

CATALYST



CarbonHub: AFL's Approach to Tracking GHG Emissions



Brandon Money

Sustainability - Global Energy & Efficiency
CEM CSDP AFL Global

Agenda



- ✓ Overview of AFL
- ✓ Understanding GHG Emissions
- ✓ CarbonHub Overview
- ✓ AFL's Approach
- ✓ Current Actions

About AFL Global



75% North America
20% Europe/Middle East/Africa
5% Asia Pacific

Mission

To connect our customers around the world with innovative technologies, exceptional products, and high-quality services

6 Core Values



Customers
First



Integrity



Innovation



Collaboration &
Accountability



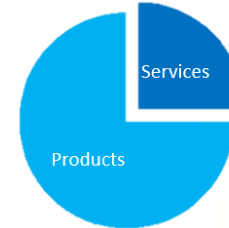
Environment,
Health & Safety



Community
Engagement



1984
AFL founded



Strong growth position

In fiber optic products, conductor accessories and network services



6,800+
Worldwide
team members



130+ Countries sold to
25 Languages spoken
1 Globally unified team



Core Market Segments

Energy | Service Provider | Industrial
Hyperscale | Enterprise



67
Global locations



3,000+
Global products



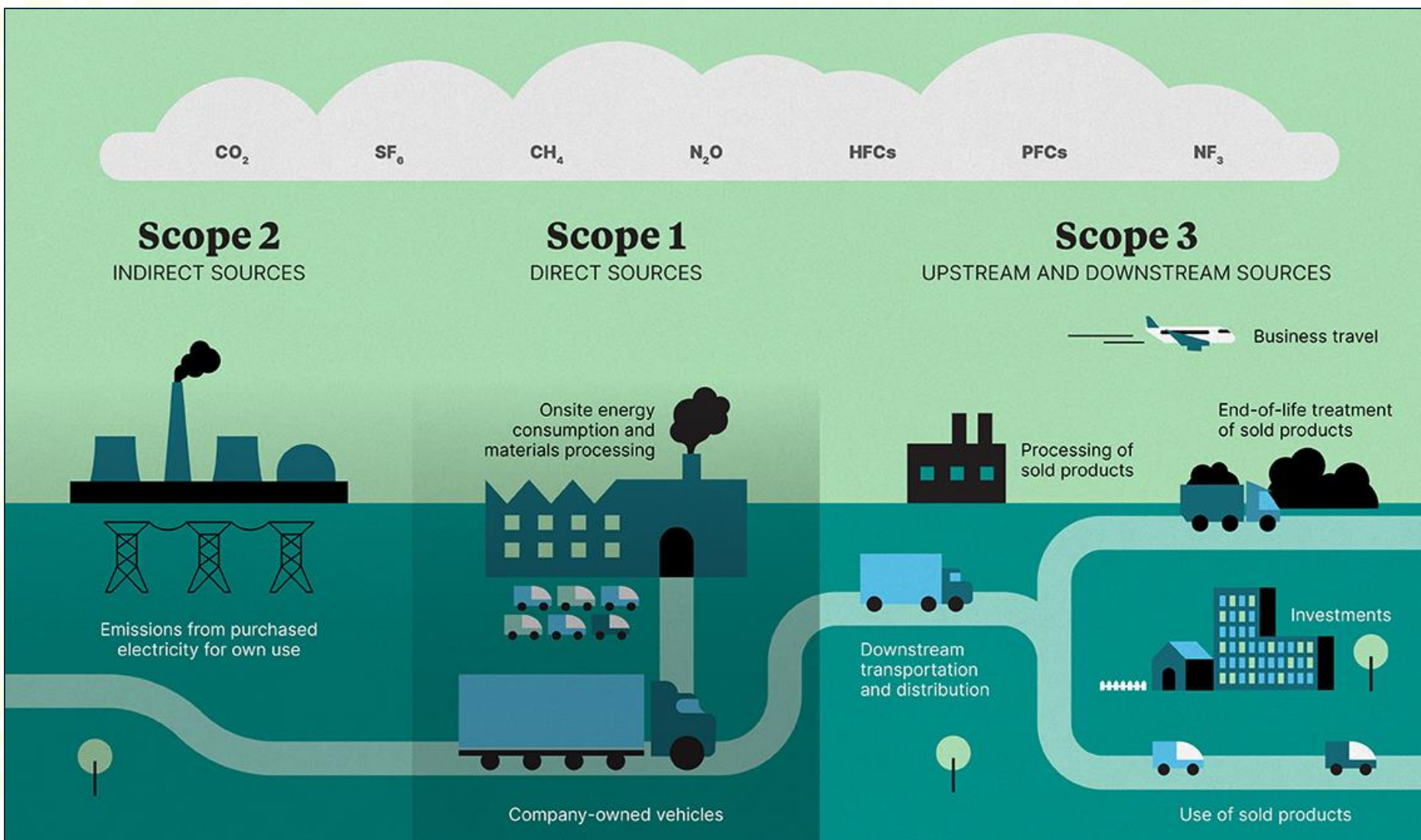
60 million
Fiber termination
capacity per year
and growing



17
Unique North
American Services

Understanding GHG Emissions

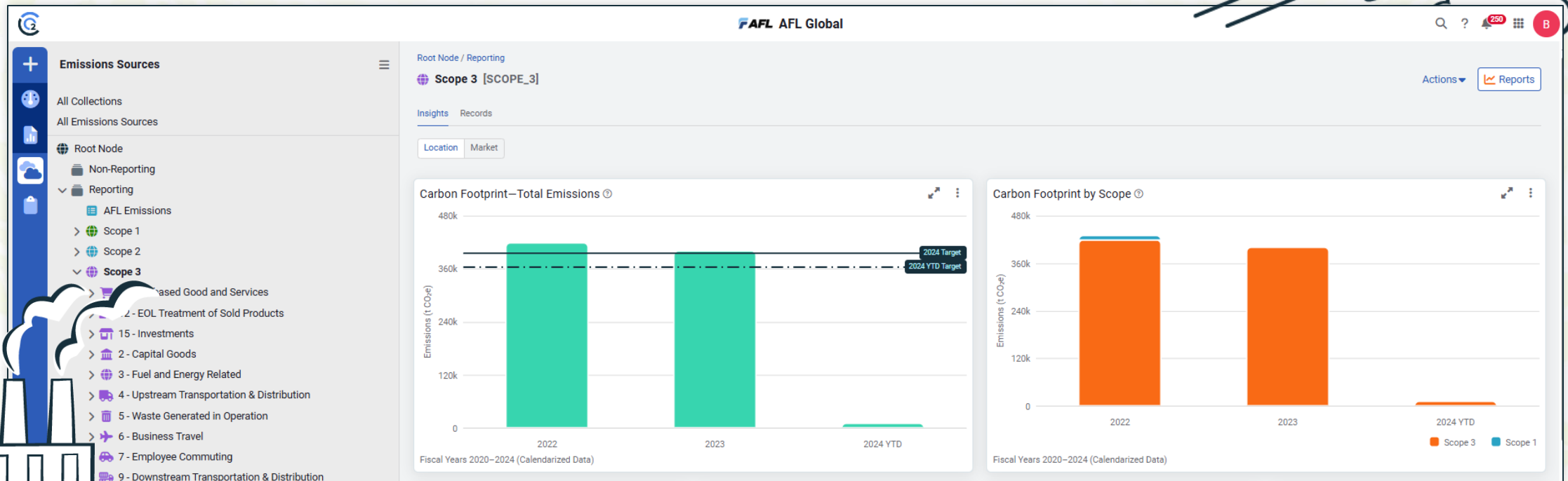
Understanding GHG Emissions



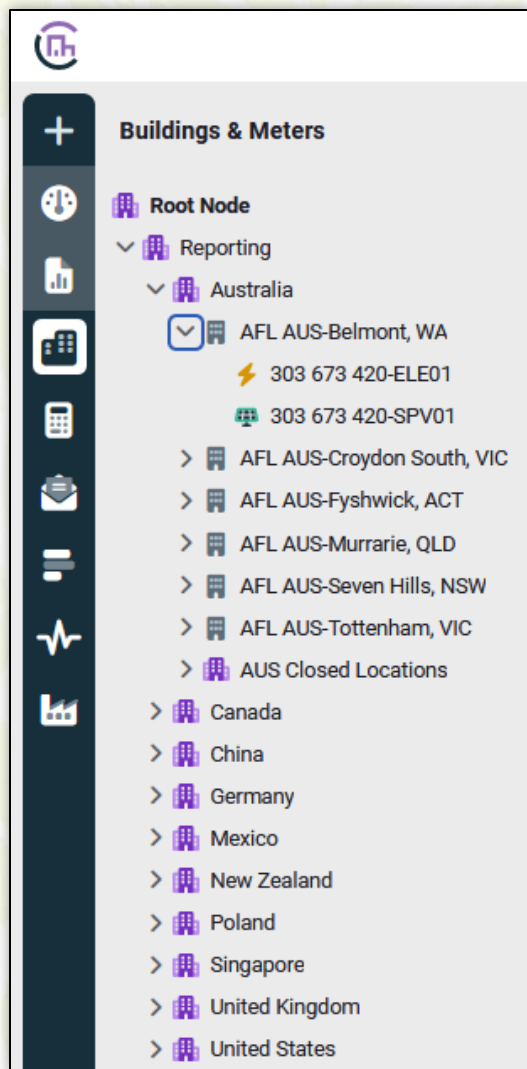
CarbonHub Overview

Carbon Hub Overview

Carbon Hub is a financial-grade accounting software, simplified.



CarbonHub Overview



Utility Management (Commodities)

Utility bill management

Facility benchmarking

Tenant billing

M&V

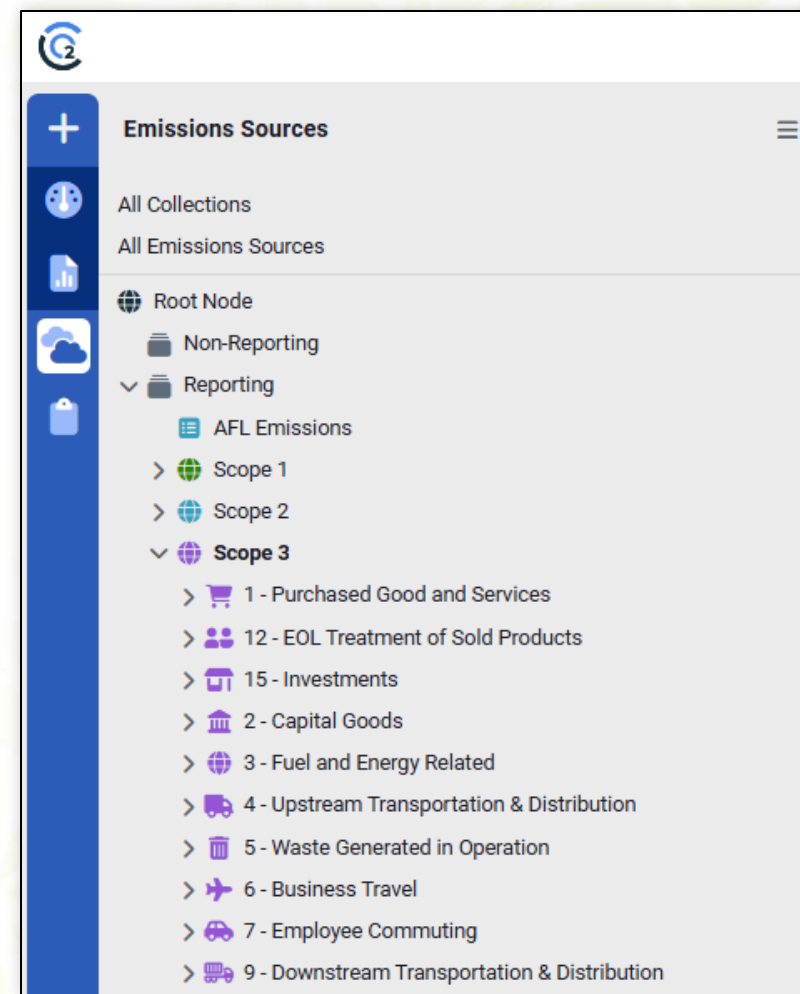
Account & meter tracking

Carbon Hub (Emission Sources)

Emission source tracking

Emission factor database

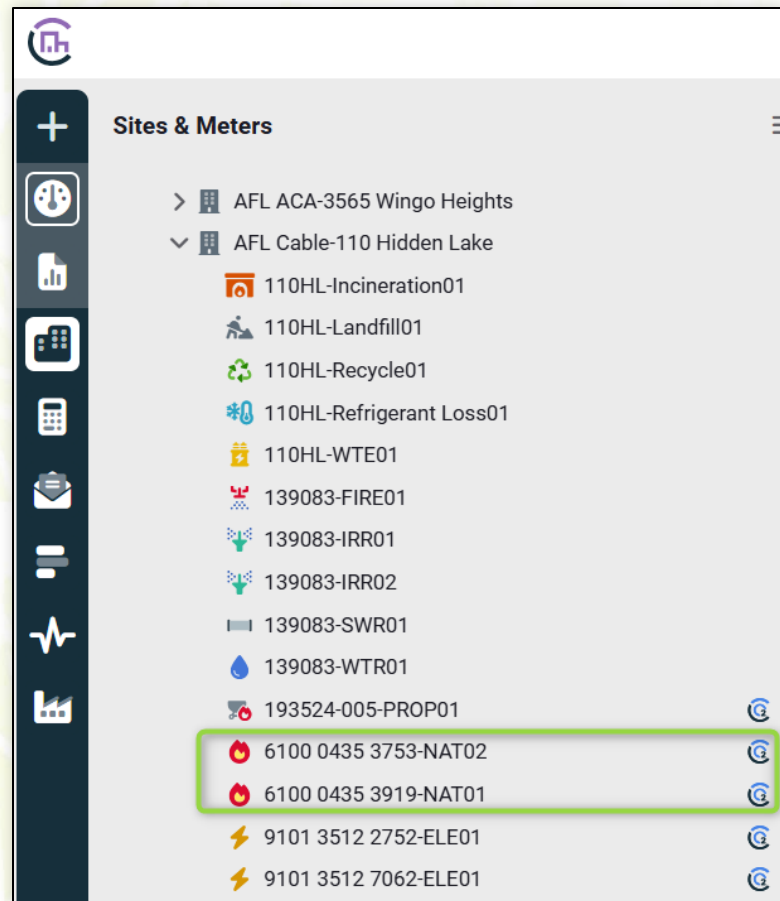
Compliance reporting



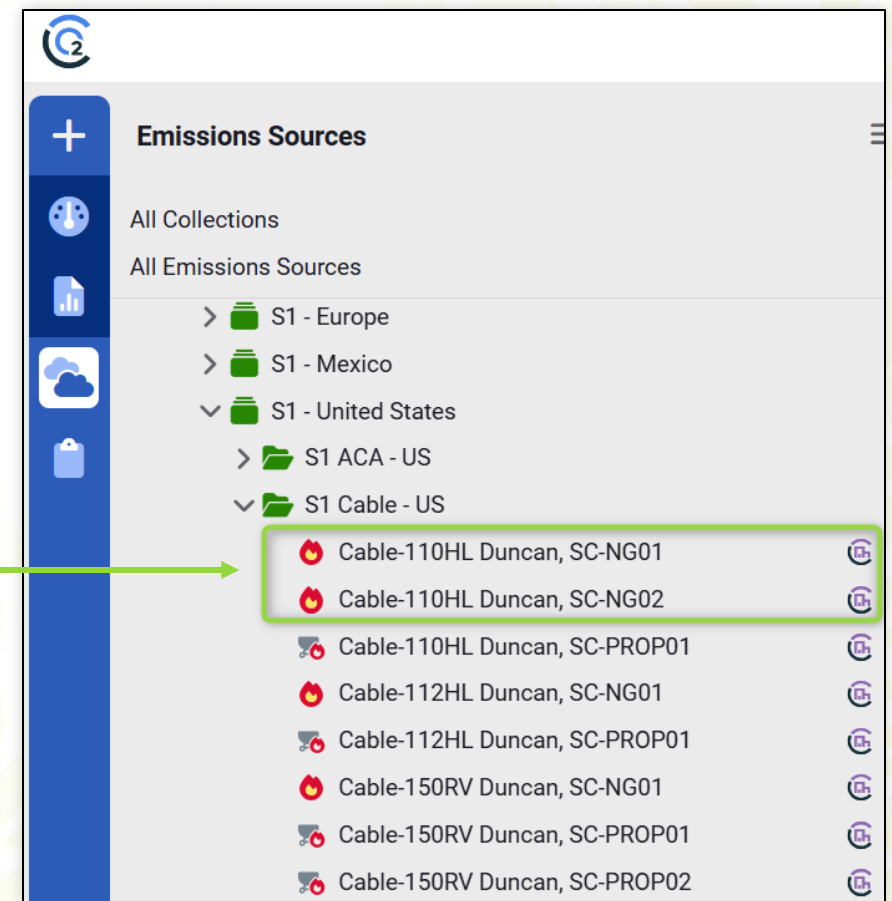
Scope 1 Emissions

Direct emissions such as mobile and stationary combustion from an organization's facilities and vehicles

Examples: Natural Gas, Gasoline, Diesel, Kerosene, Propane

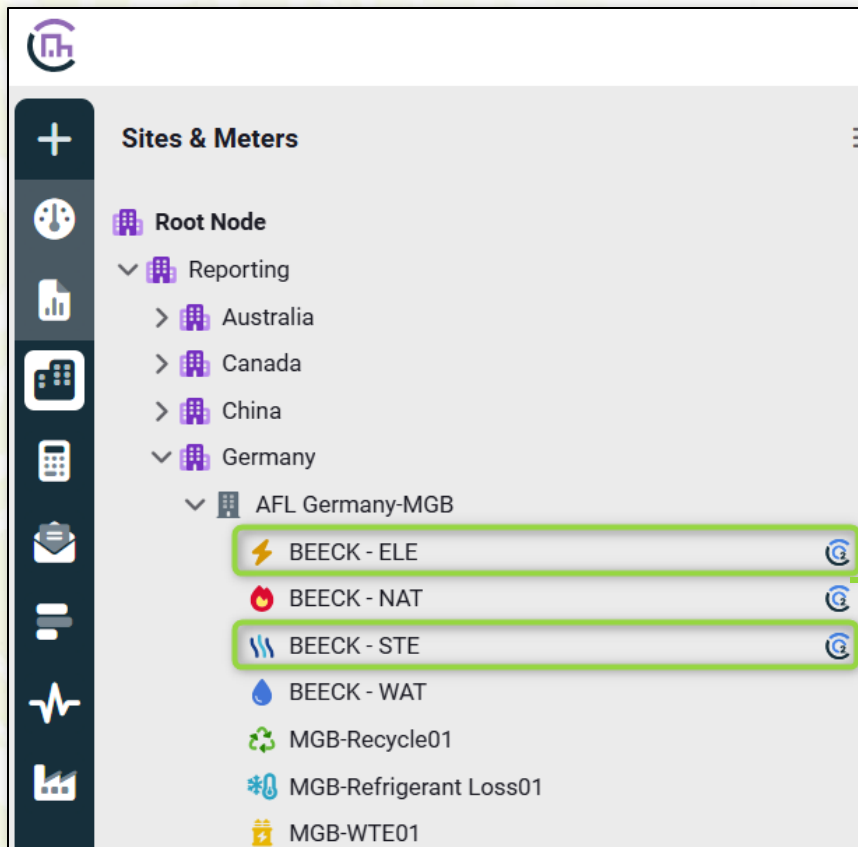


Emission factors
applied automatically
to meter usage from
Utility Management

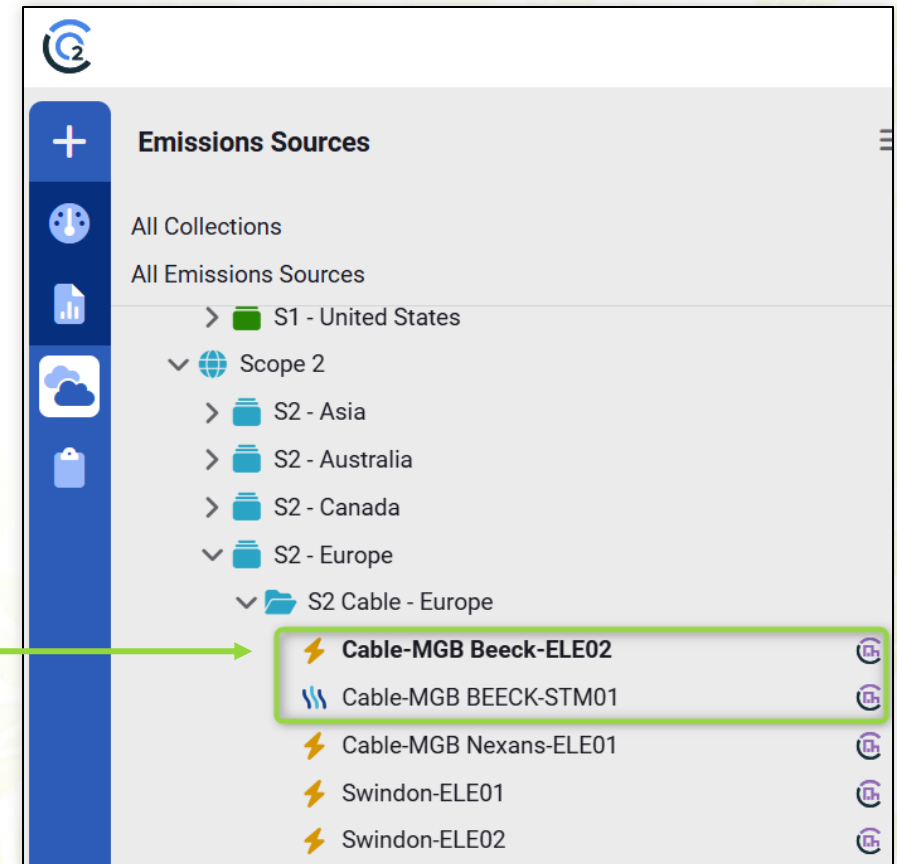


Scope 2 Emissions

Indirect emissions from purchased electricity, steam, heating and cooling
Capability to calculate location and market-based emissions



In this example, multiple calculations are being performed from meters in Utility Management



Scope 2 Emissions (Location & Market-Based)

In this example, multiple emission factors are being applied to usage data from Utility Management
Result is Scope 2 Location & Market-Based emissions being calculated automatically

Emissions Source Details

ActiveInactive

Name

Cable-MGB Beeck-ELE02

Code

MGB BEECK-ELE02

Type (commodity)

⚡ Electric

Parent collection

S2 Cable - Europe

Scope 2 Location-Based Emissions

Scope category

Scope 2 - Purchased Electricity -

GHG factor

Germany

Scope 2 Market-Based Emissions

Scope category

Scope 2 - Purchased Electricity -

GHG factor

Scope 2 Electricity - Germar

[+ Add additional category and factor pair](#)

⚡ Cable-MGB Beeck-ELE02 [MGB BEECK-ELE02] [Open in EUM](#)

Insights

Records

Properties

Record ID

Search by ID

Separate calculations performed for each input from Utility Management

Records (Count: 66, Emissions: 544.34 t CO₂e)

<input type="checkbox"/> Record ID	Modified Date	Start Date ↓	End Date	Quantity	Quantity Unit	Emissions (t CO ₂ e)
<input checked="" type="checkbox"/> 43930	02/28/2025	09/01/2024	09/30/2024	19,678	kWh	14.17
<input checked="" type="checkbox"/> 43929	02/28/2025	09/01/2024	09/30/2024	19,678	kWh	6.87
<input type="checkbox"/> 43913	02/28/2025	08/01/2024	08/31/2024	17,833	kWh	6.22
<input type="checkbox"/> 43914	02/28/2025	08/01/2024	08/31/2024	17,833	kWh	12.84
<input type="checkbox"/> 43934	02/28/2025	07/01/2024	07/31/2024	18,055	kWh	13.00
<input type="checkbox"/> 43933	02/28/2025	07/01/2024	07/31/2024	18,055	kWh	6.30

Scope 3 Emissions

Upstream and Downstream emissions from the full scope of company or organization's activities

Category 1 - Purchased Good/Services

Category 2 - Capital Goods

Category 3 - Fuel & Energy Activities

Category 4 - Upstream Trans & Distr

Category 5 - Waste Generated in Ops

Category 6 - Business Travel

Category 7 - Employee Commuting

Category 8 - Upstream Leased Assets

Category 9 - Downstream Trans & Distr

Category 10 - Processing of Sold Products

Category 11 - Use of Sold Products

Category 12 - EOL Treatment of Products

Category 13 - Downstream Leased Assets

Category 14 - Franchises

Category 15 - Investments

Scope 3 Emissions

Scope 3 can be calculated directly from meters in Utility Management or Emission Sources in Carbon Hub
Factors available in Carbon Hub database or capability exists to upload custom factors

The screenshot displays the Carbon Hub interface for managing Scope 3 emissions. The sidebar on the left lists various emission categories, with '6 - Business Travel' highlighted. The main content area shows a breadcrumb trail: '6 - Business Travel' > 'Car Travel'. Below this, a table lists emission records with columns for Record ID, Start Date, End Date, Quantity, Quantity Unit, and Emissions (t CO₂e).

Scope 3 Emissions

- > Scope 1
- > Scope 2
- > Scope 3
 - > 1 - Purchased Good and Services
 - > 12 - EOL Treatment of Sold Products
 - > 15 - Investments
 - > 2 - Capital Goods
 - > 3 - Fuel and Energy Related
 - > 4 - Upstream Transportation & Distribution
 - > 5 - Waste Generated in Operation
 - > **6 - Business Travel**
 - > Air Travel
 - > **Car Travel**
 - Car Travel
 - Car Travel WTT
 - > Hotel Stays
 - > Rail Travel
 - > 7 - Employee Commuting
 - > 9 - Downstream Transportation & Distribution

Scope category: Scope 3 - 06. Business Travel

GHG factor: Cars (by size) - Average car - Unkn

[Factor details](#)

<input type="checkbox"/>	Record ID	Start Date ↓	End Date	Quantity	Quantity Unit	Emissions (t CO ₂ e)
<input type="checkbox"/>	48746	04/01/2023	03/31/2024	307.30632	t CO ₂ e	307.31
<input type="checkbox"/>	48728	04/01/2022	03/31/2023	272.44987	t CO ₂ e	272.45

AFL's Approach

AFL's Approach: Rewind to 2022

AFL Leadership recognized need of structured effort to address ESG concerns.

- Customer requests for Sustainability data and commitments
- No formal energy management system or sustainability programs
- Utility and other company data managed in silos
- Customer requests outpacing AFL provided information



Mission, Vision, and Core Values

It's who we are, it's the right thing to do.

Talent Attraction & Retention

Risk Management

 **Fujikura**

Fujikura Expectations

Stakeholder Engagement



Competitive Advantage



Market Demand

Regulatory/Legal Compliance

AFL's Approach: Fast Forward to 2025

Reporting Commitments

- Carbon Disclosure Project (CDP)
- EcoVadis
- The Sustainability Project (TSP)
- Responsible Business Alliance (RBA)
- Science-based Targets Initiative (SBTi)
- SASB, GRI, CSRD, UNGC, ESRS
- D to B-
- Non-reporting to Above Average
- 77% to 90%
- Medium risk to Low Risk
- Committed in 2023

AFL's Approach: How did we get to where we are today?

Hired and developed dedicated personnel

- Global Sustainability and Energy lead
- Energy Engineers for large manufacturing sites and business units
- Developed bench strength from operations, maintenance and EHS Teams

Partnered with industry experts

- EnergyCAP for our utility and GHG accounting software
- EnergyStar for our Energy Management System development

Monthly touchpoints with customers and suppliers to align on Sustainability initiatives

Subscribed to EnergyCAP's UtilityManagement, CarbonHub, BillCAPture, International Service, and RDBI service

Capital investment in metering underway with plans to utilize EnergyCAP Smart Analytics

Current Actions

What are we working on?

Continuous improvement related to sustainability

- Product-level emissions details (Lifecycle Assessments of our products)
- Incorporate sustainability into R&D and new product design
- Increase automation in Scope 3 data collection

Real-Time Response

- Utilize Smart Analytics and Building Automation Systems to alert manufacturing staff
- Data visualization to the operators
- Utilize EUM public dashboards for live Sustainability feed for customers