CATALYST converge '26

Carbon Accounting in Energycap: From Emissions Tracking to Regulatory Reporting

Ryan Schwerman

EnergyCAP

Agenda

1. **Why Carbon Accounting Is Changing**

   Regulatory direction and converging data expectations

2. **Getting the Foundation Right**

   Inventory boundary, operational data, and the three scopes

3. **Calculating Emissions in EnergyCAP**

   Calculation approach, meter-linked sources, location vs. market-based

4. **Controls, Data Quality, and Intensity**

   An emissions-data control framework and complete building data

5. **Reporting and Outcomes**

   Reporting outputs, standard reports, and Q&A

Carbon accounting is becoming operational accounting

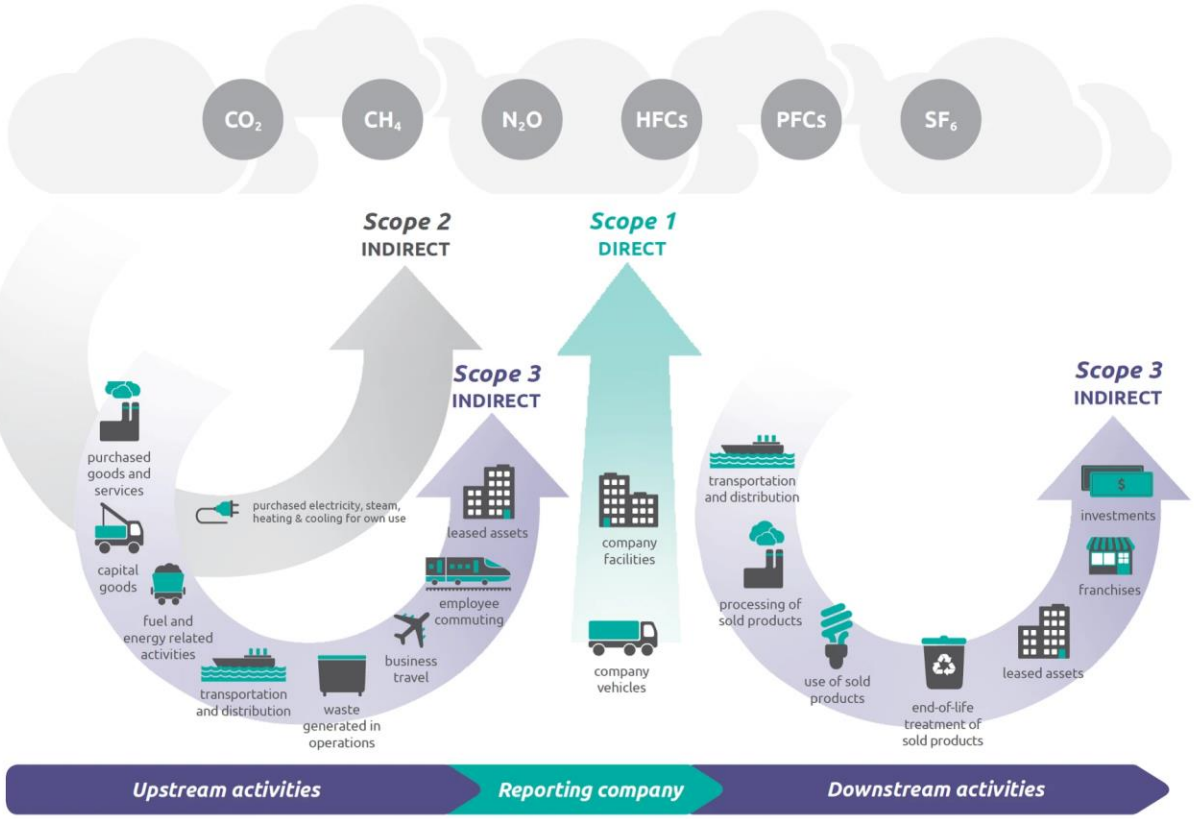
Carbon data needs the same discipline as financial data

Carbon disclosures now depend on traceable activity data, not estimates alone.

Finance, facilities, procurement, and risk all draw on the same inventory.

The question has shifted from "did we publish a report?" to "can we explain every number?"

Takeaway: Carbon accounting is converging with financial accounting - defined boundaries, repeatable calculations, audit trail.



The Rulebook Varies—but Data Expectations are Converging

- **Requirements differ by entity, sector, and location - but the direction is the same.**
- **Build one governed emissions-data foundation, not a report for every rule.**
- **The input is just as important as the output**
  - **If only there was one place where all this information could be collected….**

Driver	What organizations are being asked to demonstrate	Carbon-data implication
State climate-disclosure laws	Emissions inventories and climate-risk information	Portfolio-wide Scope 1 and 2 readiness; Scope 3 roadmap
Customers and supply chains	Supplier emissions questionnaires and product/service footprint data	Scope 3 categorization and defensible estimation methods
Investors, lenders, and insurers	Climate risk, transition planning, and performance indicators	Historical trends, targets, and documented methodology

Start with the inventory boundary, not the dashboard

Define what the organization owns, controls, and reports

Define your organizational boundary: operational control, financial control, or equity share.

Map facilities, fleet, purchased energy, and leased assets to that boundary.

Pick your reporting granularity (portfolio to business unit to building to meter).

Example: an undesigned hierarchy can double-count a central utility plant's emissions.

Operational Data → Emissions Data

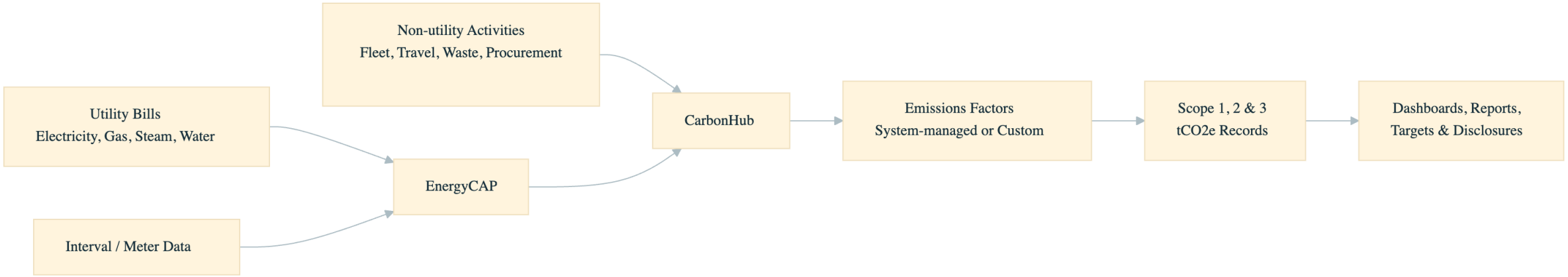
EnergyCAP connects operational data to emissions reporting, but *emissions calculations are only as good as the bill and meter data behind them*

The Emissions module connects operational data (bills, meters) to emissions records.

A bill generates an emissions record once its meter is linked to an emissions source.

Handles both meter-linked utility emissions and non-meter Scope 3 activity.

Emissions roll up from meter to site to portfolio.

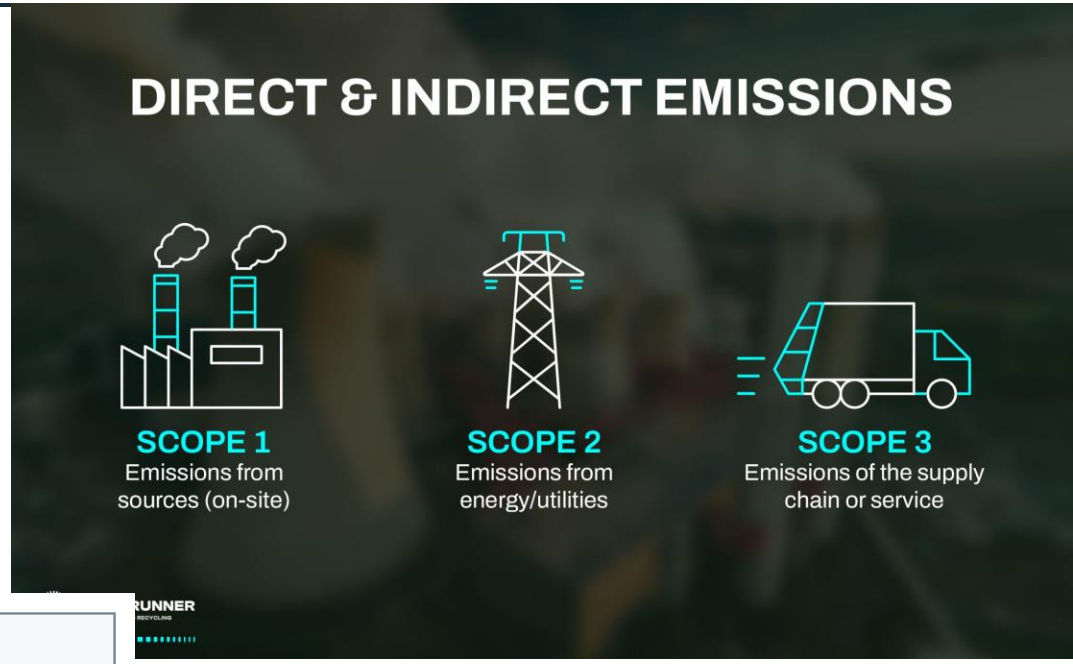


One emissions inventory, three scopes

Scopes are the reporting language; activity data is the evidence

Scope 1 and 2 usually start with data already in EnergyCAP; Scope 3 is added in phases.

”Studies have found that many public institutions’ embodied carbon emissions from purchased goods exceed their total operational emissions.”



Scope	Definition	Common EnergyCAP examples
Scope 1	Direct emissions from owned or controlled sources	On-site natural gas combustion, fleet fuel, refrigerant leakage, owned boilers
Scope 2	Indirect emissions from purchased energy	Purchased electricity, district steam, district heating, chilled water
Scope 3	Other indirect value-chain emissions	Purchased goods, waste, business travel, employee commuting, leased assets

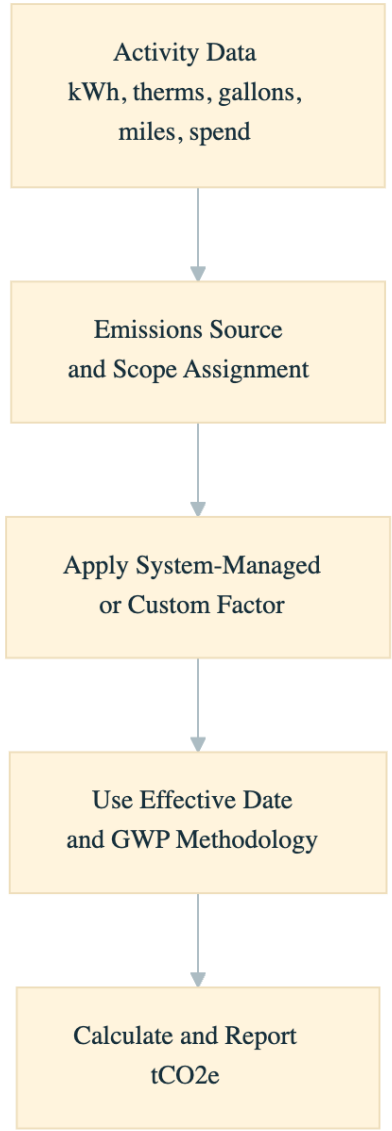
Calculation approach

The calculation is straightforward; governance makes it defensible

Activity data x factor = emissions (tCO2e).

EnergyCAP supports both system-managed and custom factors.

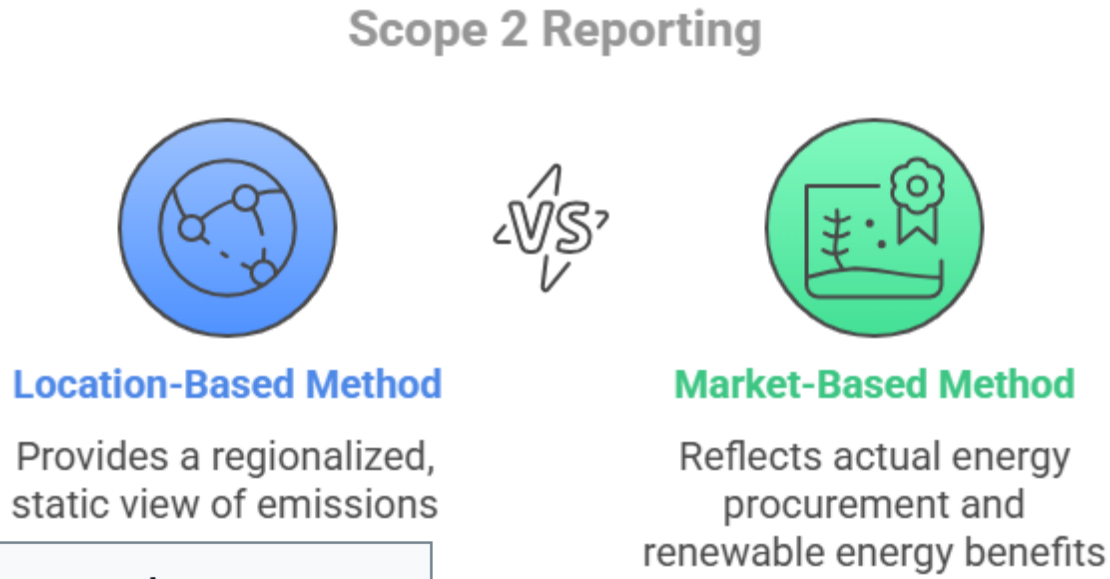
Effective dating = defensible history: factor updates improve future calculations without rewriting the past.



Location-based and market-based emissions

Show grid emissions and procurement strategy as distinct views

The Emissions module provides the factor configuration needed to support both approaches. The organization remains responsible for applying the method appropriate to its reporting framework and retaining documentation for supplier factors or energy attribute certificates.



Method	What it represents	Typical factor approach
Location-based	Average emissions intensity of the electricity grid serving the facility	Geographic grid factor, such as EPA eGRID
Market-based	Emissions associated with contractual electricity purchasing choices	Supplier-specific factors, green tariffs, RECs, PPAs, or other contractual instruments

Establish an emissions-data control framework

Recommended controls:

Complete source data — Find missing bills, inactive meters, and missing activity records.

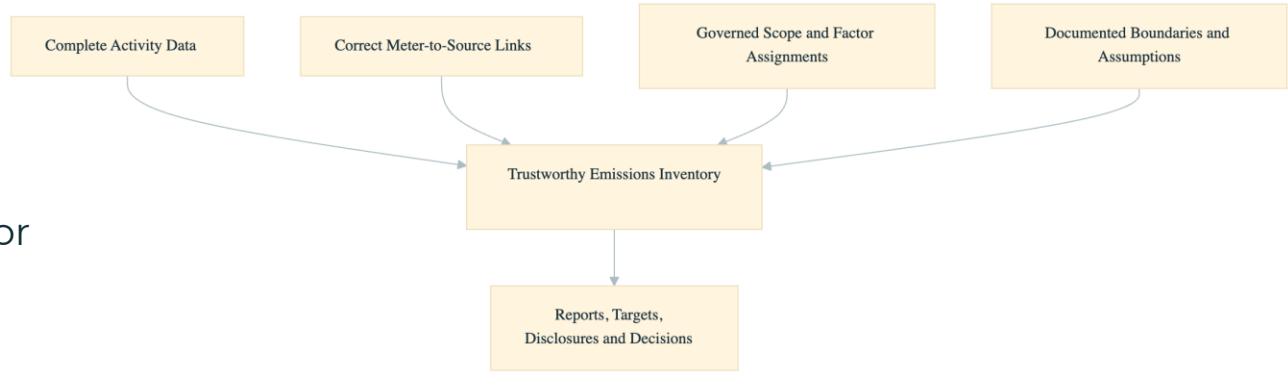
Meter-to-source linkage — Confirm applicable utility meters are linked to the correct emissions sources.

Scope assignment — Review commodity defaults and source-level exceptions.

Factor governance — Document factor origin, units, geography, methodology, owner, and effective date.

Calendarization — Use calendarized emissions data for consistent reporting periods and trends.

Change control — Retain a record of methodology, factor, boundary, and organizational changes.



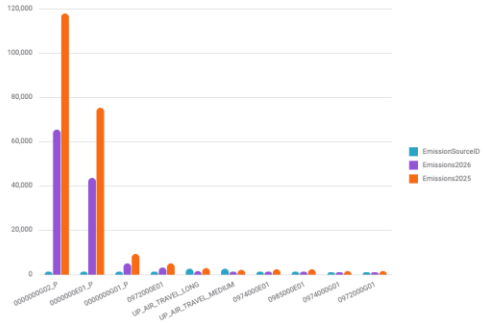
Reporting outputs: from inventory to action

Turn emissions records into decision-ready reporting

Stakeholder	What they need	EnergyCAP reporting approach
Executive leadership	Progress to targets, risk, and investment priorities	Portfolio dashboards and KPI widgets
Facilities teams	High-emitting sites and operational anomalies	Meter and site trends; emissions intensity
Finance teams	Reconciliation and support for reported figures	Bill-linked emissions records and historical reporting
Sustainability teams	Scope totals, factor methods, and source detail	Emissions module, dashboards, and reports
External stakeholders	Clear, current, appropriately governed progress reporting	Controlled dashboard and report outputs

Reporting Capabilities

- Standard Reports:
  - **Report-44 — Emissions Summary**
    - Compares emissions by **GHG scope** and **scope category**
  - **Report-45 — Emissions by Building or Organization**
    - Compares total emissions and emissions relative to **floor area** over 12 months
  - **Report-46 — Emissions Details**
    - Monthly emissions detail for a 12-month period
  - **Watts Reports will be extremely helpful with customized emissions reporting**



Report Title: Top 10 Emission Sources by 2026 Emissio

Table | Column × | + Add

EmissionSourceID	Emissions2026	Emissions2025	VariancePercent
1224	65,325.95	117,961.1	-44.62
1329	43,751.74	75,322.21	-41.91
1225	5,070.62	9,318.08	-45.58
1284	3,194.43	5,174.5	-38.27
2718	1,639.26	2,883.71	-43.15
2717	1,369.3	2,240.73	-38.89
1285	1,304.89	2,361.41	-44.74
1442	1,300.62	2,415.01	-46.14
1071	1,005.48	1,604.05	-37.32
1094	990.02	1,726.78	-42.67

Columns | Filters

The Emissions module makes carbon accounting operational

EnergyCAP helps organizations:

Centralize utility, meter, and non-utility emissions activity

Manage Scope 1, Scope 2, and Scope 3 emissions data

Link utility meters to emissions sources for bill-based emissions records

Apply system-managed and custom, date-effective emissions factors

Analyze emissions by meter, site, organization, and portfolio

Track targets and communicate progress with dashboards and reports

Create a governed emissions inventory that can adapt to changing disclosure needs

Questions?