

CATALYST

ESG Regulations + CarbonHub



Lalit Agarwal

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EnergyCAP





Agenda

- ESG vs Sustainability
- The basics of greenhouse gases
- ESG regulations landscape
- Decarbonization journey
- Energy & Sustainability ERP
- CarbonHub

ESG vs Sustainability

ESG (Environmental, Social, and Governance)

A framework used primarily by investors.

- **Environmental** company's performance as a steward of the natural environment.
- **Social** company's relationships with employees, suppliers, customers, and communities.
- **Governance** company leadership, executive pay, audits, internal controls, and shareholder rights.

Purpose - It aims to help investors make more informed decisions by considering these non-financial factors.

Sustainability

- **Ability** to exist and develop without depleting natural resources for the future.
- **Maintain** ecological and environmental balance
- **Promote** social equity and ensure economic viability

Purpose - encourage businesses and societies to operate in a way that is environmentally viable, socially equitable, and economically feasible over the long term.

Greenhouse Gases

What are greenhouse gases (GHG)?

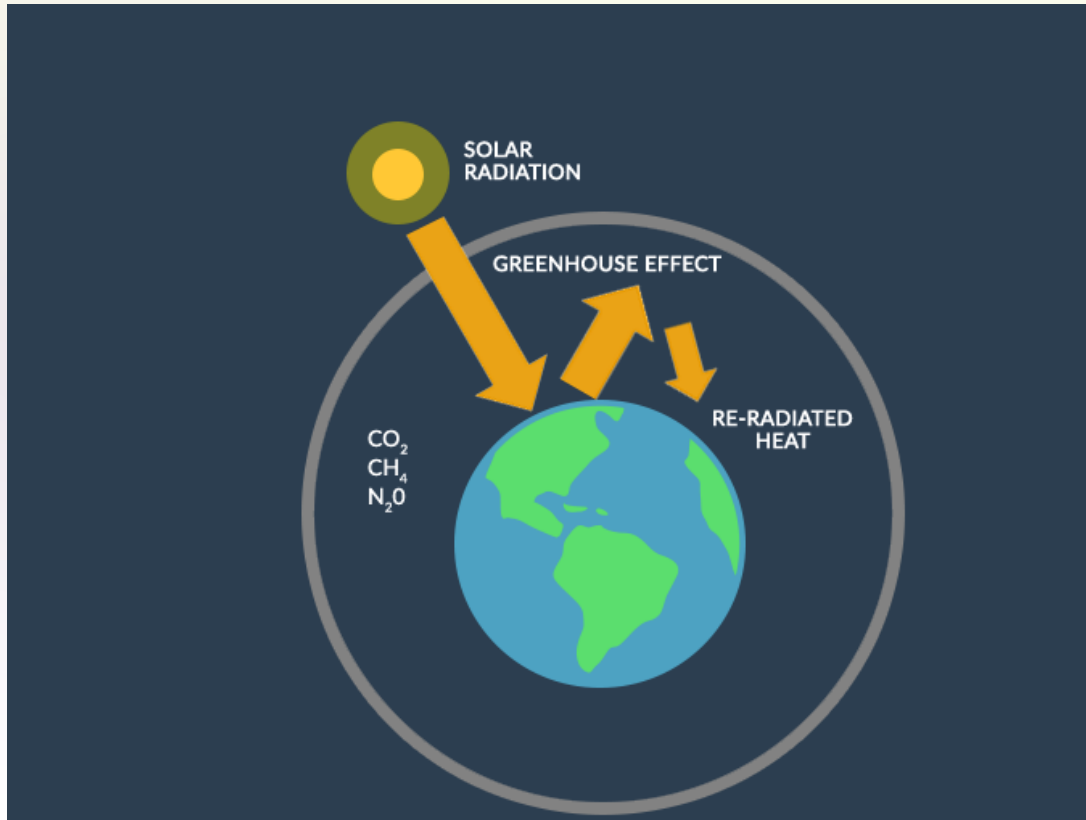
Common Greenhouse Gases:

CO₂

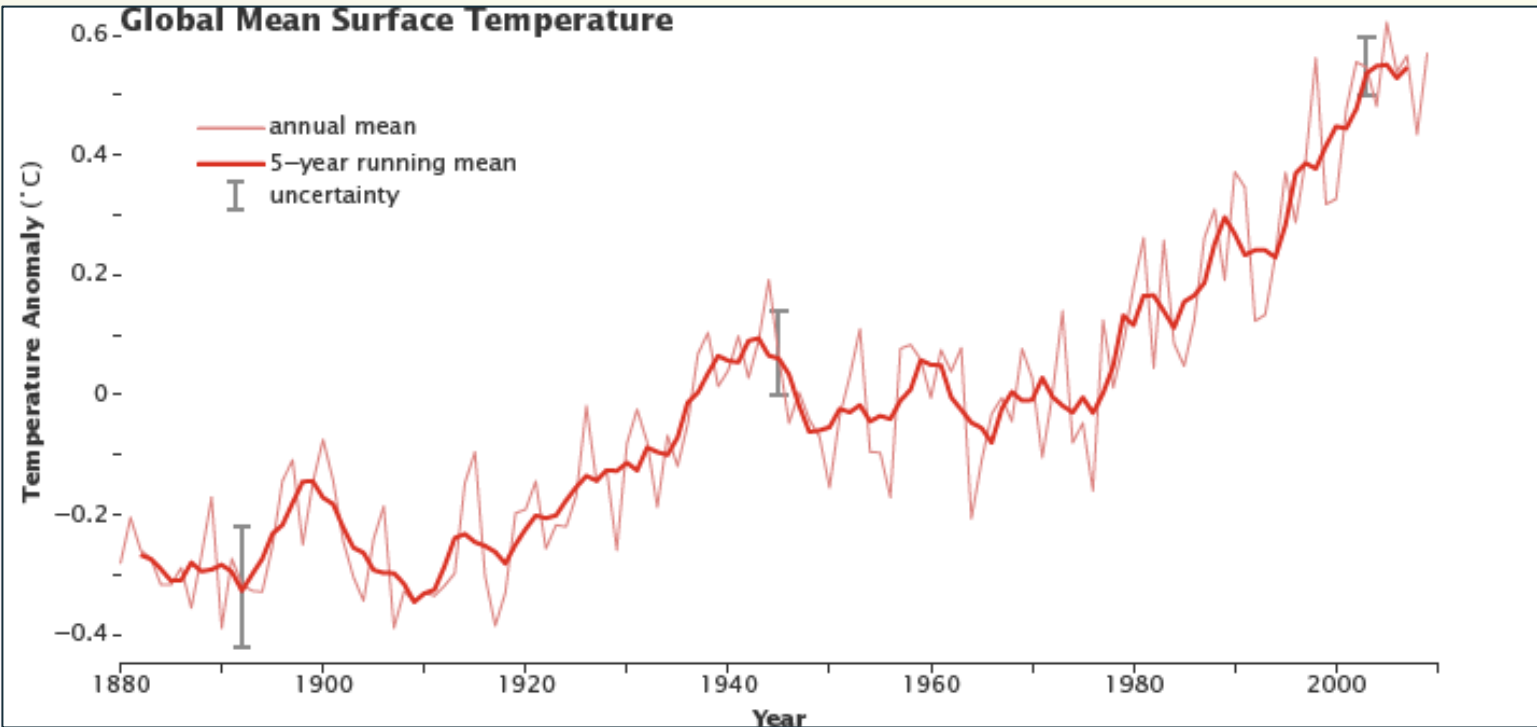
N₂O

CH₄

Serve as a blanket that keep the heat in the atmosphere instead of reflecting into space.



GHG Impact on planet and life



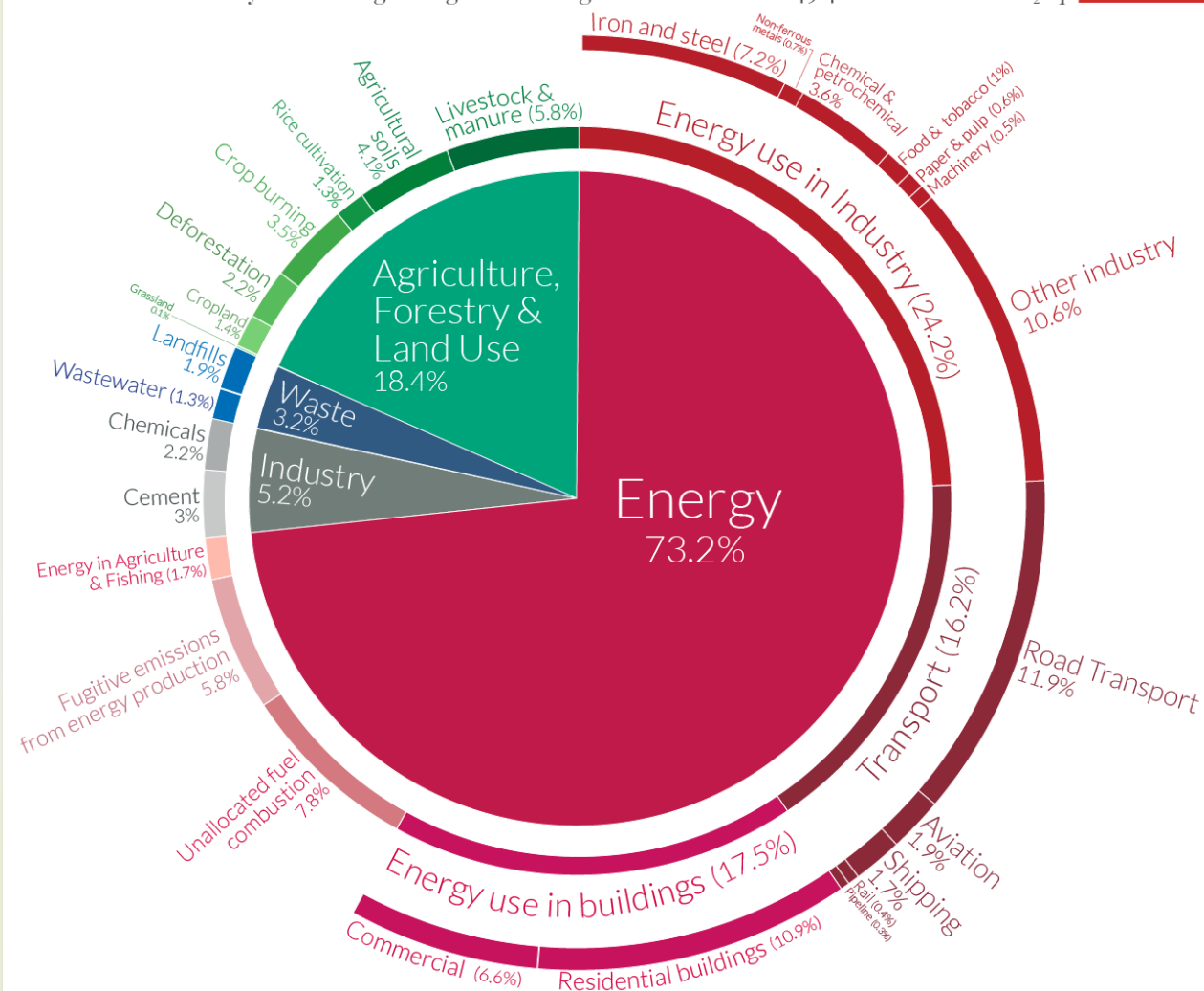
- Health
- Agriculture and Food Security
- Water Resources
- Economic Impact
- Migration and Displacement
- Social and Political Impacts
- Biodiversity Loss

GHG emissions by sector

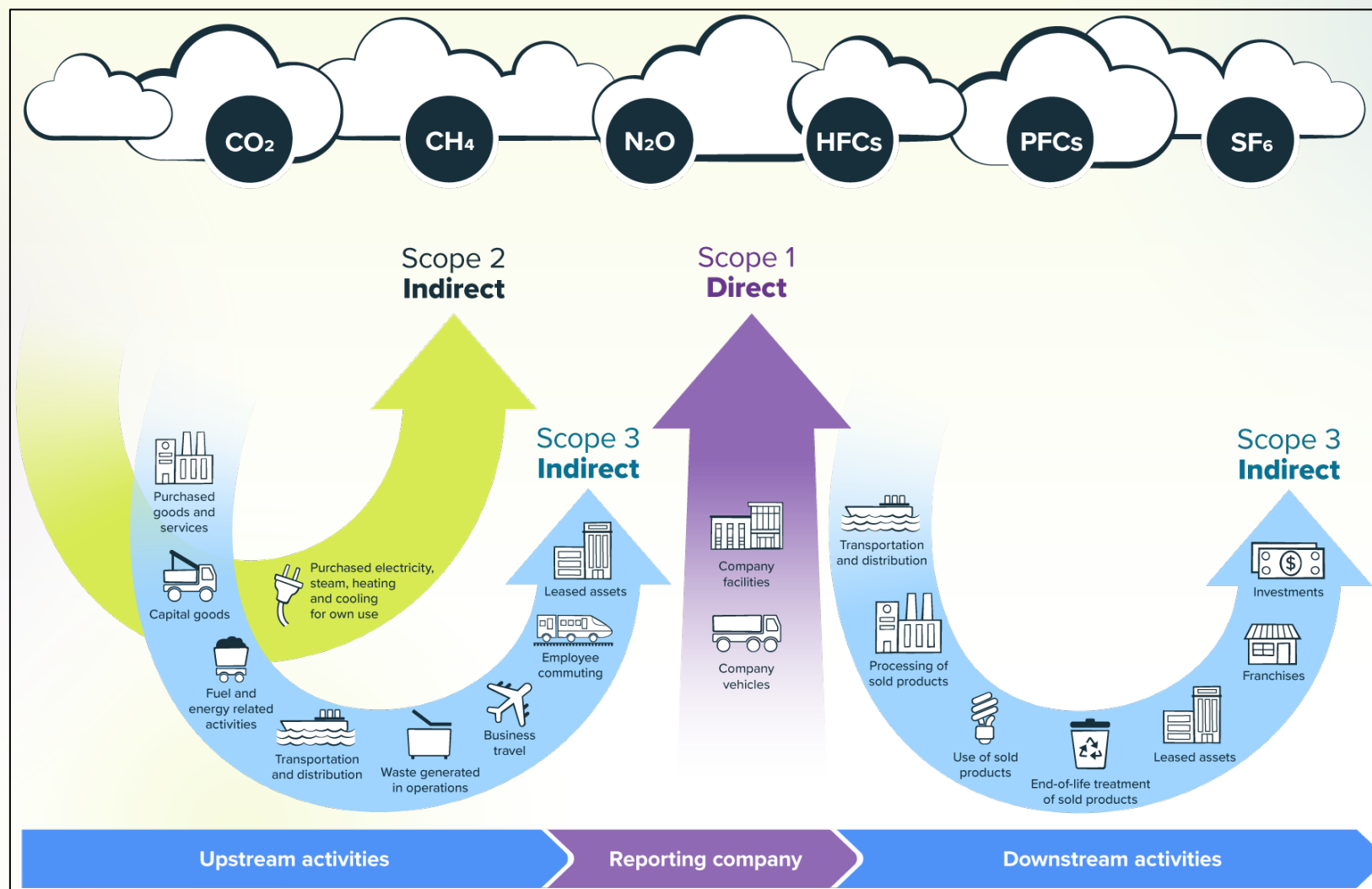
Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.

Our World
in Data



Definition and classification



ESG regulations landscape

European Green Deal // Required Sustainability Reporting

Non-Financial Reporting Directive (NFRD)

Applies to companies meeting both criteria

- More than 500 employees
- Publicly listed companies

Banks and Insurance companies

Impacted appx 11,000 companies

Limited/No audit required

Corporate Sustainability Reporting Directive (CSRD)

Applies to companies meeting two of three criteria

- More than 250 employees
- More than € 40m revenue
- More than € 20m total assets

Estimated impact appx 50,000 companies

Enforcement from 2024–2029

Requires companies to have an audit of the reported sustainability information

in effect January 5, 2023

England

Green Finance Strategy: Align private sector financial flows supported by government action

Task Force on Climate-related Financial Disclosures (TCFD): May require TCFD-aligned disclosures across the economy by 2025

Green Taxonomy: Similar to EU Taxonomy, to provide clear definitions

Pension Schemes Act 2021: Requires pension schemes to take into account climate change-related risks and opportunities in investment decisions

Corporate Governance and Reporting: Large companies must report on their ESG practices and impacts.

US Securities & Exchange Commission (SEC)

The SEC's climate-related disclosure rule would require companies to disclose material climate risks, including emissions data and transition plans.

What companies would have to disclose¹

Material impacts



How climate can impact companies' bottom lines—in the short, medium, and long term—and what governance, strategy, and risk-management processes will address these impacts.

Greenhouse-gas emissions



Audited scopes 1 and 2 emissions and scope 3 emissions, if material (or if the entity has a scope 3 target), as well as safe harbor for liability from scope 3 emissions.

Target and transition plans



If available, climate-related targets or goals, accompanied by detailed transition plans, scenario analysis methods, internal carbon pricing, and how it is set, and the use of offsets and renewable-energy certificates.

¹This chart is a summary for general information only and does not constitute legal or regulatory advice. Advice of appropriate counsel must be sought prior to any consideration of the issues raised herein.

Source: US Securities and Exchange Commission (SEC) enhancement and standardization of climate-related disclosures, March 2022

**McKinsey
& Company**

State of California // New Laws (Bills #253 and #261)

Climate Corporate Data Accountability Act, CCDA

- This applies to companies with over \$1 billion in annual revenue that do business in the CA.
- Includes Scope 1, 2 (by 2026) and 3 (by 2027) reporting

Climate-Related Financial Risk Act, CRFRA

- Revenues > \$500 million
- Following *Task Force on Climate-Related Financial Disclosures* (TCFD)



Signed into law October 7, 2023

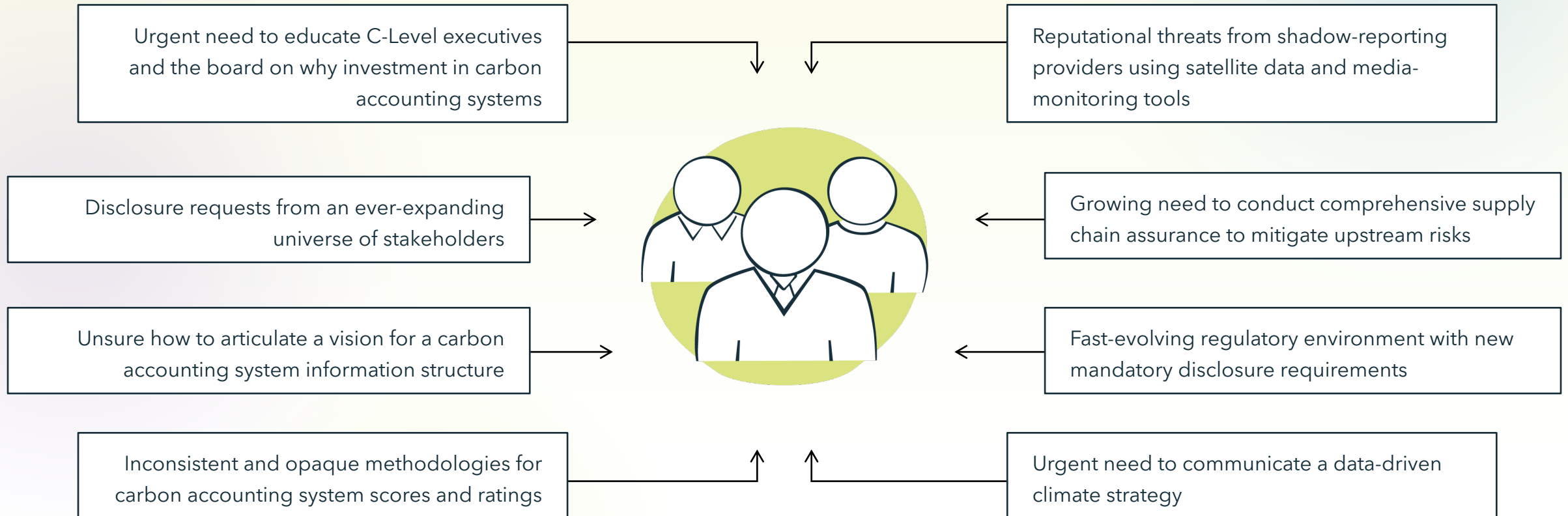
Regulations // Local Law 97 NYC

- Passed in April 2019
- Buildings over 25k sq ft (Effective 2024)
 - Energy efficiency requirement
 - GHG emissions limits
- Stricter limits coming into effect in 2030
- Reduce emissions from the largest buildings
 - by 40 percent by 2030
 - By 80 percent by 2030
- Established **Local Law 97 Advisory Board and Climate Working Groups** on how to meet these aggressive goals.

Regulation - State of Washington

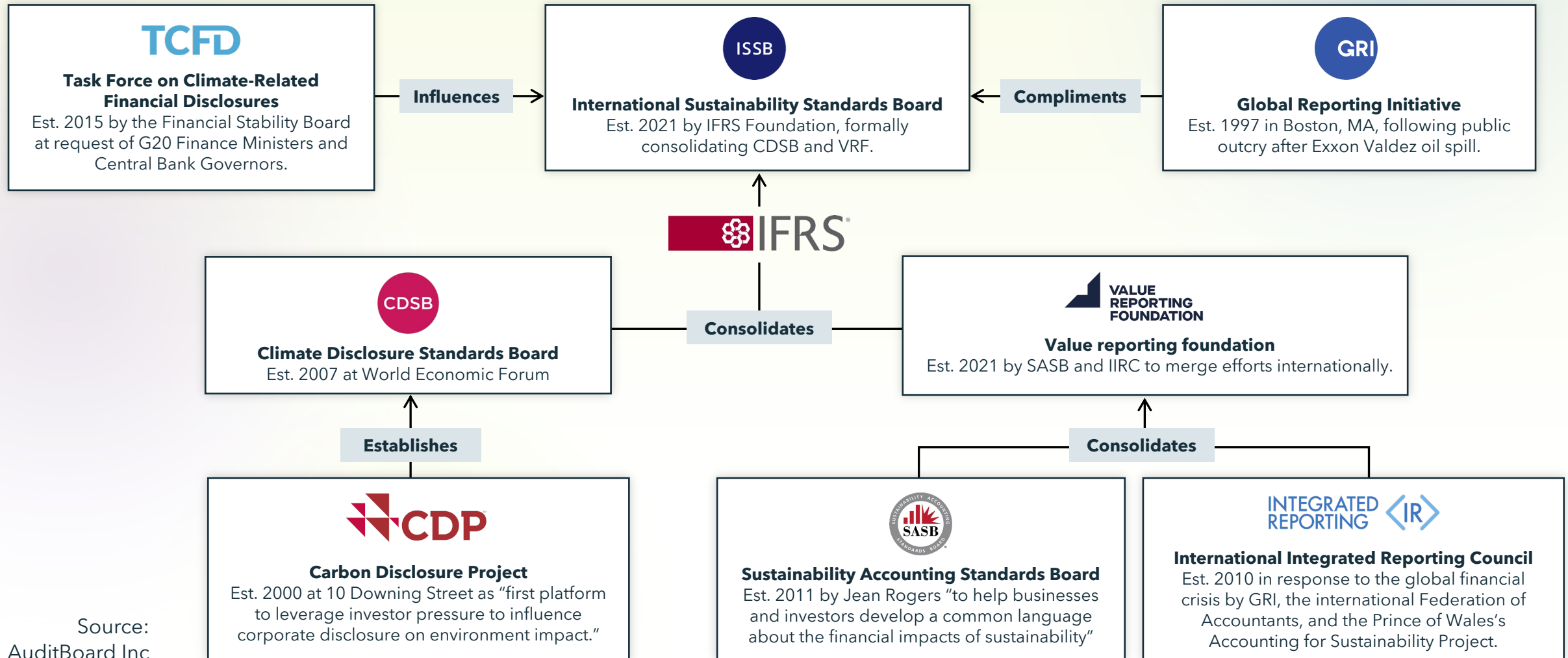
- Washington ***Climate Commitment Act*** (CCA) - 2021
 - Reduce emissions by 45% below 1990 levels by 2030
 - Continue reduction to net-zero by 2050
- Businesses that produce more than 25k metric tons of CO₂e annually
 - Fuel suppliers
 - Natural Gas and Electric Utilities
 - Waste-to-energy facilities (starting in 2027)
 - Railroads (starting in 2031)
- Cap & Invest - market-based program - limit on total emissions
- Every business impacted or participating in Cap & Invest needs to report emissions

Executives are under pressure from multiple carbon accounting challenges



Source: Verdantix

ESG frameworks



Source:
AuditBoard Inc

Elements of ESG Frameworks (Ex: CDP)

Questionnaires are based on:

- Business Type (City, States & Regions, Company)
- Risk Type (Climate Change, Forests, Water Security)
- Primary Sector (Agricultural commodities, Capital goods, Cement, Chemicals, Coal, Construction, Electric Utilities, Financial services, Food, beverage & tobacco, Metals & mining, Oil & gas, Paper & Forestry, Real estate, Steel, Transport OEMS, Transport OEMS – EPM, Transport services, All other sectors)
- Version (Full, Minimum)
- Core or additional (customer requested, RE100 etc.)

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- Version (Full, **Minimum**)
- **Core** or additional (customer requested, RE100 etc.)

CDP Questionnaire

- C0: Introduction, description of the company business, and other demographic data
- C1: Governance (Board structure, management responsibilities, incentives based on climate performance)
- C2: Risks and Opportunities (Documented strategies identifying, assessing, and responding to climate-related risks and opportunities)
- C3: Business Strategy (Business transition plan aligned with 1.5°C warming)
- C4: Emissions Target (Details, KPIs and documented initiatives)
- C5: Emissions Calculation Methodology (Document the process used for calculations)
- C6: Emissions Data (Scopes 1, 2 and 3 - as applicable)
- C7: Emissions Breakdown (Compare YTY)
- C8: Energy Data for the Org

CDP Questionnaire

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Energy and Sustainability ERP

Evolution from paper ledgers to ERP software // Financial reporting

How it used to be:

Paper ledgers and records

- Difficult to access data
- Manual labor
- Hard to maintain and update
- High chance of error
- Data limited to ledger owners

How it improved:

ERP software

- Recorded electronically
- More accurate
- Real-time updates
- Reduces/eliminates manual labor
- Reduces error
- Better collaboration
- Scalable, reportable, and reliable

Evolution from spreadsheets to ERP software // Carbon accounting

The status quo

Manual utility bills, meter reads, data collation in spreadsheets

- Occurs annually
- Difficult to access data
- Manual labor
- Hard to maintain and update
- High chance of error
- Data silos
- Reactive reporting

Using software

Energy and sustainability ERP

- Automatically captures data
- Auditable, financial-grade
- Real-time updates
- Reduces/eliminates manual labor
- Reduces error
- Better collaboration
- Scalable, reportable, and reliable
- Proactive: Monitor and respond in real-time

Energy and sustainability ERP // The single source of truth

Get instant access to validated, actionable data you can trust to better manage resource consumption, reduce your carbon footprint, reach net-zero, and drive massive savings.



Financial-grade greenhouse gas accounting

Target and track emissions.

An advanced, holistic view of financial-grade emissions data across your business with automatically applied factors to meet your ESG reporting needs.

Customer Data Type:

GHG activities

Persona:

Sustainability



Portfolio-level energy and sustainability reporting

Manage and see it all.

Get accurate and reliable energy and utility data across your entire portfolio and streamline energy and accounting workflows.

Customer Data Type:

Utilities/Bill/Resources

Persona:

Finance/Energy



Real-time energy and sustainability analytics

Dive deep. Respond quickly.

Dive deep into real-time performance of assets, devices, and sensors. Make quick, data-driven decisions for high-performance, net-zero buildings.

Customer Data Type:

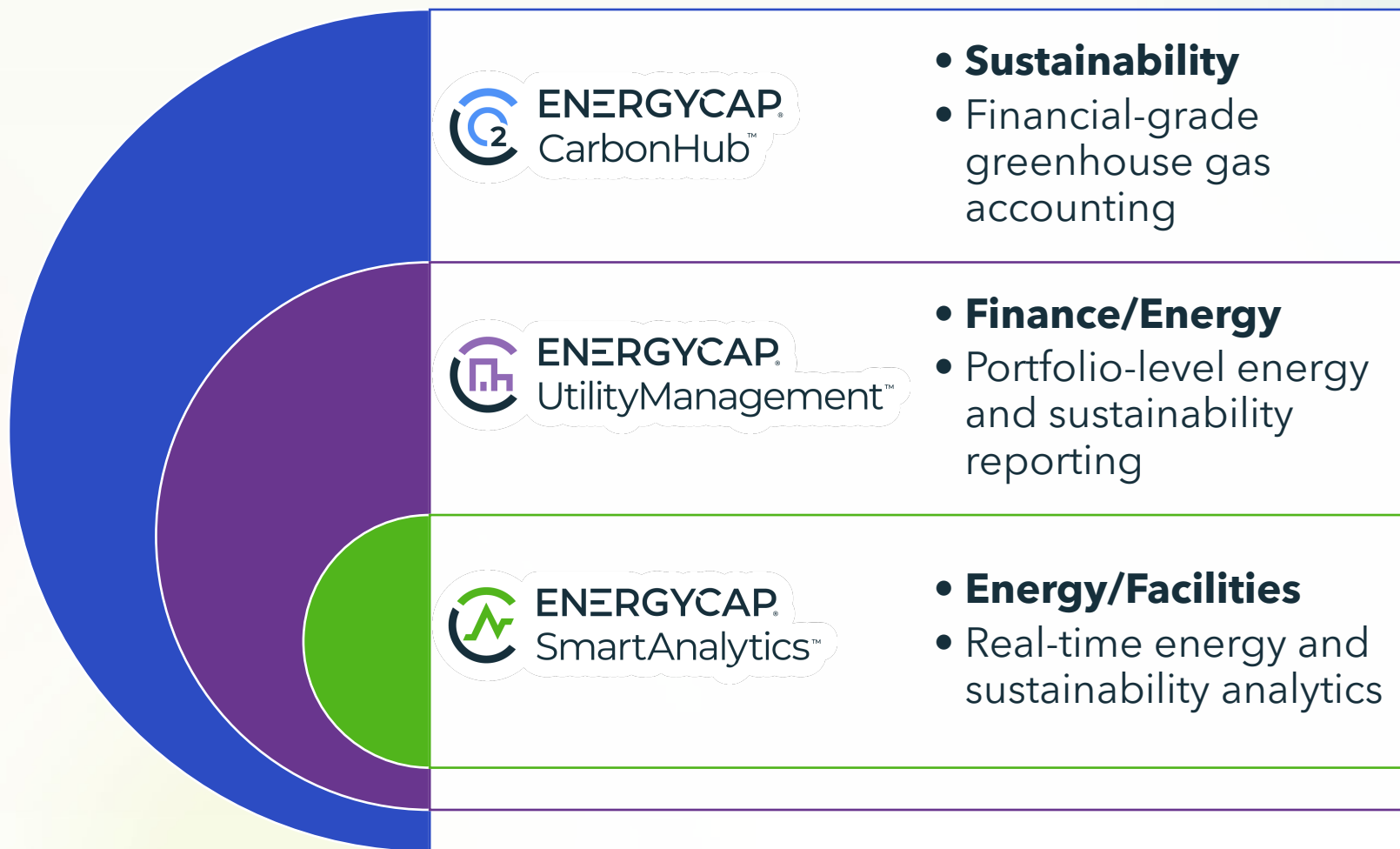
Time-Series/Interval Energy

Persona:

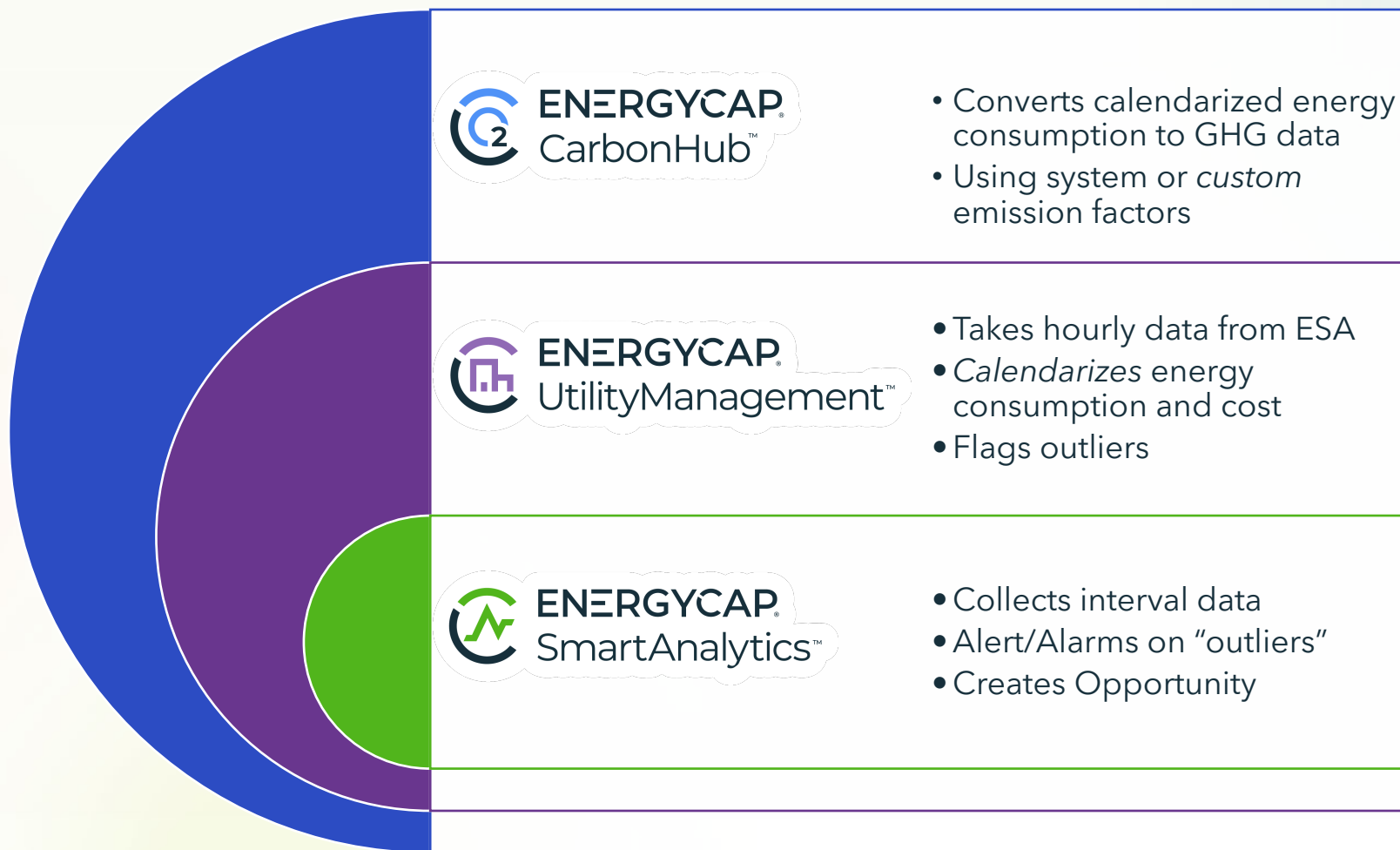
Energy/Facilities

CAPture Services: Bill CAPture, Bill Processing/Managed Services

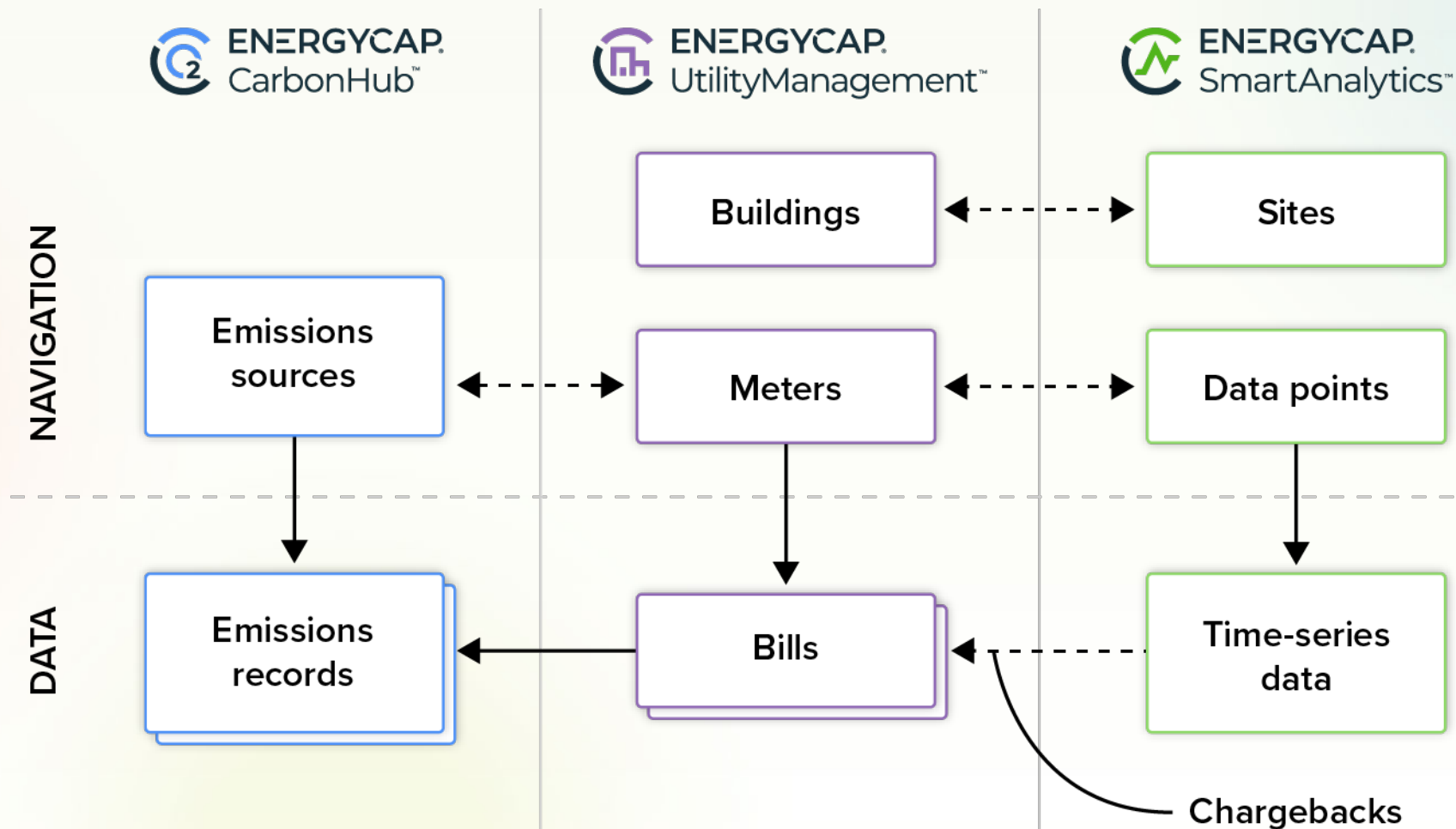
Energy and sustainability ERP // The single source of truth



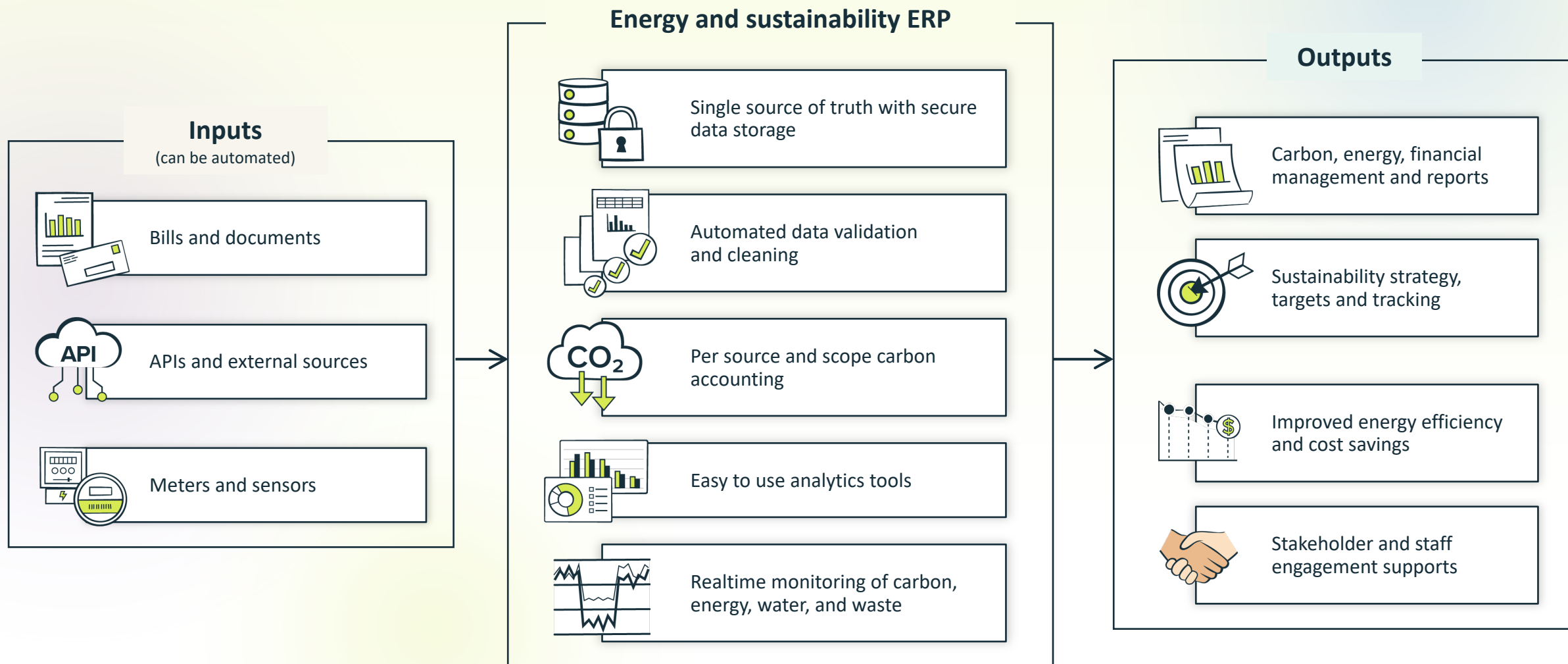
Energy and sustainability ERP // The single source of truth



Energy and Sustainability ERP // Even more value together



Use an energy and sustainability ERP to streamline carbon accounting



CarbonHub

EnergyCAP CarbonHub // Financial-grade greenhouse gas accounting



Calculate

Calculate Scope 1, 2, and 3 data across your business.

Scope 1 Emissions

Jan 2023–Dec 2023
57,921 t CO₂e

↓ 12.8%

Scope 2 Emissions

Jan 2023–Dec 2023
78,319 t CO₂e
Jan 2022–Dec 2022
70,921 t CO₂e

↑ 8%

Scope 3 Emissions

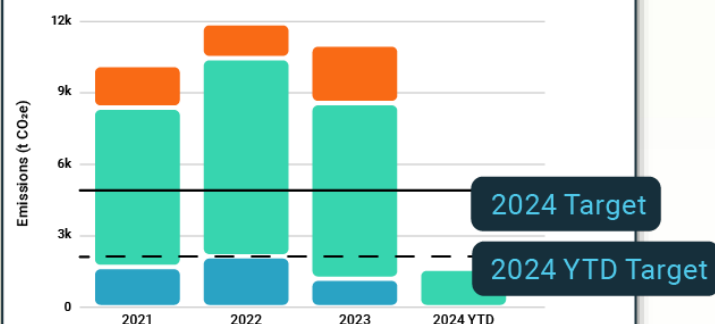
Jan 2023–Dec 2023
108,510 t CO₂e
Jan 2022–Dec 2022
70,215 t CO₂e

↓ 6.3%

Target

Set targets and track performance to your decarbonization goals.

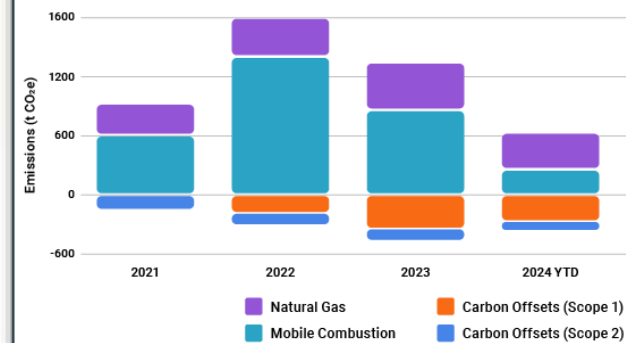
Total Emissions - Last 4 Fiscal Years



Report

Access robust analysis and GHG reporting functionality.


Scope 1 and 2 GHG Emissions by Category



EnergyCAP CarbonHub // Easy emission and factor management

- Add unlimited emission source types.
- Attach docs to emissions records
- Easier than ever to record data by **Activity**, **Cost**, or **Direct emissions**
- Includes over 3,000 global factors and counting!
 - The ability for multiple versions over time
 - Easily import custom factors
 - Support for industry-specific factors (Ecolnvent, exiobase, etc.)
- Ability to select the Assessment Report (AR) version for Global Warming Potential (GWP)


Scope 1 - Utility data

 This emissions record was generated from an EnergyCAP UtilityManagement bill. [Edit these read-only properties in EUM](#)

Emissions source



Communications Center-


Supplier 

National Weller Natural Gas

[Create an emission source](#)

Start date

01/26/2023

End date 

02/27/2023

EMISSIONS DETAILS AND CALCULATIONS

Scope category 

Scope 1 - Stationary Combustion



[Learn more about scope categories](#)

Factor 

NG-Commercial



[Factor details](#)

Quantity 

486.4

Unit

THERM

Cost 

471.67

Currency


USD (\$)

Automatic integration with
Utility Management


Ability to select your scope
category

Ability to select appropriate
conversion factor

Scope 1 - Utility data

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Emissions source

 Communications Center-

Create an emission source

Start date

01/26/2023

EMISSIONS DETAILS AND CALCULATION

Scope category ?

Scope 1 - Stationary Combustion

[Learn more about scope categories](#)

Factor ?

NG-Commercial

[Factor details](#)


Quantity ?

486.4

Cost ?

471.67

Emissions source

 Communications Center-NG01

EUM bill

February 2023

Supplier (vendor)

National Weller Natural Gas

Start date

01/26/2023

End date

02/27/2023

Scope category

Stationary Combustion

Factor

NG-Commercial

Quantity

486.4 THERM

Cost

\$471.67

Total emissions

2.59 t CO₂e

CO₂ (Carbon dioxide)

2.58 t CO₂e

CH₄ (Methane)

0.01 t CO₂e


N₂O (Nitrous oxide)

0.00 t CO₂e

Calculation of emissions based on conversion factors

Individual gases where available

Scope 1 - Utility data


 This emissions record was generated from an EnergyCAP UtilityManagement bill. [Edit these read-only properties in EUM](#)

Emissions source
 **Communications Center-**


[Create an emission source](#)

Start date
01/26/2023


EMISSIONS DETAILS AND CALCULATION


Scope category 
Scope 1 - Stationary Combustion

[Learn more about scope categories](#)

Factor 
NG-Commercial

[Factor details](#)

Quantity 
486.4

Cost 
471.67

Emissions source
 **Communications Center-NG01**

EUM bill
February 2023 
Supplier (vendor)
National Weller
Natural Gas 

Start date
01/26/2023

Scope category
Stationary Combustion
Factor
NG-Commercial

Quantity
486.4 THERM

Cost
\$471.67

Total emissions 2.59 t CO₂e

CO ₂ (Carbon dioxide)	2.58 t CO ₂ e
CH ₄ (Methane)	0.01 t CO ₂ e
N ₂ O (Nitrous oxide)	0.00 t CO ₂ e

Linked Factors History

[Close](#)

NG-Commercial

Effective	Source	Gas	Gas Amount (kg/MMBtu)	Total kg CO ₂ e/MMBtu
01/01/1990	U.S. EPA, Inventory of GHG Emissions and Sinks: 1990-2005 (2007)	CO ₂ (Carbon dioxide)	53.061226	53.061226
		CH ₄ (Methane)	0.004763	0.133364
		N ₂ O (Nitrous oxide)	0.000091	0.024115

Full transparency for audits

Scope 1 - Non-Utility data

Emissions source

📄 Landscaping - 4 Strol

▼

Create an emission source

Start date

01/01/2022

📅

EMISSIONS DETAILS AND CALCULATION

Use

Cost

Scope category ?

Scope 1 - Mobile Combustion

Learn more about scope categories

Factor ?

Lawn and garden equipment -

Factor details

Quantity ?

4230

Cost ?

0.00

Emissions source

📄 Landscaping - 4 Stroke

Supplier (vendor)

Not Configured

Start date

01/01/2022

Scope category

Mobile Combustion

Factor

Lawn and garden gasoline engine

Quantity

4,230 gal

Cost

Not Configured

Total emissions

39.05 t CO₂e

CO₂ (Carbon dioxide)

37.14 t CO₂e

CH₄ (Methane)

0.39 t CO₂e

N₂O (Nitrous oxide)

1.50 t CO₂e

Linked Factors History


Close

Lawn and garden equipment - 4 stroke gasoline engine


Effective	Source	Gas	Gas Amount (kg/gal)	🔍 Total kg CO ₂ e/gal
04/01/2022	EPA Emission Factors for Greenhouse Gas Inventories (https://www.epa.gov/system/files/documents/2022-04/ghg_emission_factors_hub.pdf)	CO ₂ (Carbon dioxide)	8.780000	8.780000
		CH ₄ (Methane)	0.002850	0.079800
		N ₂ O (Nitrous oxide)	0.001560	0.413400
04/01/2021	EPA Emission Factors for Greenhouse Gas Inventories (https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf)	CO ₂ (Carbon dioxide)	8.780000	8.780000
		CH ₄ (Methane)	0.005840	0.163520
		N ₂ O (Nitrous oxide)	0.000180	0.047700
03/01/2020	EPA Emission Factors for Greenhouse Gas Inventories (https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_mar2020.pdf)	CO ₂ (Carbon dioxide)	8.780000	8.780000
		CH ₄ (Methane)	0.005840	0.163520
		N ₂ O (Nitrous oxide)	0.000180	0.047700
03/01/2018	EPA Emission Factors for Greenhouse Gas Inventories (https://www.epa.gov/sites/default/files/2018-03/documents/emission-factors_mar_2018_0.pdf)	CO ₂ (Carbon dioxide)	8.780000	8.780000
		CH ₄ (Methane)	0.005840	0.163520
		N ₂ O (Nitrous oxide)	0.000180	0.047700

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Scope 2 - Purchased Utility - Location Based

 This emissions record was generated from an EnergyCAP UtilityManagement bill. [Edit these read-only properties in EUM](#)

Emissions source

 City Hall-ELE01

Create an emission source

Start date

08/02/2023

EMISSIONS DETAILS AND CALCULATION

Scope category 

Scope 2 - Purchased Electricity

[Learn more about scope categories](#)

Factor 

RFC East

[Factor details](#)

Quantity 

76800

Cost 

9201.32

Emissions source

 City Hall-ELE01

EUM bill

August 2023 

Start date

08/02/2023

Scope category

Purchased Electricity

Factor 

RFC East

Quantity

76,800 kWh

Cost

\$9,201.32

Total emissions

CO₂ (Carbon dioxide)

CH₄ (Methane)

N₂O (Nitrous oxide)

0.05 t CO₂e

0.06 t CO₂e

Linked Factors History

RFC East

Emission factors are per MWh of electricity consumed using US grid average

Effective

Source

Gas

01/01/2021 eGRID2021 Summary Data (State Output Emission Rates) [01/2023]

CO₂ (Carbon dioxide)

CH₄ (Methane)

N₂O (Nitrous oxide)

01/01/2019 eGRID2019 (by Subregion) - reference eGRID2019 V1.0 [02/2021]

CO₂ (Carbon dioxide)

CH₄ (Methane)

N₂O (Nitrous oxide)

01/01/2018 eGRID2018 (by Subregion) - reference eGRID2018 V2.0 [03/2020]

CO₂ (Carbon dioxide)

CH₄ (Methane)

N₂O (Nitrous oxide)

01/01/2016 eGRID2016 (by Subregion) - reference eGRID2016 V1.0 [02/2018]

CO₂ (Carbon dioxide)

CH₄ (Methane)

N₂O (Nitrous oxide)

01/01/2014 eGRID2014 (by Subregion) - reference eGRID2014 V1.0 [01/2017]

CO₂ (Carbon dioxide)

CH₄ (Methane)


N₂O (Nitrous oxide)

Automated by
region/state/country

Full flexibility in using
alternate factors

Can use custom factors
provided by the supplier or
based on PPA/vPPA

ons data.

 Total kg CO₂e/MWh

305.174181

0.622328

0.841375

315.262064

0.673120

0.841375

324.756658

0.774732

0.961685

343.903695

0.635040

1.081730

386.867503

0.959728

1.383830

Scope 3 - Currency based

Emissions source

Air Travel

Create an emission source

Start date

01/01/2023

EMISSIONS DETAILS AND CALCULATION

Use

Scope category ?

Scope 3 - 06. Business Travel

Learn more about scope categories

Factor ?

Air transport (per GBP | SIC code: 51)

Factor details

Cost ?

44933.00

NOTES

Add notes here...

Emissions source

Air Travel

Supplier (vendor)

Not Configured

Start date

01/01/2023

Scope category

06. Business Travel

Factor ?

Air transport (per GBP | SIC code: 51)

Cost

£44,933.00

Total emissions

CO₂e (Carbon dioxide equivalent)

Entered by: David Ulmer

Entered date: 09/08/2023

Modified by: Lalit Agarwal

Modified date: 02/26/2024

Linked Factors History

Close


Air transport (per GBP | SIC code: 51)

Cost-based emissions estimate per £ spent

Effective	Source	Gas	Gas Amount (kg/£)	Total kg CO ₂ e/£
01/01/2011	UK Department for Environment, Food and Rural Affairs (Defra) [Table 13, Version 2]	CO ₂ e (Carbon dioxide equivalent)	2.995703	2.995703
01/01/2010	UK Department for Environment, Food and Rural Affairs (Defra) [Table 13, Version 2]	CO ₂ e (Carbon dioxide equivalent)	2.934865	2.934865
01/01/2009	UK Department for Environment, Food and Rural Affairs (Defra) [Table 13, Version 2]	CO ₂ e (Carbon dioxide equivalent)	2.948919	2.948919
01/01/2008	UK Department for Environment, Food and Rural Affairs (Defra) [Table 13, Version 2]	CO ₂ e (Carbon dioxide equivalent)	2.898175	2.898175
01/01/2007	UK Department for Environment, Food and Rural Affairs (Defra) [Table 13, Version 2]	CO ₂ e (Carbon dioxide equivalent)	3.086054	3.086054

Scope 3 - Activity based

Emissions source

 Police Fleet

Create an emission source

Start date

01/01/2022

EMISSIONS DETAILS AND CALCULATION

Use

Cost

Scope category

Scope 1 - Mobile Combustion

Learn more about scope categories

Factor

Cars (by market segment) - Dual purpose 4X4 - Petrol by Length or Distance | km

Factor details

Quantity

1182600


Cost

0.00

Supplier

Search or add

Emissions source

 Police Fleet

Supplier (vendor)

Not Configured

Start date

01/01/2022

Scope category

Mobile Combustion

Factor

Cars (by market segment) - Dual purpose 4X4 - Petrol by Length or Distance | km

Quantity

1,182,600 km

Cost

Not Configured

Total emissions

249.48 t CO₂e

CO₂ (Carbon dioxide)

166.63 t CO₂e

CH₄ (Methane)

7.11 t CO₂e

N₂O (Nitrous oxide)

75.73 t CO₂e

Linked Factors History

Close

Cars (by market segment) - Dual purpose 4X4 - Petrol by Length or Distance | km

Cars (by market segment) | These are sport utility vehicles (SUVs) which have off-road capabilities and four-wheel drive. Examples include: Suzuki Jimny, Land Rover Discovery and Defender, Toyota Land Cruiser, and Nissan Pathfinder. | Passenger vehicles conversion factors should be used to report travel in cars and on motorcycles that are owned or controlled by the reporting organisation. This does not include employee-owned vehicles that are used for business purposes. Produced by UK Department for Environmental, Food and Rural Affairs (Defra)

Effective	Source	Gas	Gas Amount (kg/km)	Total kg CO ₂ e/km
06/01/2023	Greenhouse gas reporting: conversion factors 2023 - https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2591	CO ₂ (Carbon dioxide)	0.203370	0.203370
		CH ₄ (Methane)	0.000013	0.000364
		N ₂ O (Nitrous oxide)	0.000001	0.000265
06/01/2022	Greenhouse gas reporting: conversion factors 2023 - https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2591	CO ₂ (Carbon dioxide)	0.209920	0.209920
		CH ₄ (Methane)	0.000320	0.008960
		N ₂ O (Nitrous oxide)	0.000360	0.095400

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Scope 3 - Direct Emissions

Emissions source

 Transportation & Distribution GHG (Upstream)

[Create an emission source](#)

Start date

01/01/2023

EMISSIONS DETAILS AND CALCULATION

Use

Scope category 

Scope 3 - 04. Upstream

[Learn more about scope categories](#)

Factor 

GHG Emission/Adjustment

[Factor details](#)

Quantity 

Cost 

Emissions source

 Transportation & Distribution GHG (Upstream)

Supplier (vendor)

Not Configured

Start date

01/01/2023

End date

01/01/2024

Scope category

04. Upstream

Factor 

GHG Emission/Adjustment

Quantity

300 t CO₂e

Cost

Not Configured

Total emissions

300.00 t CO₂e

CO₂e (Carbon dioxide equivalent)

300.00 t CO₂e

Entered by: Lalit Agarwal

Entered date: 02/27/2024

Linked Factors History

Close

GHG Emission/Adjustment

Used for recording pre-calculated GHG emissions and adjustments. Each recorded unit equates to the same quantity of CO₂e (example: 1kg recorded = 1 kg CO₂e.)

Effective	Source	Gas	Gas Amount (kg/kg CO ₂ e)	Total kg CO ₂ e/kg CO ₂ e
01/01/1980	General GHG emission/adjustment	CO ₂ e (Carbon dioxide equivalent)	1.000000	1.000000

Visualize

Happy Valley

+

Emissions Sources

All Collections

All Emissions Sources

Sustainability Reporting

City of Happy Valley

- Communication Towers
- Facilities
 - City Hall
 - Communications Center
 - Doc Brown Building
 - Emergency Coordination Center
 - Happy Valley Center
 - Parking
 - Police
 - Records Center and Archives
 - Smart Metered Buildings
 - Strickland Building
 - Train Station
 - Twin Pines Mall
- Non-Utillities
 - Business Travel
 - Long Haul Flights
 - Medium Haul Flights
 - Rental Cars
 - Short Haul Flights
 - Carbon Offsets and RECs
 - Employee Commuting
 - Bus
 - Employee Vehicles
 - Light Rail
 - Fleet
 - Landscaping
 - Scope 3A: Upstream Activities
 - Scope 3B: Downstream Activities
- EnergyCAP, LLC

Sustainability Reporting

City of Happy Valley [HAPPY_VALLEY]

Insights

Records

Actions

Reports

Carbon Footprint—Total Emissions

Fiscal Year	Total Emissions (t CO ₂ e)
2020	~8,800
2021	~11,500
2022	~11,200
2023 YTD	~5,500

Fiscal Years 2020–2023 (Calendarized Data)

Carbon Footprint by Scope

Fiscal Year	Scope 1	Scope 2	Scope 3
2020	~1,000	~6,000	~1,500
2021	~1,000	~7,500	~3,000
2022	~1,000	~7,000	~3,500
2023 YTD	~1,000	~3,000	~1,500

Fiscal Years 2020–2023 (Calendarized Data)

Total Emissions

Feb 2022–Jan 2023
10,469.23 t CO₂e

↓ 9.7%

Feb 2021–Jan 2022
11,597.89 t CO₂e

Feb 2021–Jan 2023 (Calendarized Data)

Scope 1 Emissions

Feb 2022–Jan 2023
-44.63 t CO₂e

↓ 104.1%

Feb 2021–Jan 2022
1,078.38 t CO₂e

Feb 2021–Jan 2023 (Calendarized Data)

Scope 2 Emissions

Feb 2022–Jan 2023
6,307.24 t CO₂e

↓ 14.6%

Feb 2021–Jan 2022
7,386.67 t CO₂e

Feb 2021–Jan 2023 (Calendarized Data)

Scope 3 Emissions

Feb 2022–Jan 2023
4,219.11 t CO₂e

↑ 34.1%

Feb 2021–Jan 2022
3,145.34 t CO₂e

Feb 2021–Jan 2023 (Calendarized Data)

Emissions by Type (Commodity)

Type	Emissions (t CO ₂ e)
Electric	6,594.01
Ground Transportation	5,170.67
Natural Gas	523.81
Mass Transit	361.79
Biodiesel	259.60

Emissions by Scope Category

Category	Emissions (t CO ₂ e)
Scope 2: Purchased Electricity	6,581.76
Scope 3: 07. Employee Commuting	5,295.26
Scope 1: Mobile Combustion	712.66
Scope 1: Stationary Combustion	523.81
Scope 3: 06. Business Travel	21.93

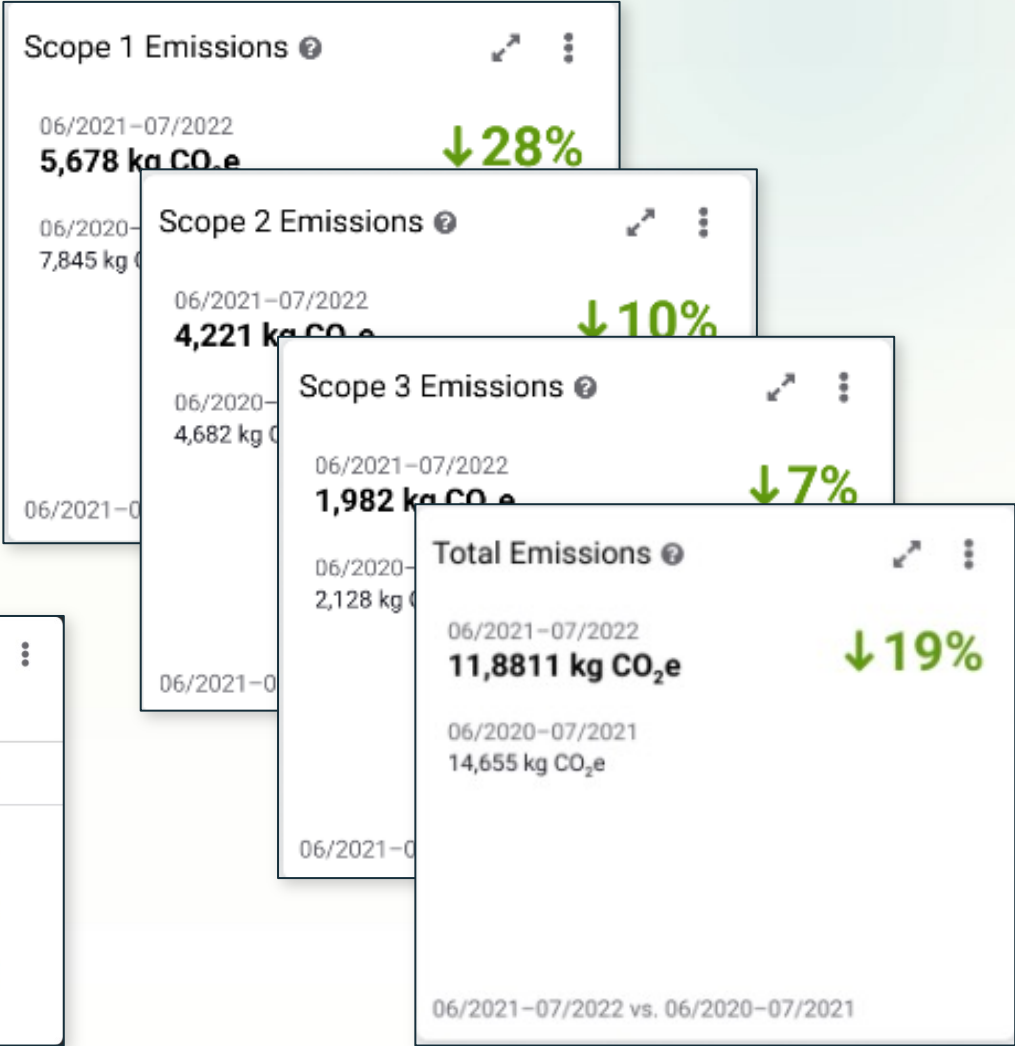
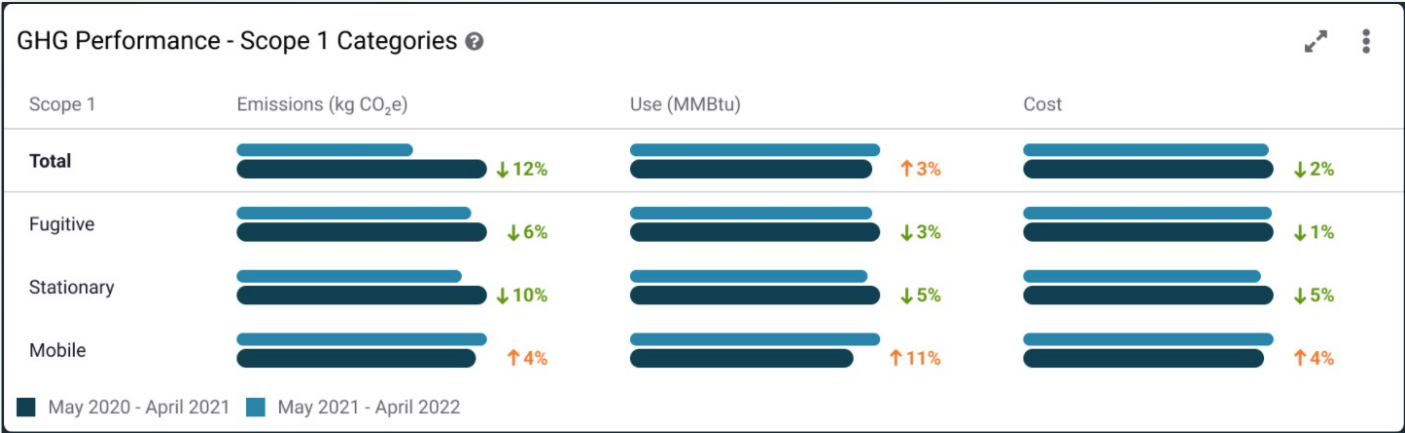
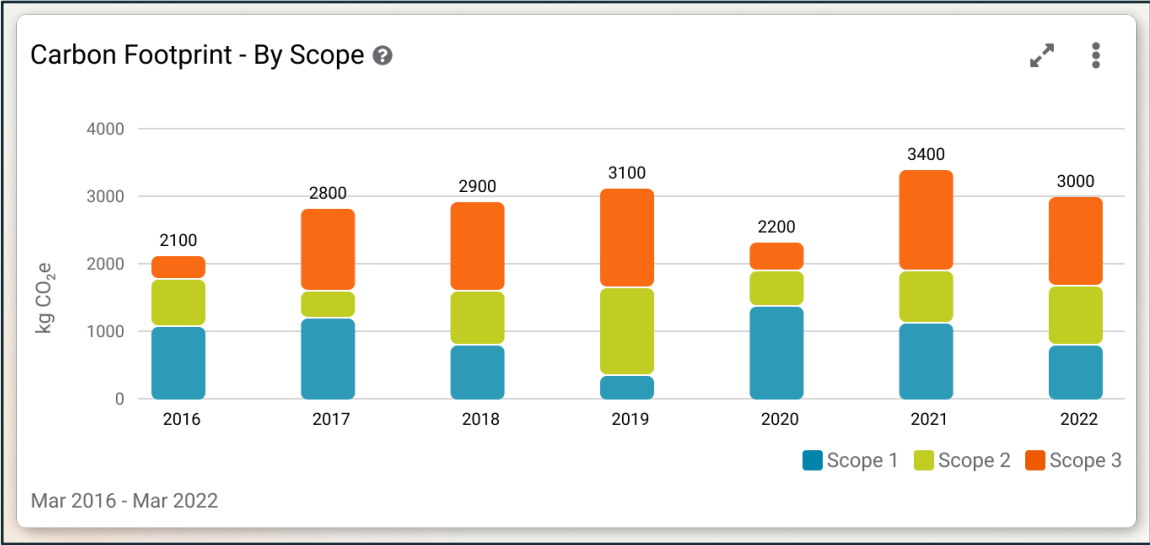
Report your way

Emissions Details (Excel only) - Report-46

[Save as ▼](#)[Email](#)[Download ▼](#)[Done](#)

Building Name	Building Code	Parent Name	Parent Code	2023 Emissions (t CO ₂ e)										Total
				Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	
10th & Central Parking Garage	2709	Parking	PARKING	543.78	512.24	514.56	434.79	371.45	352.42	363.56	394.37	35.69	4.12	3,526.98
1st & Main Parking Garage	2707	Parking	PARKING	9.36	8.56	8.55	7.49	6.07	5.71	0.76	5.28	5.44	0.54	57.76
3rd & West Parking Garage	2708	Parking	PARKING	28.60	27.94	29.38	24.26	17.70	15.95	17.70	18.38	0.00		179.90
4th & Walnut Parking Garage	2699	Parking	PARKING	27.18	25.00	25.25	21.27	15.76	12.55	11.76	11.90	0.84	0.14	151.64
Airport Police Training Center	2699	Parking	PARKING	7.25	6.60	7.18	6.90	6.86	6.49	6.67	6.73			54.66
Broadsword Communications Tower	2074	Police	ACADEMY1	24.88	25.42	27.26	20.67	14.33	12.56	13.04	13.62	0.39		152.17
City Hall	2959	Communication Towers	COMM_TOWERS	1.07	0.99	1.08	1.05	1.06						5.25
Cliffside Comm Tower	2131	City Buildings	CITY_BUILDINGS	46.58	41.11	25.08	21.79	21.60	20.05	23.80	24.32	0.00		224.32
Communications Center	2972	Communication Towers	COMM_TOWERS	1.81	1.58	1.68	1.51	1.55	1.29	0.64	1.44			11.50
East Precinct	2911	City Buildings	CITY_BUILDINGS	52.58	46.31	48.73	44.72	45.30	43.71	46.03	45.66	0.02		373.06
Emergency Coordination Center	2400	Police	ACADEMY1	12.14	12.35	12.62	11.22	9.01	8.09	9.19	9.74			84.37
Futura Radio Site	2021	City Buildings	CITY_BUILDINGS	13.27	11.95	11.40	9.37	10.49	10.05	11.90	13.26			91.69
Goldie Wilson Radio Site	2964	Communication Towers	COMM_TOWERS	0.35	0.31	0.35	0.37	0.41						1.79
Happy Valley Center	2960	Communication Towers	COMM_TOWERS	1.15	1.09	1.24	1.14	1.19	1.14	0.74				7.68
Jacobs Precinct	2106	City Buildings	CITY_BUILDINGS	116.61	105.37	112.49	106.91	118.31	119.42	141.10	139.81	0.00	0.00	960.02
Justice Center	2126	Police	ACADEMY1	5.29	4.93	4.86	4.35	3.76	3.46	4.04	4.30	0.02		35.00
Kennedy Pedestrian Bridge	2119	Police	ACADEMY1	0.22	0.26	0.31	0.16	0.14	0.15	0.01	0.15	0.15	0.01	1.55
Mount Gretna Communication Tower	2013	Parking	PARKING	1.54	1.38	1.61	1.80	1.49	1.08	2.46	3.05			14.40
Mount Marty Comm Tower	2951	Communication Towers	COMM_TOWERS	0.09	0.08	0.08	0.08	0.09	0.05					0.47
Mountain Crest Comm Tower	2957	Communication Towers	COMM_TOWERS	1.25	1.14	1.27	1.22	1.31	0.79					6.98
New Town	2949	Communication Towers	COMM_TOWERS	5.02	4.53	5.02	4.92	5.35	0.68					25.51
Orchard Hill Communication Tower	2273	Police	ACADEMY1	0.25	0.23	0.26	0.29	0.32	0.27	0.07	0.33	0.30	0.04	2.37
Records Center and Archives	2200	Police	ACADEMY1	5.18	4.87	4.71	3.34	2.12	1.67	1.87	2.01	1.03	0.13	26.93
Scenic Trail Comm Tower	2961	Communication Towers	COMM_TOWERS	1.35	1.10	1.22	1.17	1.23	0.93					6.99
Squirrel Hill Comm Tower	2224	City Buildings	CITY_BUILDINGS	9.92	8.44	8.84	9.33	11.38	22.29	17.24	31.36	5.42		124.21
Strickland Building	2953	Communication Towers	COMM_TOWERS	1.67	1.62	1.77	1.37	0.40	1.46					8.31
Tanner Garage	2954	Communication Towers	COMM_TOWERS	1.93	1.80	1.98	1.92	1.86	0.80					10.29
Temple Radio Site	2078	City Buildings	CITY_BUILDINGS	9.07	9.18	8.76	6.63	4.70	4.24	4.07	3.81	0.00		50.47
Thomas Square Parking Garage	2343	Parking	PARKING	40.26	39.99	43.28	29.33	19.03	17.84	19.13	20.78	9.92	0.26	239.81
Twin Pines Garage	2952	Communication Towers	COMM_TOWERS	2.55	2.50	2.84	2.80	2.48	0.60					13.77
Train Station	2121	Parking	PARKING	0.56	0.48	0.54	0.53	0.52	0.20	0.00				2.83
Twin Pines Mall	2215	City Buildings	CITY_BUILDINGS	41.70	41.82	41.31	29.96	4.68	0.26	0.00				159.73
Vehicle Storage	2553	Parking	PARKING	0.29	0.40	0.99	0.38	0.20	0.21	0.23	0.26	0.10		3.07
Warehouse	2815	City Buildings	CITY_BUILDINGS	11.45	11.05	10.43	6.77	3.90	3.23	0.99	2.62	3.17	0.81	54.43
Welch Pool Parking Garage	2271	Police	ACADEMY1	3.45	4.01	2.78	2.28	1.82	1.69	1.74	1.76			19.53
Wilson Building	2270	Police	ACADEMY1	17.63	16.47	16.46	12.97	11.43	10.50	3.34	7.47	8.33	2.13	106.72
	2711	Parking	PARKING	15.67	15.42	16.45	12.38	7.57	7.28	5.89	5.90	0.42	0.06	87.03
	2333	Police	ACADEMY1	24.61	25.98	26.50	22.14	16.07	15.76	19.16	20.41	0.15		170.77

Granular GHG reporting, comparison, and analysis // All scopes



Thank you!