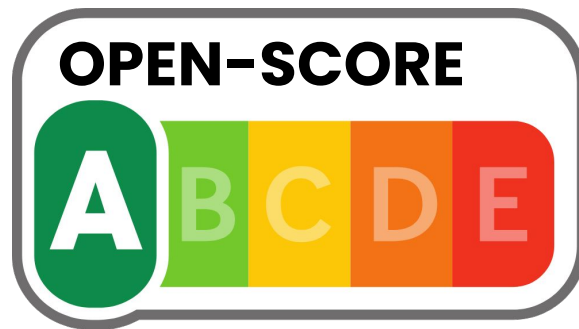
**Climate change is not
a severe threat to humanity**

**Climate change can be
reversed with new technologies**



Openness as a Key Proxy for Sustainability

- Open Access ✓
- Open Data ✓
- Open Source ✓
- Open Execution ✓
- Open Forum ✓



Traceable Sustainability = Claimed Sustainability • OPEN-SCORE

Open Science Labels to Rule them All

Systematic change for the open science assessment of corporate sustainability:

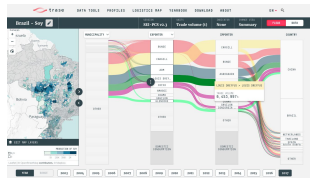
1. **Carbon offset and “carbon neutral”**
2. **Biodiversity offsets**
3. **Sustainable investment**
4. **Sustainable forestry**
5. **Energy planning**
6. **...**



Disclosure of the entire sustainability rating process



GLOBAL
FOREST
WATCH



Get started

```
1.1.1. Import and verify the data
We use the following package as a data source.
We use the following package as a data source.

1.2. Files
The following variables are used in the code.
The following variables are used in the code.

1.3. Sampling the observations
The following variables are used in the code.
The following variables are used in the code.
```

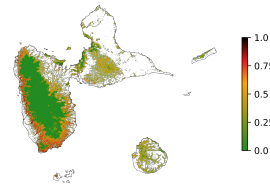


Open Execution in a Jupyter Notebook

```
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```



Global open data platform
on forest condition and
agriculture supply chain

forestatrisk
Python package

Open Execution in a
Jupyter Notebook

Open Forum
to discuss

Spatial probability of
deforestation

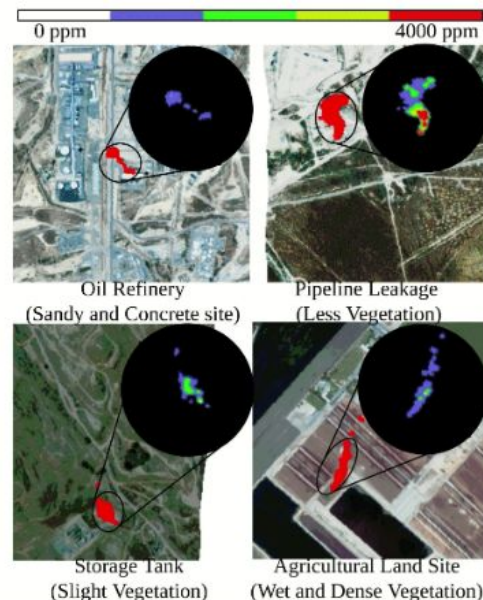


Enforce Open Science in the Fossil Fuel Industry

Provide **traceable** Open Data
about larger point source
emissions.

Tying subsidisation to
traceability and openness
about the environmental
impact.

Create an open source
platform that tracks all the
world's emissions.



<https://github.com/UCSB-VRL/MethaneMapper-Spectral-Absorption-aware-Hyperspectral-Transformer-for-Methane-Detection>