DÉPART DE SENTIER

Growing open data in a changing world: state of the art and approaches

Laurenz Bougan

Brightcon 2026 · Aalborg, 23-25 Sept 2026

Changing faster than our data

DEMAND: NUMBERS BECOME MANDATORY

- CSRD sustainability (EU)
- Product Environmental Footprint (PEF) (EU)
- CBAM (border control)
- ESPR : Digital Product Passport

SUPPLY: THE DATA CHAIN GETS FRAGILE

- AI scraping -> data more gated
- Funding pressure from regulations
- Different nomenclature and formats
- Tracable, verifiable data + methods systemically asked for

Open data: what actually works

PRINCIPLES

FAIR

Findable, **A**ccessible, **I**nteroperable, **R**eusable.

LICENCES

CC-BY · ODbL · ODC-PDDL

Terms of Reuse.

COMMONS

OpenStreetMap · Wikidata

Community Driven

INFRASTRUCTURE

GitHub · Open Source tooling

Versioned releases + OS tools.

The LCA data landscape today

OPEN TOOLS · LICENSED DATA

ecoinvent read by Brightway, openLCA, Activity Browser.
Most people here.

OPEN TOOLS · OPEN DATA

Agribalyse (ADEME) + BAFU UVEK 2026,
Open methods: EF 3.1, etc.

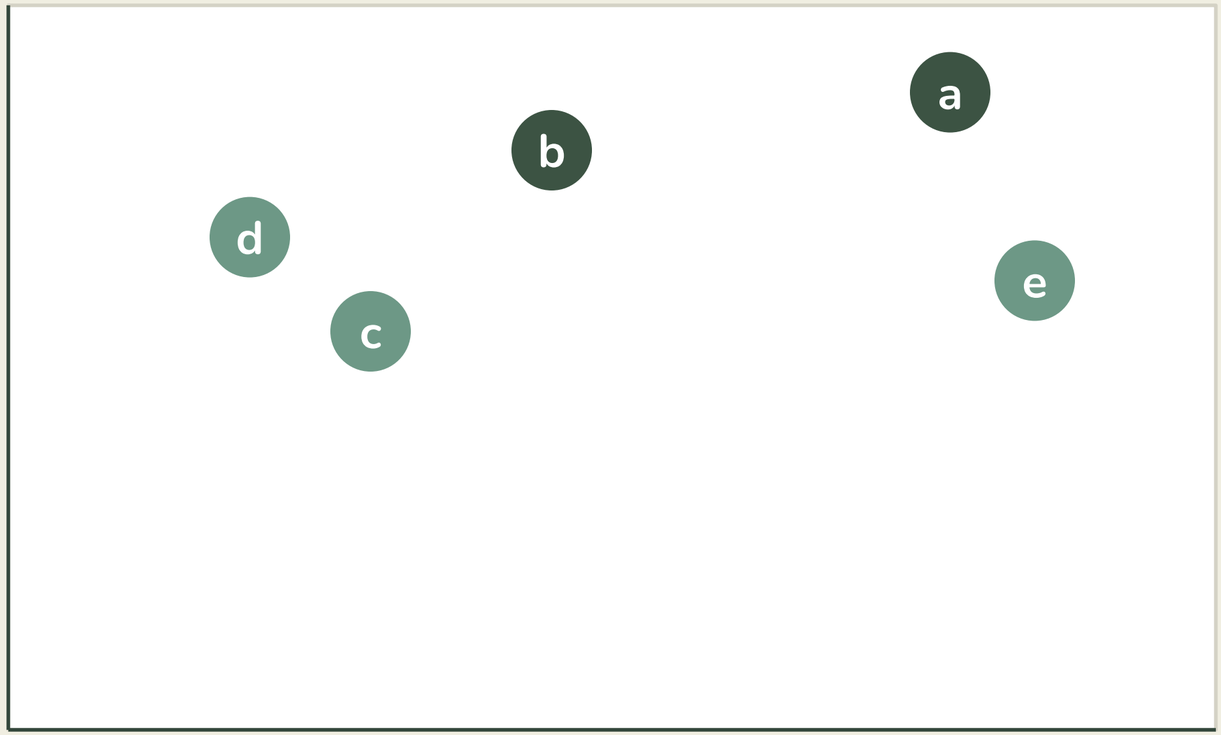
CLOSED TOOLS · LICENSED DATA

Sphera / GaBi, SimaPro with ecoinvent.

CLOSED TOOLS · OPEN DATA

Agribalyse as SimaPro CSV, etc.
Open, but readable through one vendor's conventions or with custom adaptors.

Five answers, one chart



a **Harmonised nomenclature and IRIs**
UNEP GLAD · JRC EF reference flows · sentier-vocab

b **Mappings as published artefacts**
randonneur · flowmapper · GLAD mappings

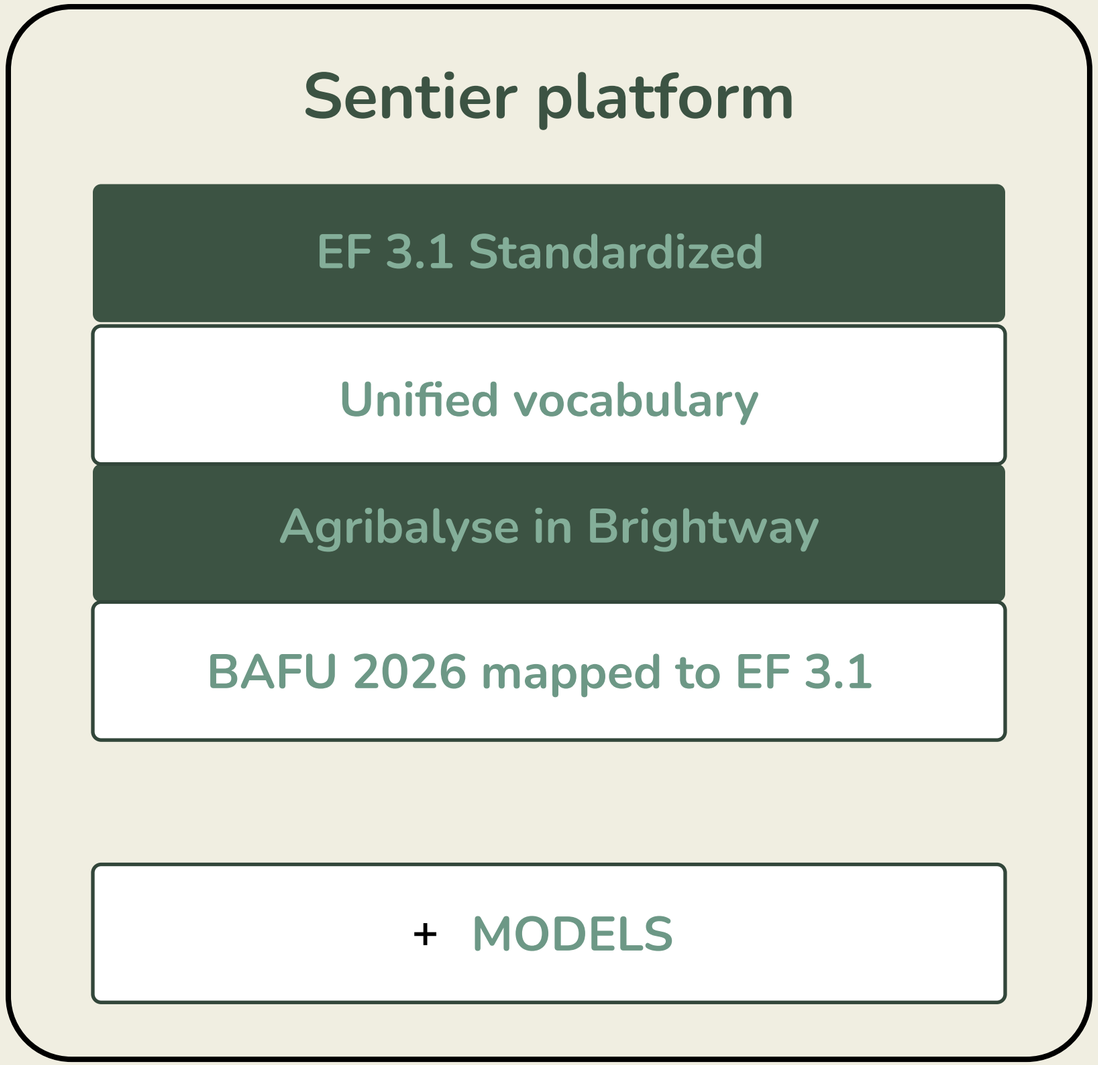
c **Data as code**
git repos · PR review · CI validation · deterministic ids

d **Licence-compatible distribution**
publish code and structure; regenerate licensed amounts locally

e **Community contribution models**
OSM / Wikipedia style: many small reviewed edits

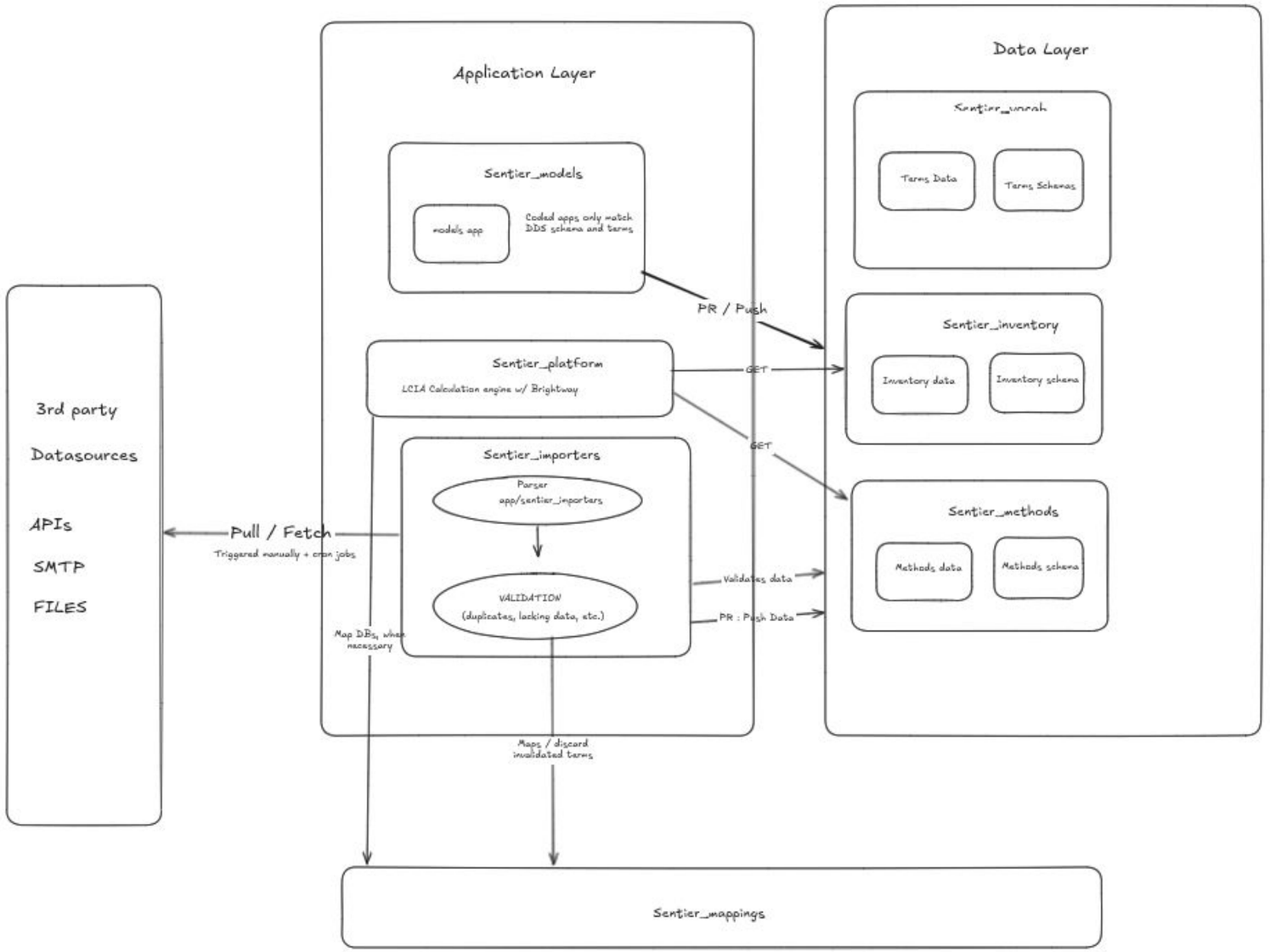
Why open LCA data still doesn't compose

- Nomenclature drift
- Licences that forbid derivatives
- Translation layers living in notebooks not on GitHub
- New versions break every mapping
- No shared identifiers and vocabulary



Départ de Sentier - Data platform

Domain Driven Design



DÉPART DE SENTIER

Thank you

We look forward to your collaboration.

www.d-d-s.ch