

Emissions Reduction Activities

CDP Supply Chain



Report emissions reduction Initiatives

Report details of the initiatives that were completed in the reporting year:

- Category and type of initiative
- Estimated annual CO_{2e} savings
- Scope(s)
- Annual monetary savings
- Payback period

Full	SME
7.55, 7.5.5.1 7.55.2	20.17, 20.17.1

Examples:

- **Energy efficiency in production processes:** ; Machine/equipment replacement e.g. Replacement of oil boilers with heat pumps; Process optimization,
- **Energy efficiency in buildings:** Energy audits, Building insulation, Heating, Ventilation and Air conditioning (HVAC)
- **Transportation-** Changing fuel type e.g. from diesel to biofuel, Replacement of fleet vehicles with EVs,
- **Low Carbon energy consumption & generation :** Switching to renewable energy; Installing solar panels, solar lighting towers
- **Waste reduction and material circularity:** Chemical recycling program, packaging optimization



Report emissions reduction initiatives

Full 7.55	SME 20.17
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Did you have emissions reduction initiatives that were active within the reporting year?
Note that this can include those in the planning and/or implementation phases.

Emissions reduction initiatives that were active within the reporting year	Primary reason for not having active emissions reduction initiatives within the reporting year	Explain why you did not have active emissions reduction initiatives within the reporting year
• Yes • No, but plan to start investigating them within the next two years • No, and do not plan to implement any within the next two years	• Evaluation in progress • Important but not an immediate business priority • Judged to be unimportant, explanation provided • Lack of internal resources • Insufficient data on operations • No instruction from management • Other, please specify	



Report emissions reduction initiatives

Full
7.55.2

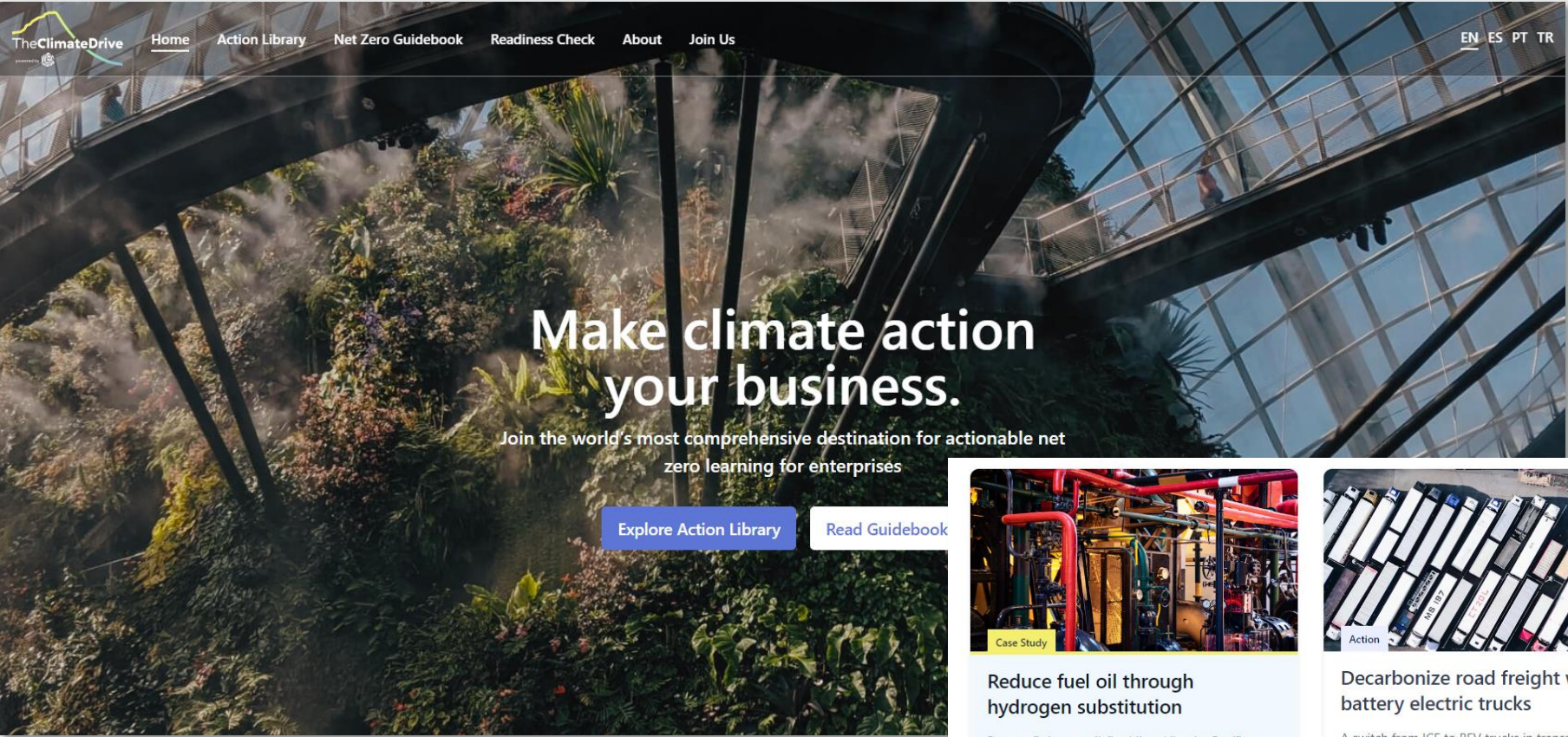
SME
20.17.1

Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type	Estimated annual CO ₂ e savings (metric tonnes CO ₂ e)	Scope(s) or Scope 3 category(ies) where emissions savings occur	Voluntary/ Mandatory	Annual monetary savings (unit currency – as specified in 1.2)	Investment required (unit currency – as specified in 1.2)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency in buildings • Insulation • Maintenance program • Draught proofing • Solar shading • Building Energy Management Systems (BEMS) • Heating, Ventilation and Air Conditioning (HVAC) • Lighting • Motors and drives • Combined heat and power (cogeneration) • Other energy efficiency in buildings initiative, please specify		Scope 1 Scope 2 (location-based) Scope 2 (market-based) Scope 3 categories to select from				• <1 year • 1-3 years • 4-10 years • 11-15 years • 16-20 years • 21-25 years • >25 years • No payback	• <1 year • 1-2 years • 3-5 years • 6-10 years • 11-15 years • 16-20 years • 21-30 years • >30 years • Ongoing	<i>Please add description of activity</i>



Action Library for emissions reduction initiatives



Explore here at WBCSD-
The Climate Drive



Case Study

Reduce fuel oil through hydrogen substitution

By retrofitting an oil-fired lime kiln, the Pacifico pulp mill aims to reduce fuel oil consumption and GHG emissions by using residual hydrogen from a nearby sodium chlorate plant.

APPLIED BY

 **Empresas CMPC S.A.**

Retrofitting Hydrogen

Last updated on: 21/11/2023



Action

Decarbonize road freight with battery electric trucks

A switch from ICE to BEV trucks in transportation, using electric motors, can reduce direct fuel combustions emissions from fossil fuels

EXPLAINED BY

 **WBCSD**

Freight Electric Vehicles

Last updated on: 31/10/2022



Action

Transition to a just, net-zero, and nature positive economy

Addressing the climate emergency and nature loss is impossible without putting people at the center and ensuring a just transition that is equitable and inclusive for all.

EXPLAINED BY

 **WBCSD**

Just transition

Last updated on: 21/11/2023



Increasing your % of renewable Energy/electricity consumption

Reporting on your renewable energy use helps your customers to track reductions in their supplier emissions and assess the level of risk in relation to fossil fuel reliance.

Renewable energy is energy taken from sources that are inexhaustible such as wind, solar, hydropower, geothermal, sustainable biomass and marine (tidal and wave energy).

Waste energy and hydrogen should not be included if derived from fossil fuels.



Full	SME
7.30, 7.30.1	20.15.1 or 20.15.2



Methodology:

- You should enter all energy data in Megawatt-hours (MWh). If your raw data is in energy units other than MWh, such as Giga-Joules (GJ) or British Thermal Units (Btu), then you should convert to MWh. Guidance: [CDP Technical Note: Conversion of fuel data to MWh](#)
- Conversion factors from other energy units are available from a variety of online calculation tools, including from [IEA](#) and [OnlineConversion.com](#), or from conversion tables such as those in [EPA AP-42 \(Annex A\)](#).



Report total energy consumption

Full
7.30.1

Report your organization’s energy consumption totals (excluding feedstocks) in MWh

Activity	Heating value	MWh from renewable sources	MWh from non-renewable sources	MWh from non-renewable zero or near-zero emission sources	Total (renewable + non-renewable) MWh
- Consumption of fuel (excluding feedstock), - Consumption of purchased or acquired electricity, - Consumption of purchased or acquired heat, - Consumption of purchased or acquired steam, - Consumption of purchased or acquired cooling, - Consumption of self-generated non-fuel renewable energy, - Total energy consumption	LHV (lower heating value) HHV (higher heating value) Unable to confirm heating value				



Report total energy consumption

20.15.1 -Provide a breakdown by country/area of your purchased or acquired electricity consumption in MWh

Country/area	MWh from renewable sources	MWh from non-renewable sources	Total (renewable + non-renewable) MWh	Comment

20.15.2 –Report your organizations consumption of purchased or acquired electricity consumption in MWh

MWh from renewable sources	MWh from non-renewable sources	Total (renewable + non-renewable) MWh	Comment



If you only have electricity consumption data on part of your operations, you may extrapolate the rest, but include a note in column “Comment”.

Renewable energy procurement



Self-Generation

Generation from installations owned by the company

Installing solar panels, wind turbines, biomass, hydropower

Purchase

Energy Attribute Certificate Purchase (EACS)

EACs confirm the generation and delivery of 1 MWh of clean energy to the grid. When a company purchases EACs, they gain ownership of the sustainability claim linked to that energy generation. EACs are known for their ease of procurement and cost-effectiveness.

Power Purchase Agreement (PPA)

A PPA is a long-term contract between a renewable energy developer and a buyer. It involves the purchase of clean energy (power and associated EACs) from a specific asset at a predetermined price.

Virtual Power Purchase Agreement (VPPA)

A VPPA is a contract between a renewable energy project developer and a buyer, usually a corporation. In a VPPA, the buyer commits to buying a specific amount of renewable energy from the project over a set time. Unlike a traditional PPA, where the buyer uses the power generated by the project, in a VPPA, the power is sold to the grid.



Scaling Renewable Energy Training

Please see these sessions for valuable insights, resources, and recommendations to support you in your company's renewable energy procurement journey. Held in English with subtitled sessions below

EU/US Focus session	
English	PDF of Slides
English	Recording (Vimeo)
Japanese	Recording (Vimeo)
Portuguese	Recording (Vimeo)
Spanish	Recording (Vimeo)
Chinese	Recording (Webex)

APAC focus session	
English	PDF of Slides
English	Recording (Vimeo)
Japanese	Recording (Vimeo)
Portuguese	Recording (Vimeo)
Spanish	Recording (Vimeo)
Chinese	Recording (Webex)

The password for **all** Vimeo recordings is: **CDP2026Solarpanel**



Collect upstream emissions data and engage with suppliers

An organizations suppliers' emissions (Scope 3) are on average **26x higher** than operational emissions (Scope 1 and 2) Therefore, engaging with value chain stakeholders is essential for organizations to drive progress on environmental issues associated with their operations

Full 5.11, 5.11.7	SME 18.3
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Identify supply chain areas with high emissions. These could include:

- Transport, delivery, or shipment methods
- Energy consumption from production or manufacturing
- Certain materials steel, for example, is a source of high GHG emissions and processes (such as upstream agriculture)

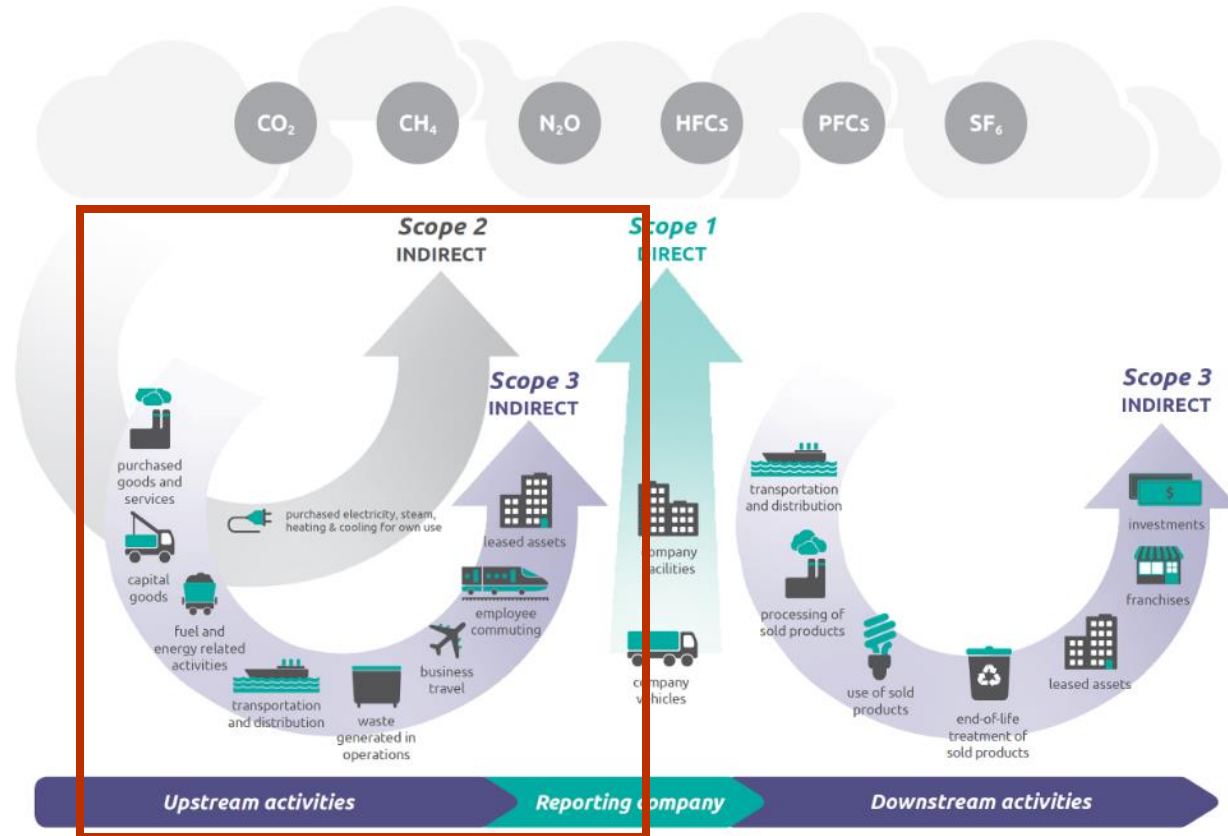
The requirement is that you engage with your value chain and collect information annually (e.g. GHG Emissions data, Targets information, Environmental risk and opportunities)



Scope 3 emissions: Upstream emissions

Indirect emissions from your supply chain

Overview of GHG Protocol scopes and emissions across the value chain



Cat 1: Purchased Goods and services

Cat 2: Capital Goods

Cat 3: Fuel and energy related activities

Cat 4: Transportation and distribution

Cat 5: Waste generated in operations

Cat 6: Business Travel

Cat 7: Employee commuting

Cat 8: Leased Assets



Resources for capacity building



Emissions reduction

- [SME Climate Hub: Decarbonise Buildings](#)
- [SME Climate Hub: Transport](#)
- [SME Climate Hub: Tools](#)
- [SME Climate Hub Training](#)
- [WBCSD- The Climate Drive](#)

Renewable Energy

- [SME Climate Hub: Renewables](#)
- [RE100 About us](#)

Value Chain engagement

- [Corporate Value Chain \(Scope 3\) Standard](#)
- [SME Climate Hub- Supply Chain Emissions](#)
- [CDP Technical Note- Relevance of Scope 3 Categories by sector](#)
- [CDP Supply Chain Report: Strengthening the chain](#)
- [CDP-Sustainable Supply Chains: How Disclosure Data Drives Progress and Accelerates Action](#)
- [Science-Based Targets Supplier Engagement Guide](#)