

Antitrust & Legal Reminder for Training Session: From Estimating Emissions to Accelerating Action

The purpose of this webinar is to share educational materials related to estimating a company's carbon footprint and accelerating climate action

However, be mindful that you may compete with other participants attending the Webinar and, therefore, you should avoid discussing:

- Any agreements or understandings to limit any aspect of competition; and
- Competitively-sensitive information, including pricing, costs, margins, and other price-related or confidential terms of sale; forward-looking strategies or business plans (discussing, for example, a specific customer, geographic, or segment focus); and non-public information regarding employee recruitment strategies and/or wages/benefits.

You will have an opportunity to discuss sensitive strategic issues with your Walmart buying team on an individual basis – do not do so in front of your competitors.

If you have any questions, please contact your company's legal counsel.

THIS TRAINING DOES NOT CONSTITUTE LEGAL ADVICE. SUPPLIERS SHOULD CONSULT THEIR OWN COUNSEL WITH LEGAL QUESTIONS RELATED TO CLIMATE REPORTING.

From Estimating Emissions to Accelerating Action

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Walmart  Sustainability





“

Walmart is on a path to become a regenerative company, one dedicated to placing nature and humanity at the center of our business practices.”

Doug McMillon

President and CEO, Walmart Inc.

What does Regeneration mean for Sustainability?



Spurring a circular economy, eliminating waste along the product chain



Decarbonizing operations



Restoring, renewing, replenishing and conserving natural resources



Adopting regenerative practices in agriculture, forest management and fisheries



Advancing prosperity, equity for associates, customers, people across our supply chains

Project Gigaton: Driving action with suppliers toward Regeneration



Energy



Nature



Waste



Packaging



Transportation



Product Use
& Design

Aiming to reduce or avoid
1 billion MT of emissions by 2030

Cumulative **750+ million MT CO₂e avoided** (supplier reported) and **5,200+ suppliers** engaged since 2017

Major
Contributors



ProjectGigaton™



Agenda

Recap from last week's session

Scope 2: market-based and location-based methods

Updating and maintaining carbon footprints

- Inventory management plans
- Assurance and verification

Setting emissions reduction targets

Reporting and disclosing emissions

Where to go for more help



Poll



Recap from last week's session

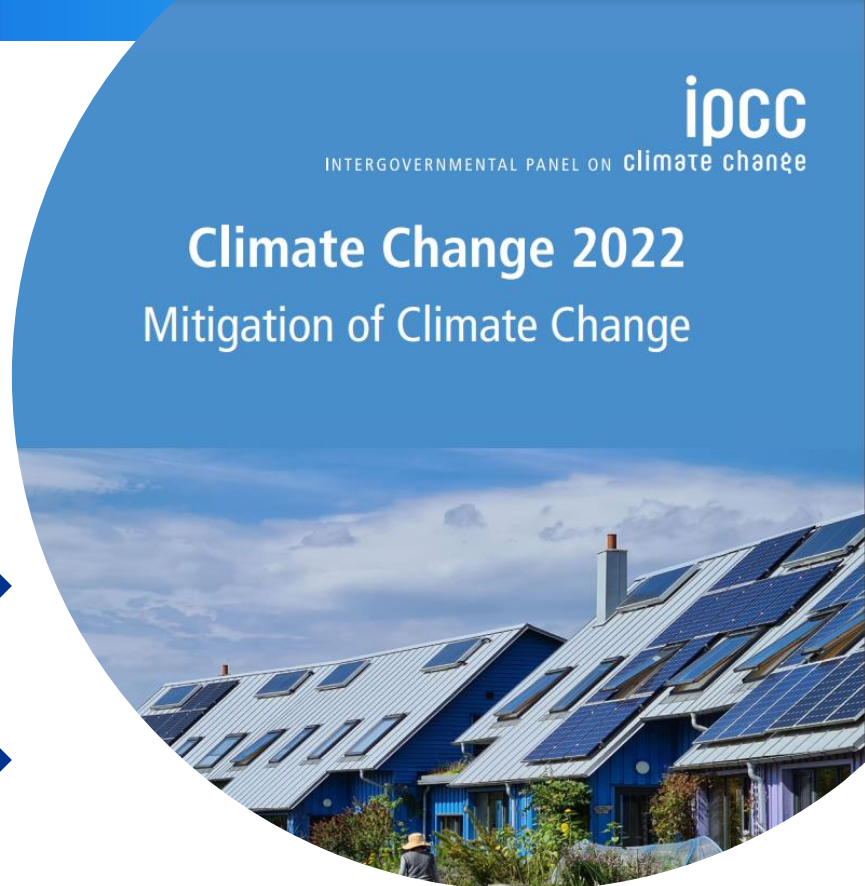
IPCC Urges Rapid Action

Recent IPCC report found that we're off track to meet global climate goals.

To limit irreparable damage, we need to:

- 01 Peak greenhouse gas (GHG) emissions by 2025**
- 02 Halve GHG emissions by the end of this decade**
- 03 Achieve global net zero GHG emissions by around 2050**

Climate Change 2022 Mitigation of Climate Change



What is the value of estimating, managing and disclosing greenhouse gas emissions?



Meet stakeholder expectations

Stakeholders including customers, investors, and employees expect businesses to transparently manage emissions.



Climate change mitigation

Reducing emissions is critical for maintaining surety of supply in the face of climate change disruption.



Risk mitigation

Managing emissions can mitigate risk by reducing costs, enhancing reputation, improving efficiency, and preparing for regulation.

What is a carbon footprint?

An organization's GHG emissions resulting from business operations (e.g., energy consumption) over a specific time period

- Typically represents one year of activities
- Includes greenhouse gases other than carbon (e.g., methane, refrigerants like HFCs)
- Typically measured in metric tons (MT) of carbon dioxide equivalent (CO₂e)



Scope 1 Emissions

- Direct GHG emissions produced by a company's **own activities or operations**
- Often related to fuel consumption

Scope 1 Examples:

- Space heating
- Vehicle fleets



Scope 2 Emissions

- Indirect GHG emissions from consumption of **purchased electricity**
- Emissions are “indirect” because they occur somewhere else
- E.g., at a power plant where coal is burned to produce electricity

Scope 2 Examples:

Electricity purchased from local utility provider





Deeper dive on Scope 2: Market-based and location-based method

Two methods for Scope 2 reporting

Location-based



- Typically based on regional grid average of where facility is located
- Does not change based on renewable energy purchasing
- More accurate depiction of actual emissions on the grid

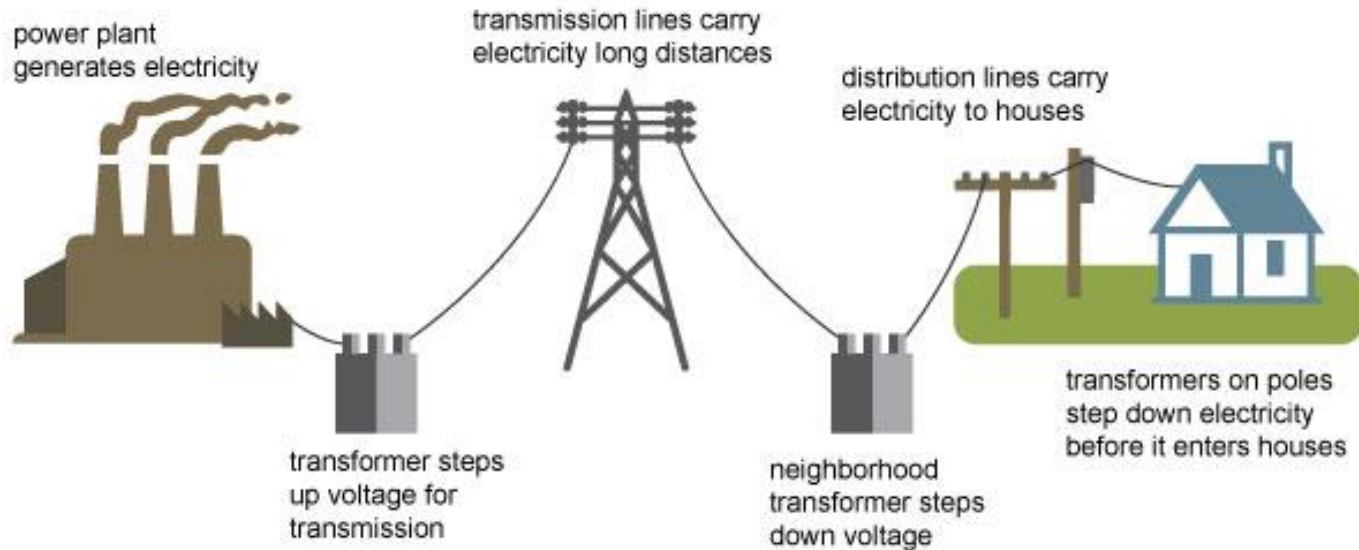
Market-based



- Adjusted for renewable energy purchased by business
- More accurate depiction of efforts made to purchase renewable energy

How do electricity grids work?

Electricity generation, transmission, and distribution

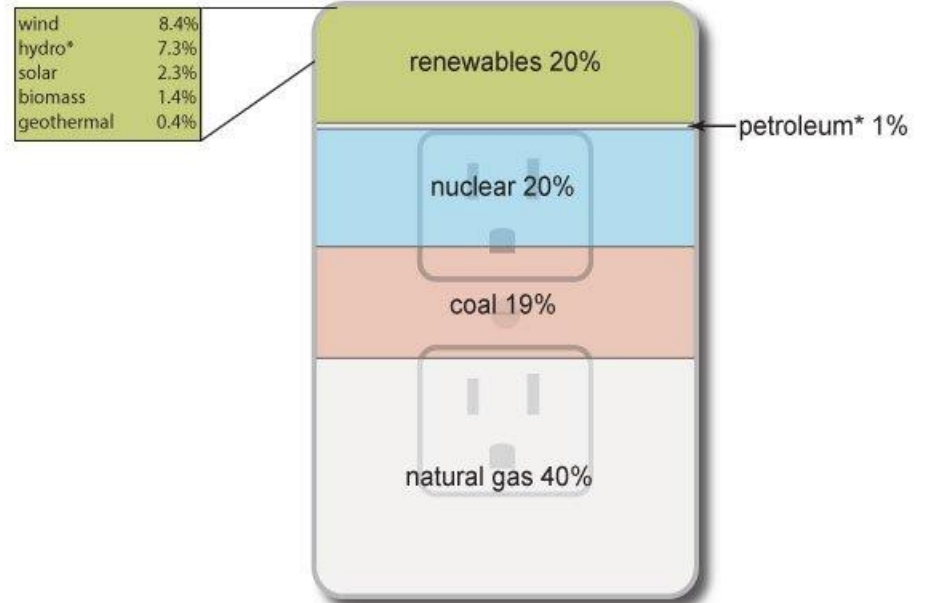


Source: Adapted from National Energy Education Development Project (public domain)

Electricity is generated by different sources



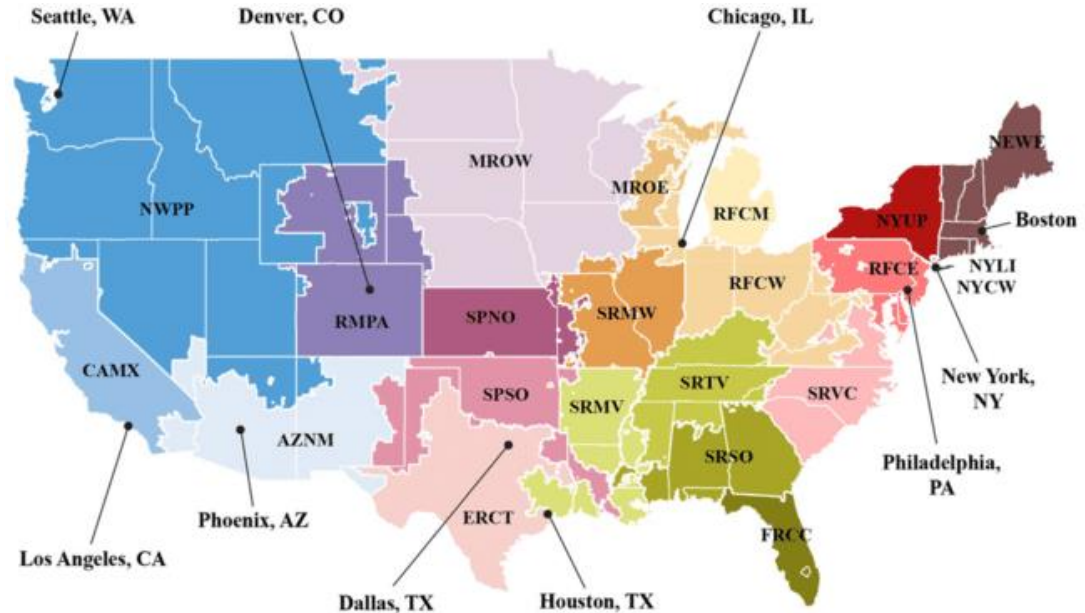
Sources of U.S. electricity generation, 2020
Total = 4.12 trillion kilowatthours



via EIA

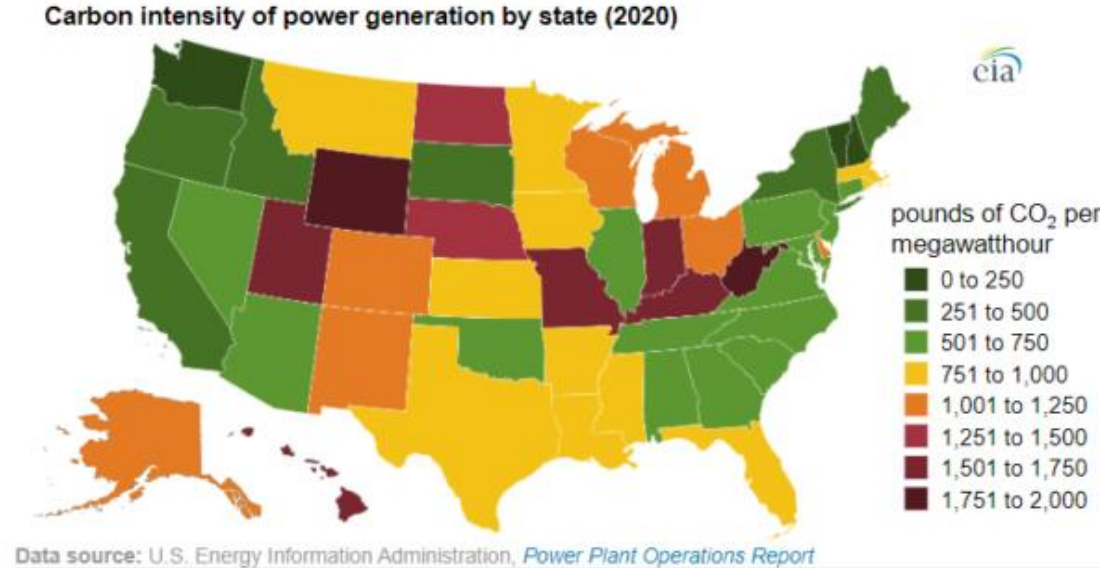
Electricity grids are regional

- Electricity grids are typically regional
- A single grid region might have hundreds of power plants feeding into it
 - I.e., solar farms, wind farms, coal power plants, nuclear plants, etc.
- These power plants have varying emissions intensities



Emissions of electricity varies based on location

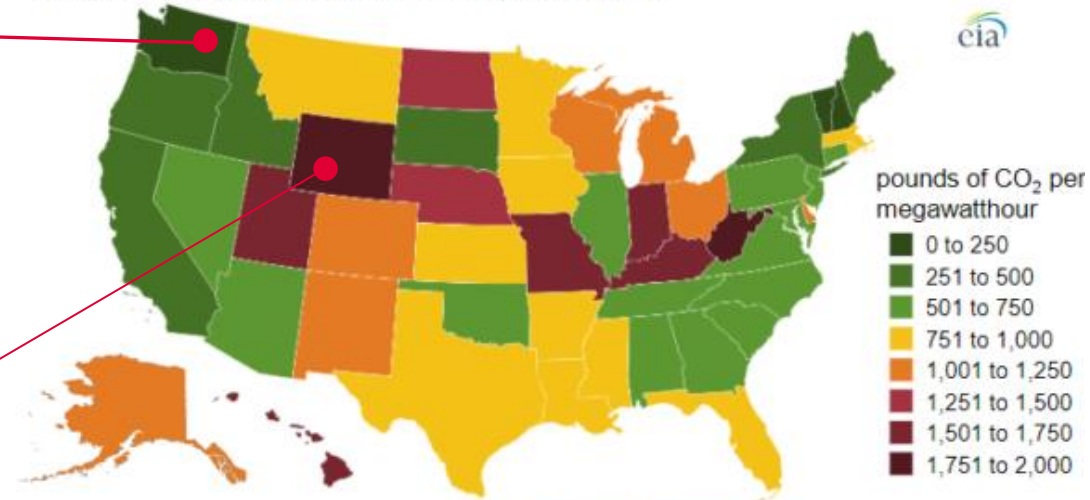
- Each region has a unique mix of energy generation and emissions intensity
 - E.g., some regions may have coal plants, other may have hydropower plants
- Thus, regions have different “grid average” emissions
- Emissions from electricity consumed by businesses **vary based on the regional “grid average” emissions**
 - E.g., [US EPA eGrid](#) grid average emissions



Emissions of electricity varies based on location



Carbon intensity of power generation by state (2020)



Data source: U.S. Energy Information Administration, *Power Plant Operations Report*

Businesses are purchasing renewable energy

- Businesses increasingly buy renewable energy to achieve their climate goals
- Procurement can be from on-site sources
 - E.g., electricity from rooftop solar panels
- Or off-site sources
 - E.g., solar farm in another state via a Power Purchase Agreement (PPA)



Easiest path to renewable energy is off-site purchasing

- Off-site renewable energy is often not physically delivered to the buyer
- Instead, it is conveyed via contracts (such as a Power Purchase Agreement)
- This supports overall renewable energy development and companies can reduce their emissions
- **But: it does not necessarily reduce emissions on the local grid where you operate**



Two methods for Scope 2 reporting

Business should report on the emissions from:

01

The electricity they actually consume from the grid

Location-Based Method

02

The electricity or renewable energy certificates purchased through other contractual mechanisms

Market-Based Method

Two methods for Scope 2 reporting

Location-based



- Typically based on regional grid average of where facility is located
- Does not change based on renewable energy purchasing
- More accurate depiction of actual emissions on the grid

Market-based



- Adjusted for renewable energy purchased by business
- More accurate depiction of efforts made to purchase renewable energy

What emission factors should I use?

Reminder: emission factors translate energy consumption to emissions, e.g. pounds of CO₂ per MWh electricity

Location-based



Emission factors:

- Regional grid average (regional or national)

Market-based



Emission factors:

- Renewable energy certificates (RECs)
- Power Purchase Agreements (PPAs)
- Green power programs
- Other utility-specific emission factor (if available)
- Other contracts for renewable energy

Scope 2 Example

Acme Co. is located in California and purchases **no renewable electricity**.

Location-based



100 MWh

(energy consumed)

x 0.24 mt CO₂ / MWh

(California grid average
emission factor)

=

**24 mt
CO₂**

Market-based



100 MWh

(energy consumed)

x 0.24 mt CO₂ / MWh

(California grid average
emission factor)

=

**24 mt
CO₂**

Because Acme **does NOT** purchase renewable energy, **market- and location-based totals are the same**. This is the case for many companies.

Scope 2 Example

Acme Co. is located in California and now purchases **100 MWh of solar electricity** from an off-site location.

Location-based



100 MWh
(energy consumed)

x 0.24 mt CO₂ / MWh
(California grid average
emission factor)

=

**24 mt
CO₂**

Market-based



100 MWh
(energy consumed)

x 0 mt CO₂ / MWh
(renewable energy
emission factor)

=

**0 mt
CO₂**

Because Acme DOES purchase renewable energy, **market- and location-based totals are different**

Scope 2 Best Practices

- Read [GHG Protocol's Scope 2 Guidance](#)
- Pay attention to the ownership of renewable electricity
 - Renewable Energy Certificates (RECs), Energy Attribute Certificates (EACs), Guarantee of Origin, etc.
- Be consistent with the method you use to calculate totals and track toward a target
- Publish both totals, e.g.:

Published Example:

Scope 1	6,000 [♦]
Scope 2 (LBM)	286,000 [♦]
Impacts of contractual instruments and MBM emissions factors	(200,000) [†]
Scope 2 (MBM)	86,000 [♦]
Total emissions from operations (MBM)	92,000 [♦]



Updating and maintaining carbon footprints

Consistency and documentation is critical

Carbon footprints should be updated each year

Consistency and documentation are critical for carbon footprints

01

Save staff
time and
resources

02

Improve
internal
transparency

03

Ensure data
accuracy

04

Measure
progress
over time in
comparable
way

05

Prepare
for future
regulation

GHG Inventory Management Plans

An “inventory management plan” is an internal document that accompanies a carbon footprint

Provides written documentation of the **“WHO, WHAT, WHEN, WHERE, HOW”** of the footprint process

Improves internal clarity on processes and timelines, and helps improve planning over time

Templates available online:

[US EPA Center for Corporate Climate Leadership Inventory Management Plan Guidance](#)

Inventory management plans

Provides documentation of the “WHO, WHAT, WHEN, WHERE, HOW” of the footprint process

WHO?

- Contact name and information
- Roles and responsibilities
- Relevant trainings

WHAT?

- Reporting boundaries
- Emissions sources (facilities, fleets, etc.)
- Relevant GHGs

WHEN?

- What year does it apply to?
- What is the timeline for gathering and reporting data?

WHERE?

- Where is data obtained from?
- Where is it stored and accessed?
- Where are emission factors obtained?

HOW?

- What calculation methodologies were used?
- What was calculated versus estimated?
- What were assumptions in estimations?

Other considerations for updating footprints

Have boundaries changed?
(E.g., major acquisitions or divestitures?)

Are there new facilities that have come online?
Old ones that have been decommissioned?

Are there updated emission factors for Scope 2?

Will you be doing assurance or verification?

Assurance and verification

- Assurance (or verification) is an audit of a carbon footprint and associated data by an independent 3rd party
- Important step in organizational climate maturity
- Why do assurance?
 - Enhance internal and external confidence in data
 - Identify areas for improvement
 - Strengthen reporting processes and procedures

2019 | **2020** | **2021**

91%

92%

95%

reported some ESG information

51%

58%

64%

obtained some level of assurance

[IFAC State of Play: Sustainability Disclosure & Assurance](#)

Assurance and verification

GHG assurance is a common service offered by accredited firms, e.g.:

- Major accounting firms with sustainability practices
- Environmental and engineering consultancies

Where to learn more?

- [GHG Protocol Corporate Standard Ch. 10](#)
- [CDP's Verification Resources](#)



Setting emissions reduction targets

Why set an emissions reduction target?

Setting ambitious climate goals for your organization is a key step in climate maturity, and increasingly expected by stakeholders

Emissions reduction goals can help:



Find cost savings



Galvanize sustainability efforts



Enhance reputation



Drive innovation



Future-proof business

What is a “science-based” target?

- Climate targets should **align with what science tells us** we need to do to meet the goals of the Paris Agreement
- “Science-based targets” are a way of translating global climate goals **into corporate emissions reduction pathways**
- These pathways tell us **how much** we need to reduce emissions, and by when

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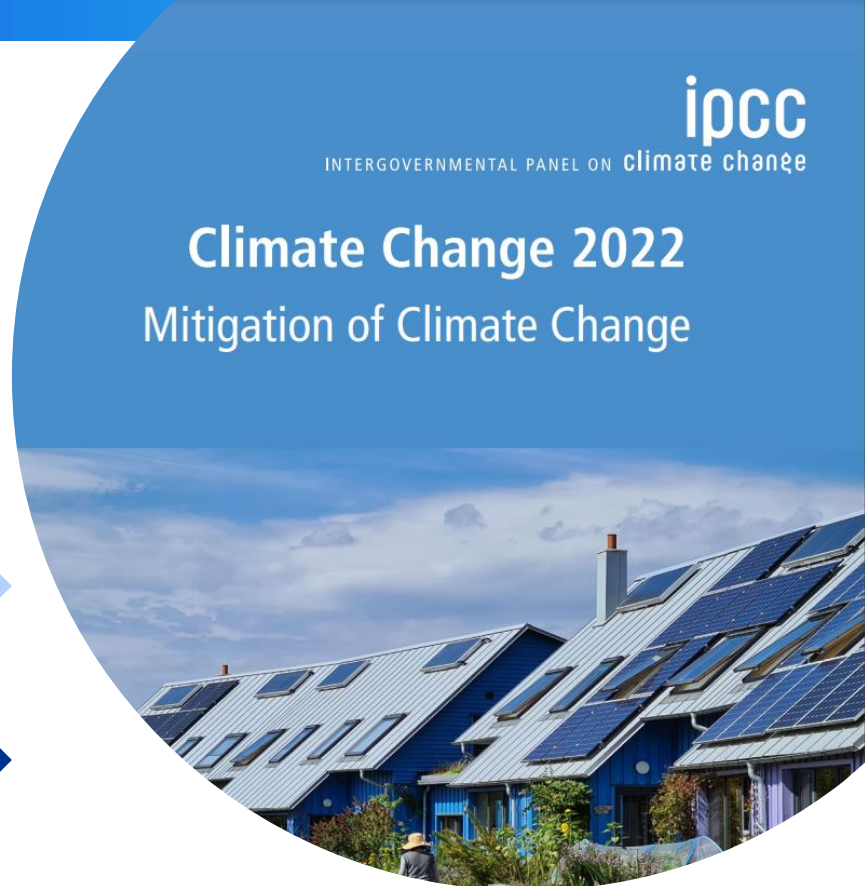
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What is a “science-based” target?

Generally, targets are considered “science-aligned” if they commit to:

Near-term emissions reductions aligned with global goal of halving emissions by 2030

- ~4% emissions reduction per year

Net zero emissions by midcentury

- ~90%+ absolute emissions reduction



Graphic via SBTi

Setting science-based targets

Science Based Targets Initiative (SBTi) is a leading standard-setter and goal validation organization

- SBTi defines reduction pathways and goal-setting methodologies
- Companies commit to setting a target and submit their target for official validation within 2 years

SBTi is the “gold standard” of goals; requires Scope 3 coverage

UN-backed Race to Zero initiative also develops criteria for ambitious goal-setting



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

RACE TO ZERO

What are general expectations for ambitious goals?

Set emissions reduction goals that ideally:

- 01** | Address all GHGs and corporate operations
- 02** | Have a clear base year and target year
- 03** | Commit to ambitious absolute emissions reductions
- 04** | Address all three scopes of emissions
- 05** | Are publicly disclosed

What does a published goal look like?

Acme Company will reduce _____ emissions across _____
Scopes **Goal coverage**

by _____ from _____ to _____.
Percent reduction **Base year** **Target year**

What does a published goal look like?

Acme Company will reduce Scope 1 and 2 emissions across global operations
Scopes Coverage

by 50% from 2020 to 2030.
Percent reduction Base year Target year

Reduction Goal Examples

Company A:

Reduce absolute **global scopes 1 & 2** GHG emissions **35%** by **2025** and **65%** by **2030** from **2015 base year**.

coverage **scopes** **percent reduction** **target year** **base year**

Company B:

Reduce **Scope 1 and 2** GHG emissions by **50%** by **2030**, as compared to a **2019 base year**.

Company C:

Reduce absolute **scope 1 and 2** GHG emissions **60%** by **FY2030** from a **FY2018 base year**.

Best practices for reduction goals

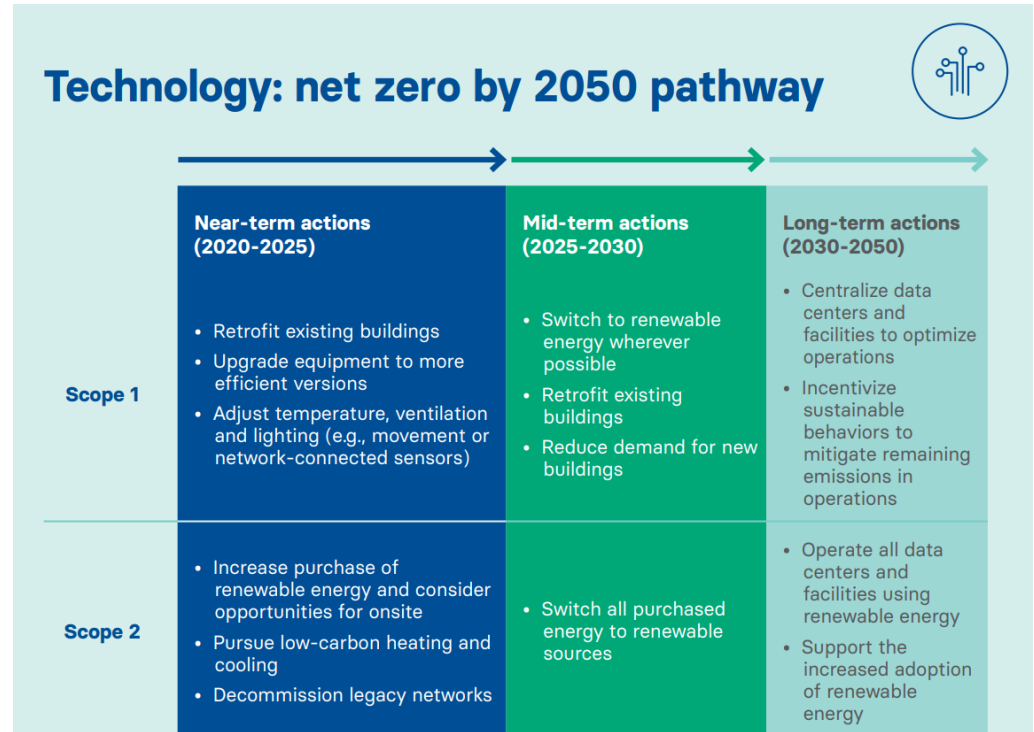
Think about
**what makes
sense** for your
organization

- Does it make sense to start with SMART Goals?
- Work towards establishing company-wide science-based targets
- Consider other supportive goals, like renewable energy

- Executive buy-in and cross-functional support across the business are important for success
- Communicate early and often around your goal

Best practices for reduction goals

- Develop a roadmap of potential projects and activities that can support goal achievement
- E.g., leveraging EDF's [Pathways to Net Zero report series](#)





How to share goals for Project Gigaton

Project Gigaton SMART Goal Templates


Language: English

This interactive page is a replica of the SMART goal templates in Walmart's Project Gigaton. To set your SMART goals in Project Gigaton and get recognized by Walmart, log into your account on the [Sustainability Portal](#).


 Energy

 Nature

 Waste

 Packaging

 Transportation

 Product Use And Design

 Enterprise Level

GOALS

We have a Science Based Target (SBT) which was approved in

We will be Net Zero by

If you are unable to set one of the above goals, free text can be entered below.

We will by I confirm this goal is SMART.



Reporting and Disclosure

Public Disclosure

- Transparency is a critical
- Best practice to disclose **at least**:
 - **Scope 1 and Scope 2 emissions** (location- and market-based)
 - **Scope 3 emissions** (encouraged)
 - **Interim or short-term targets**
 - **Long-term or net zero targets**



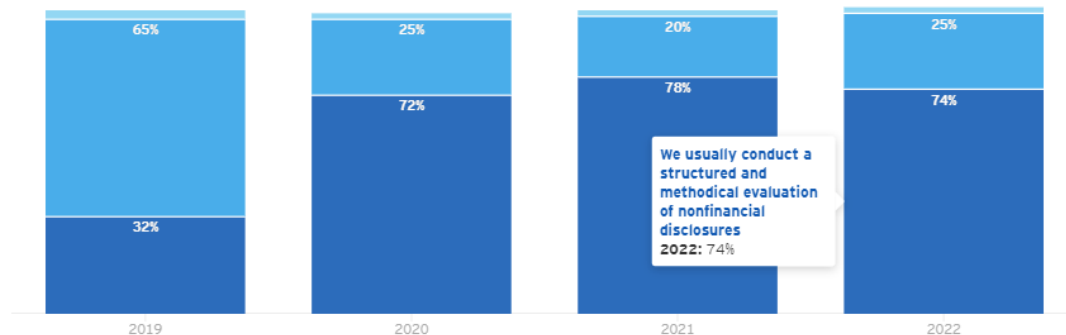
Stakeholders are interested in climate disclosure

- Employees and customers increasingly interested in climate change
- Investors regularly relying on sustainability disclosure for investments
- Potential mandatory GHG reporting in >37 countries, incl. US, EU, UK, India

Company sustainability reporting can be important to investment decision-making

Which one of the statements best describes how you and your investment team evaluate nonfinancial disclosures that relate to the environmental and social aspects of a company's performance?

■ We usually conduct a structured and methodical evaluation of nonfinancial disclosures ■ We usually evaluate nonfinancial disclosures informally
■ We conduct little or no review of nonfinancial disclosures

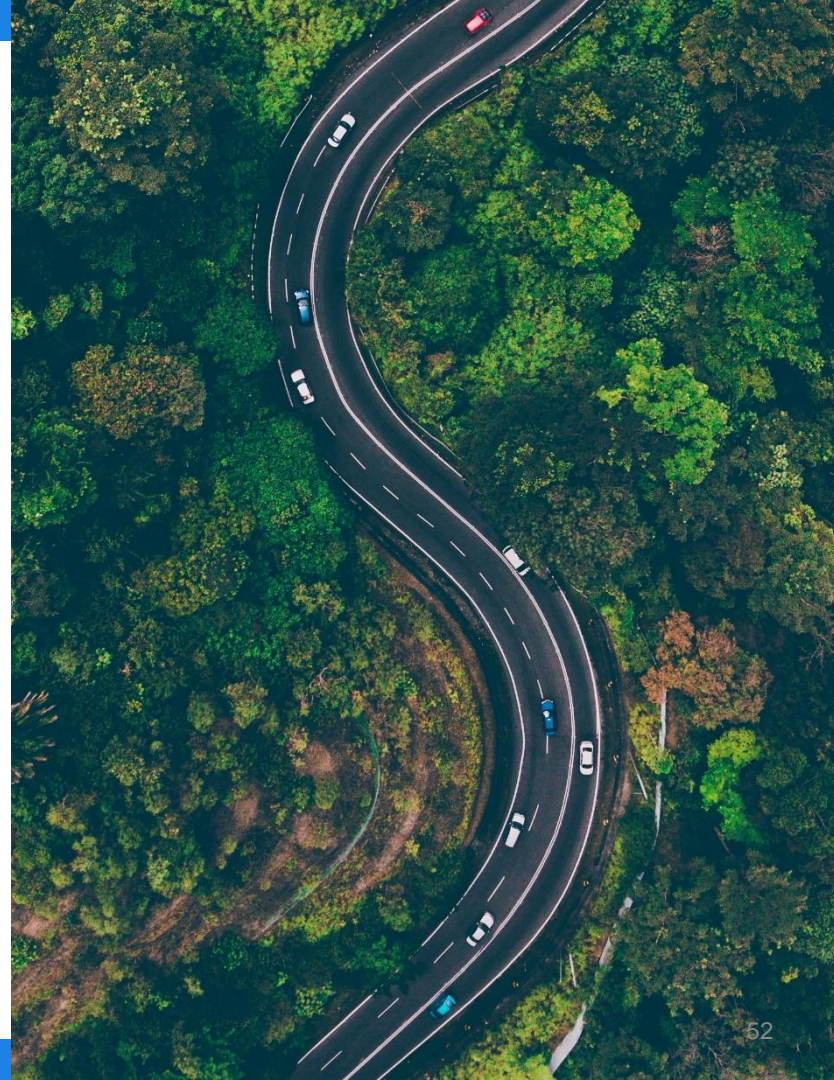


Note: 2022 and 2020 data does not add to 100% because of rounding.

Remember:

Estimating a carbon footprint is a means to an end, not the end goal.

You can act now to reduce emissions, save money, and boost efficiency.





Getting more help

Getting more help

- [Walmart Sustainability Hub](#)
- [EDF Climate Corps Fellows](#)
- [Greenhouse Gas Protocol web trainings](#)
- [Science-Based Targets Initiative web trainings](#)
- [SME Climate Hub tools and trainings](#)
- Sustainability consultancies (e.g., [CDP Solutions Provider list](#))
- [World Wildlife Fund \(WWF\)](#)
- [UN Race to Zero's Accelerator Partners](#)
- **Coming soon:** EDF's Net Zero Action Accelerator

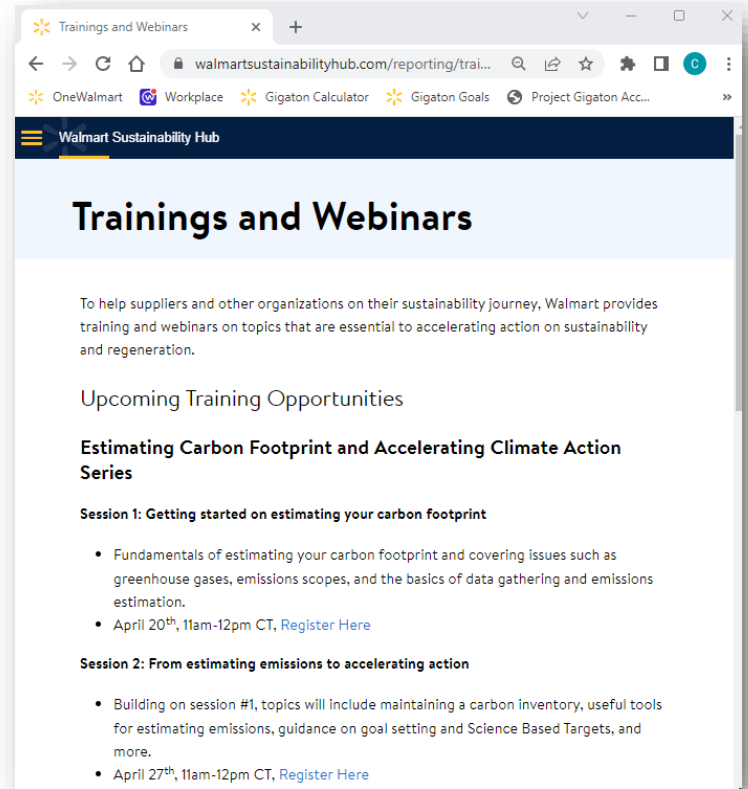
Additional Resources

- [Greenhouse Gas Protocol](#)
 - [Scope 2 Guidance](#)
 - [Scope 2 Training](#)
- [US EPA Center for Corporate Climate Leadership](#)
- [EDF Pathways to Net Zero Reports](#)
- [EDF Climate Corps Handbook](#)

Future Walmart Trainings

Session 3: Climate action companies with 500 or less employees - Introduction to the SME Climate Hub

May 4th, 11am CT, [Register Here](#)



The screenshot shows a web browser window with the URL [walmartsustainabilityhub.com/reporting/trainings-and-webinars](https://www.walmartsustainabilityhub.com/reporting/trainings-and-webinars). The page title is "Trainings and Webinars" and the header is "Walmart Sustainability Hub". The main content area is titled "Trainings and Webinars" and contains the following text:

To help suppliers and other organizations on their sustainability journey, Walmart provides training and webinars on topics that are essential to accelerating action on sustainability and regeneration.

Upcoming Training Opportunities

Estimating Carbon Footprint and Accelerating Climate Action Series

Session 1: Getting started on estimating your carbon footprint

- Fundamentals of estimating your carbon footprint and covering issues such as greenhouse gases, emissions scopes, and the basics of data gathering and emissions estimation.
- April 20th, 11am-12pm CT, [Register Here](#)

Session 2: From estimating emissions to accelerating action

- Building on session #1, topics will include maintaining a carbon inventory, useful tools for estimating emissions, guidance on goal setting and Science Based Targets, and more.
- April 27th, 11am-12pm CT, [Register Here](#)

<https://www.walmartsustainabilityhub.com/reporting/trainings-and-webinars>