

flex[®] Supplier Sustainability Program

How to set your emissions
reduction target



Supplier Greenhouse Gas Emission Program

Flex has adopted greenhouse gas emissions reduction targets necessary to meet the Paris Agreement goals, limiting global warming to 1.5°C above preindustrial levels.

Flex approach



In order to support [Flex's 2030 goals](#), the supplier sustainability team launched a GHG emission reduction program with our preferred suppliers and in partnership with CDP (formerly known as the Carbon Disclosure Project) to help us achieve our GHG emission reduction goals.



[Read Lynn's post about sustainability in supply chain here](#)



Thank you

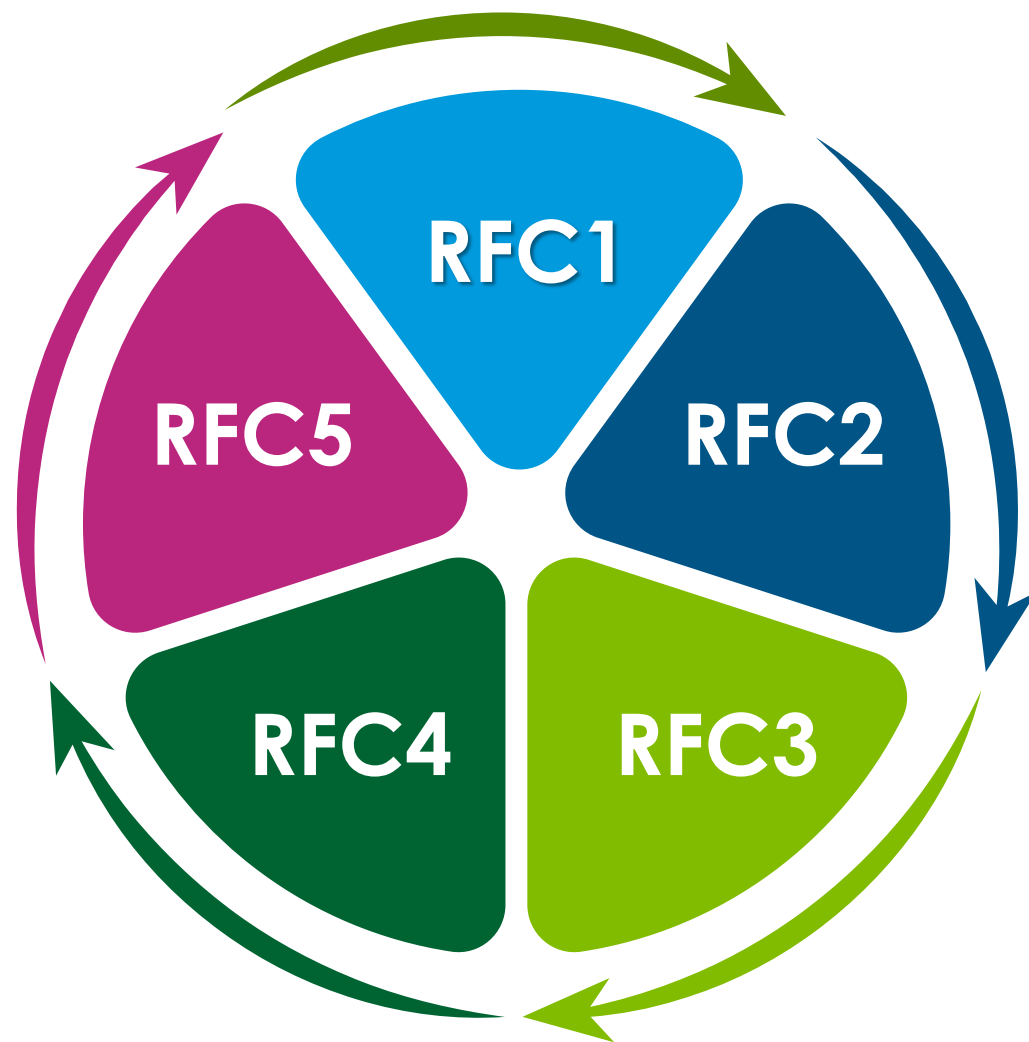
At Flex, part of our mission is to make products that contribute positively to the world and steward sustainable manufacturing and operations practices to minimize environmental impact. Our suppliers play a critical role in not only helping Flex deliver on our commitments, but also to advance our ongoing sustainability journey.

We aspire to leverage where we are in the value chain for good, share learnings as well as best practices, and create opportunities to collaborate in the spirit of sustainability. To do so, we have created a greenhouse gas emissions reduction initiative as part of our broader supplier sustainability program.



Reasons for Concern

Risk level transitions for climate change at 1.5°C



RFC1 Unique and threatened systems

- Arctic sea-ice dependent ecosystems
- Unsects projected to lose 50% of geographic range
- Reduced habitability of small islands
- Increased endemic species extinction

RFC2 Extreme weather events

- Increase in fluvial flood
- Soil moisture droughts
- Agricultural and ecological droughts
- Crop failure
- Malnutrition and risk of disease

RFC3 Distribution of impacts

- Crop failure in maize up to 40%
- Flood risk in Asia and Africa
- High risk of mortality and morbidity due to Heat extreme and infectious diseases

RFC4 Global aggregate impacts

- 10% decrease in effective labor
- 24% exposure global flooding
- Reduced marine food provisioning
- Decline in oceane animal biomass

RFC5 Large-scale singular events

- Sea level rise yp to 3.1 m
- Risk of savannisation of the Amazon

Companies included in this initiative

This program applies to all companies from all sectors, including, but not limited to:

- Manufacturing
- Distributors
- Brokers
- Service industries
- Office-based organizations
- Etc.

All companies generate emissions (e.g., by purchasing electricity or driving vehicles) and we all have improvement areas in our daily operations where we can reduce our emissions and environmental impact.



What are Greenhouse Gas Emissions?

Greenhouse gases (GHG) Trap heat from the sun and warm the planet's surface, creating a greenhouse effect and allowing life on earth.

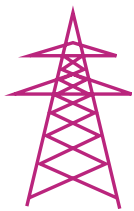
Primary anthropogenic sources of GHG emissions are the burning of fossil fuels for electricity, heat and transportation; and even land-use change, or agriculture.



Mobile combustion



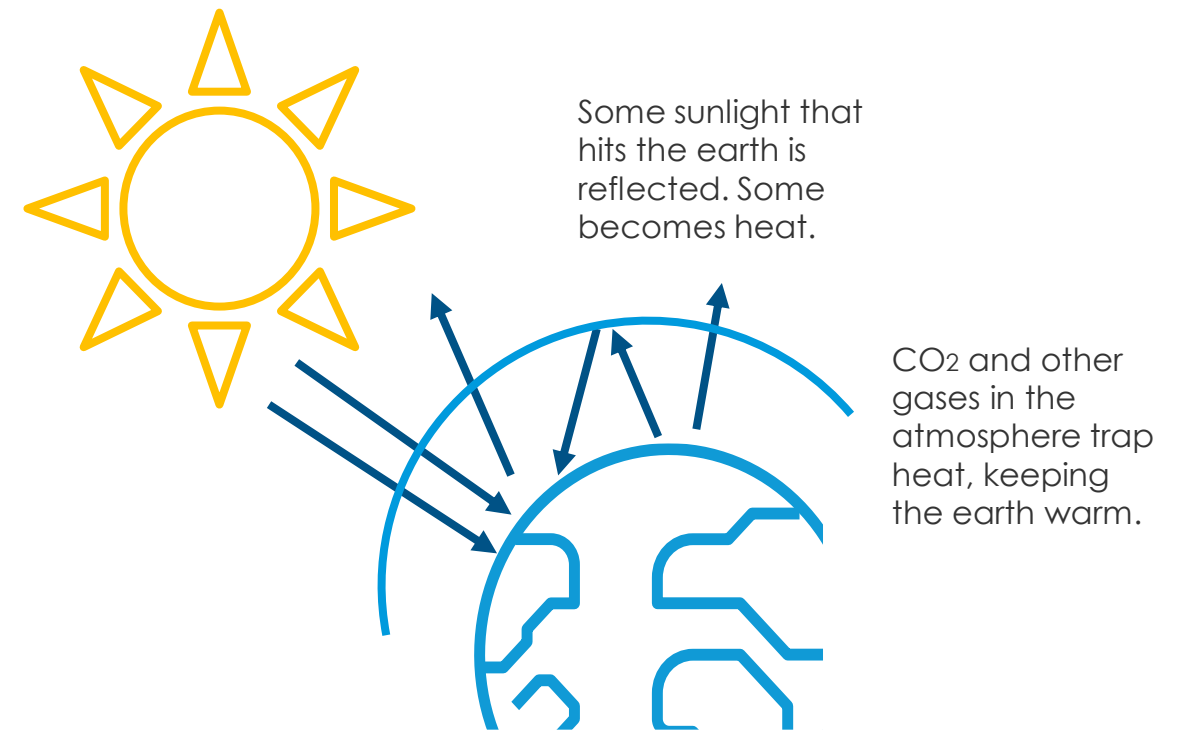
Agriculture



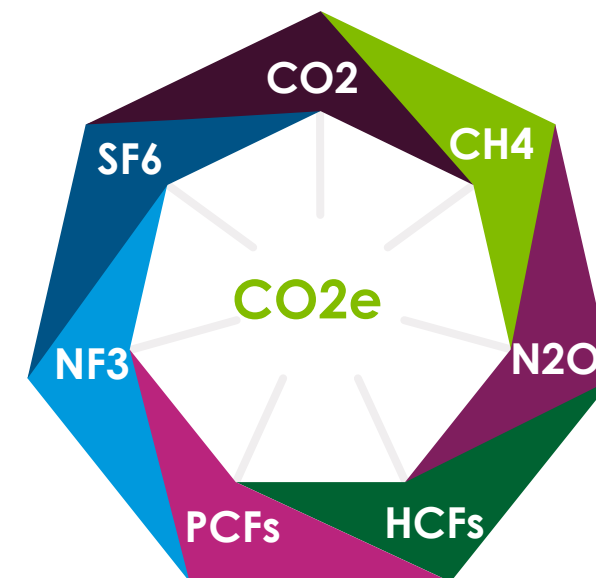
Purchased electricity/power plants



Stationary combustion



Some examples of greenhouse gases:



Note: All industries including manufacturers, distributors, services providers, and office-based companies have GHG emissions; so, they apply in this initiative.

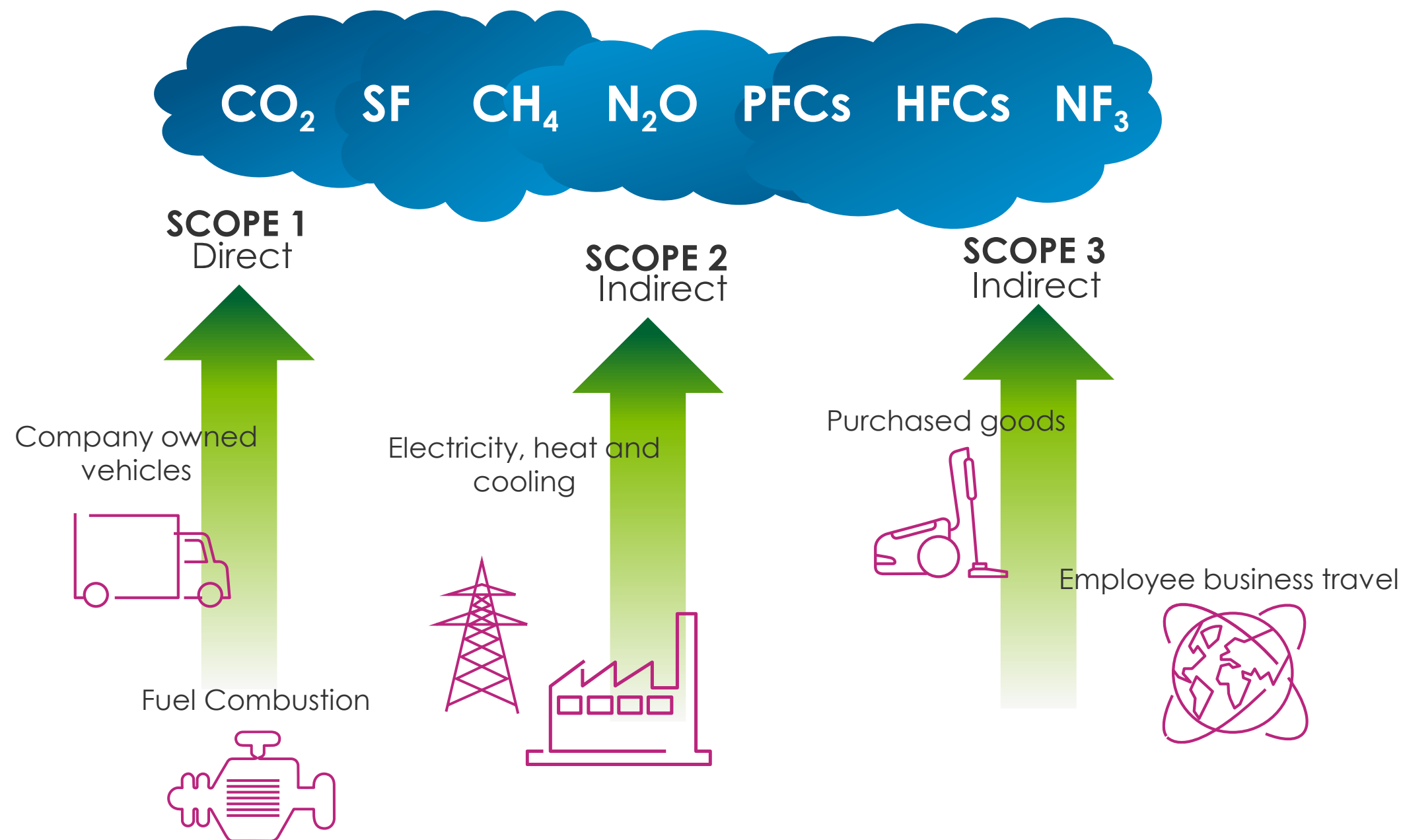
What does Scope 1, 2 and 3 mean in GHG emissions?

When talking about **GHG emissions** these are categorized in “**Scopes**” to have a better understanding of where the emissions are coming from.

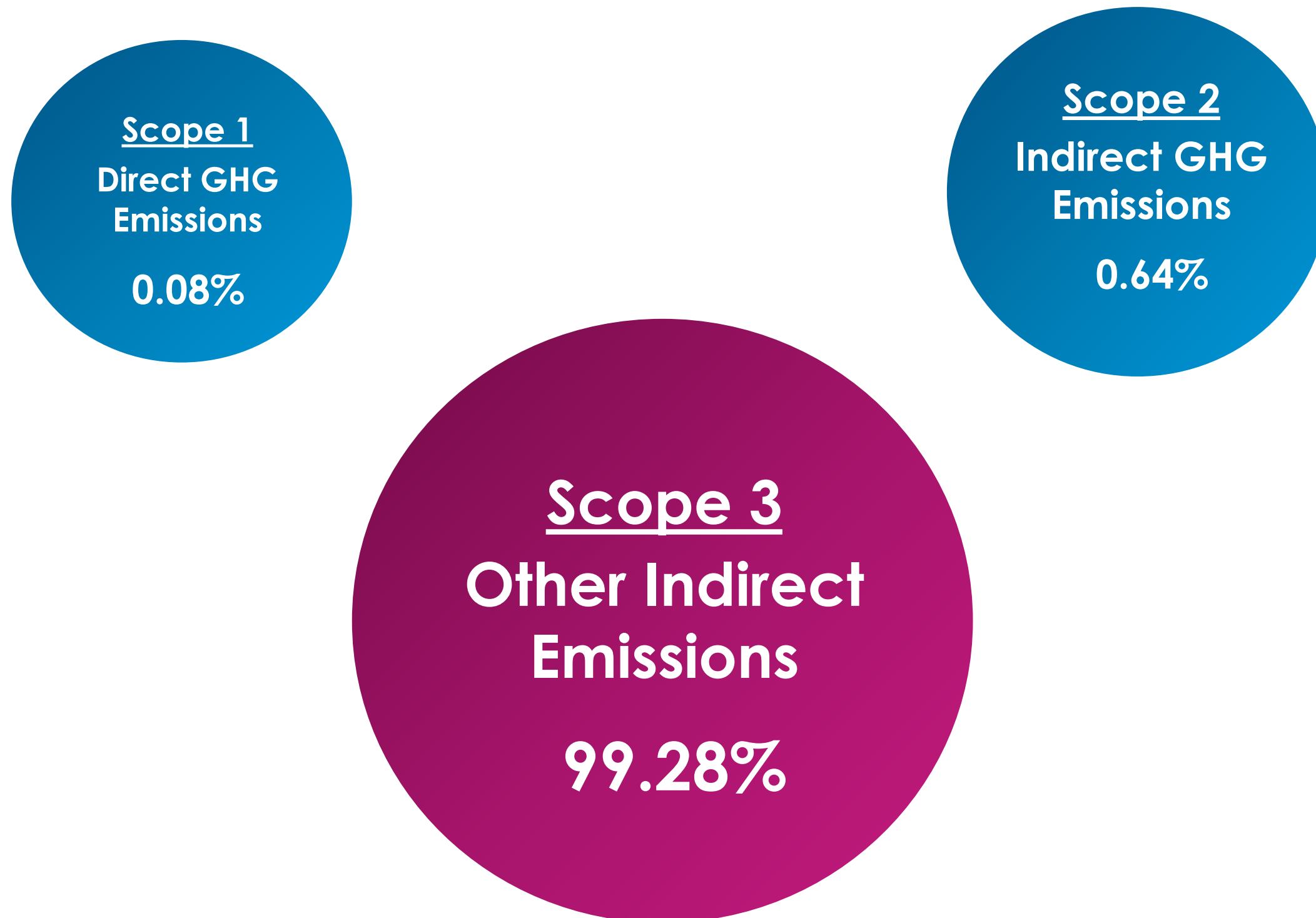
Scope 1 Direct emissions from fuel combustion and refrigerant leakage from company facilities and vehicles.

Scope 2 Indirect emissions from the purchase of electricity, steam, heat, and cooling.

Scope 3 Indirect emissions from a company’s value chain (e.g., purchased goods and services, use of sold products).



Flex's emissions allocation



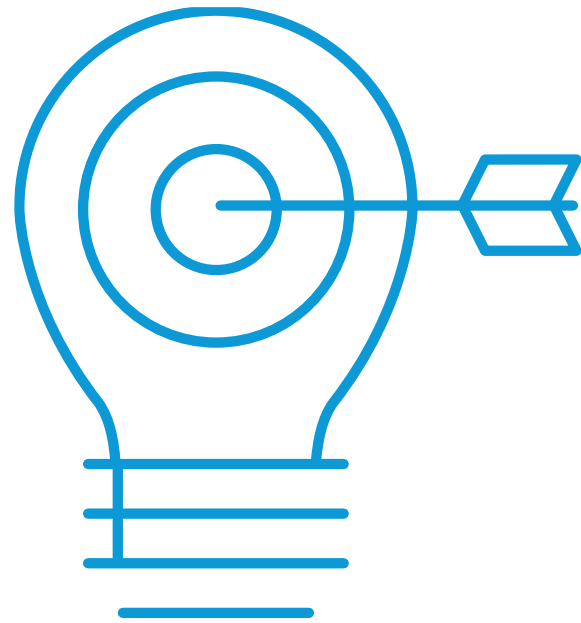


Emissions reduction targets

What is an emissions reduction target?

It's the reduction percentage that a company has defined for their Green House Gas emissions.

These targets help the organization to reach sustainability goals, these targets can impact areas such as financing, business and new opportunities such as clients.



Why do we need targets?

“Business leaders have a crucial role to play, by putting nature at the core of their processes and decision-making and systematically identifying, assessing, mitigating and disclosing nature-related risks to avoid severe consequences”

World Economic Forum , Nature risk rising why the crisis engulfing nature matters for business and the economy.

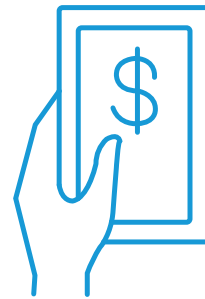
Importance of setting targets



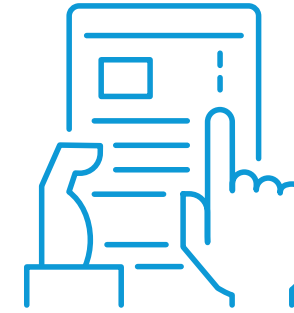
Measure and reduce environmental impact and benchmark impact against peers



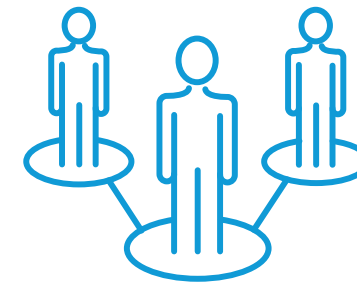
Propose collaborative opportunities and increase value from customer relationships



Identify cost savings and areas to improve operational efficiency



Identify risks and opportunities and communicate risk management practices



Demonstrate transparency and operational competence to your customers

How to start identifying and setting your targets?



Elements of an emission reduction target

BASE YEAR

The year you will take as a starting point to reduce your emissions

TARGET YEAR

Year in which you aim to achieve it, the date must be higher than the current year



% OF REDUCTION

Percentage of emissions that will be reduced, this percentage is free to choose according to the scope of the provider.

EMISSION SOURCE

In can be by scopes: 1, 2 and/or 3, business units, facilities or geographies

Types of Emissions Targets

Type	Explanation	Example units
ABSOLUTE	Total quantity of greenhouse gas emissions emitted	<i>Tons CO₂e reduced</i>
INTENSITY	Compares the emissions to some <u>unit of economic output</u>	$\frac{\text{Tons CO}_2\text{e}}{\text{Revenue / product}} \text{reduced}$

Examples of Emissions Targets

Absolute Target:

- Flex commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.

Intensity Target:

- Flex commits to reduce company-wide Scope 1+2(location-based) CO2e emissions by at least 10% normalized to revenue by 2020 from a 2016 base year.

• Emission source

• % Reduction

• Target year

• Base year



In order to have a structured target, the following elements are required in your disclosure:

Absolute target (C4.1a):

1. Scope(s)
2. Covered emissions in base year (metric ton CO₂e)
3. Target year
4. Targeted reduction % from base year
5. Target Status

Intensity target (C4.1b):

1. Scope(s)
2. Intensity Metric
3. Intensity Figure in base year
4. Intensity Figure in reporting year
5. Target year
6. Target reduction %
7. Target Status

Flex Excel GHG Emissions Tool

(C4.1) Did you have an emissions target that was active in the reporting year? (C4.1) 在此报告年中，您是否有有效的排放目标？				
Types of targets: 减排目标的类型：	ABSOLUTE: Total quantity of greenhouse gas emissions emitted 绝对目标: 温室气体排放总量	Units example: Tons CO ₂ e reduced	减少的二氧化碳当量排放吨数	
	INTENSITY: Compares the emissions to some unit of economic output 强度目标: 排放量和某种经济产出进行对比	Units example: $\frac{\text{Tons CO}_2\text{e}}{\text{Revenue / product}}$ reduced	减少的 $\frac{\text{二氧化碳当量排放吨数}}{\text{营业额/产品数量}}$	
Question (Mandatory questions are marked with an asterisk *)		Your answer	Notes 注释	Location in the CDP questionnaire CDP问卷中的位置
Data to provide	ABSOLUTE TARGET 绝对目标	Scope(s) of your target* 范围*	Scope 1 范围一	(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets. (C4.1a) 请提供您的绝对排放目标和针对这些目标的进展的详情。
		Base Year 绝对目标	2020	
		Is your base year the same year you reported in the "Env Tab" of this file?	Yes 是	
		Covered emissions in base year (Metric ton CO ₂ e)* 所有选定范围中目标覆盖的基准年排放 (公吨CO ₂ e) *	297.96	
		Target year* 强度目标*	2025	
		Targeted reduction % from base year* 基准年减排百分比 *	50.00	
		Target Status in reporting year* 报告年的目标状态 *	Underway 正在进行	
	INTENSITY TARGET 强度目标	Scope(s) of your target* 范围*	Scope 2 范围二	(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s). (C4.1b) 请提供您的排放强度目标和针对这些目标的进展的详情。
		Base Year 绝对目标	2020	
		Is your base year the same year you reported in the "Env Tab" of this file?	Yes 是	
		Intensity Metric* 强度指标*	Metric ton CO ₂ e / Revenue in USD	
		Insert your business activity metric from your base year (matching the denominator units of the "Intensity Metric" row; i.e. USD revenue, tons of product, kWh, etc).	5,768.00	
		Intensity figure in base year for all selected Scopes (metric tons CO ₂ e per unit of activity) *	0.003293912	



2023 GHG Emissions Template- V1.3



GHG Emissions Template guide.pdf



Target Questions:

Greenhouse Gas Emissions Data & Energy Usage



MODULES
C0 Introduction
C1 Governance
C2 Risks and opportunities
C3 Business strategy
C4 Targets and performance
C5 Emissions methodology
C6 Emissions data
C7 Emissions breakdown
C8 Energy
C9 Additional metrics
C10 Verification
C11 Carbon pricing
C12 Engagement
C15 Signoff
SC Supply Chain

Scope 1 – Greenhouse gases that your company emits (C6.1)



Company Facilities



Company Vehicles

Scope 2 – Greenhouse gases that others emit due to your energy use (C6.2 & C6.3)



Purchased electricity, steam, heating & cooling, for own use

Scope 3 – Everything else (C6.5)



Supplier emissions



Product use



Employee commuting

Target Questions: Greenhouse Gas Emissions Data



MODULES
C0 Introduction
C1 Governance
C2 Risks and opportunities
C3 Business strategy
C4 Targets and performance
C5 Emissions methodology
C6 Emissions data
C7 Emissions breakdown
C8 Energy
C9 Additional metrics
C10 Verification
C11 Carbon pricing
C12 Engagement
C15 Signoff
SC Supply Chain

Reporting emissions is **best practice** and a pre-requisite to understanding and reducing negative environmental impacts.

▼Target Questions: C5.1 & C5.2(a)

- ▼ Provide your base year and base year emissions (scopes 1 and 2).
- ▼ Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate scope 1 and scope 2 emissions.

▼Target Questions: C6.1, C6.2, C6.3, C6.5, & C6.10

- ▼Scope 1 and scope 2 GHG emissions
- ▼Account for your scope 3 GHG emissions
- ▼Provided an emissions intensity figure

Target Questions:

Targets and Performance



MODULES
C0 Introduction
C1 Governance
C2 Risks and opportunities
C3 Business strategy
C4 Targets and performance
C5 Emissions methodology
C6 Emissions data
C7 Emissions breakdown
C8 Energy
C9 Additional metrics
C10 Verification
C11 Carbon pricing
C12 Engagement
C15 Signoff
SC Supply Chain

Target setting provides direction and structure to environmental strategy. Providing information on quantitative targets and qualitative goals, and progress made against these targets, can demonstrate your organization’s commitment to improving climate-related issues management at a corporate level. It also **helps Flex understand your ambition levels for reducing your greenhouse gas emissions in the future.**

▼**Target Questions: C4.1(a-c)**

- ▼ Details on GHG emissions targets (absolute and/or intensity)

▼**Target Questions: C4.2**

- ▼ C4.2a: provide details of your target(s) to increase low-carbon energy consumption or production including renewable energy targets
- ▼ C4.2b: provide details of any other climate-related targets

▼**Target Questions: C4.3(a-d)**

- ▼Details on GHG emissions reduction initiatives

Target Questions:

Greenhouse Gas Emissions Allocation & Energy Usage



MODULES
C0 Introduction
C1 Governance
C2 Risks and opportunities
C3 Business strategy
C4 Targets and performance
C5 Emissions methodology
C6 Emissions data
C7 Emissions breakdown
C8 Energy
C9 Additional metrics
C10 Verification
C11 Carbon pricing
C12 Engagement
C15 Signoff
SC Supply Chain

Emissions located in the supply chain are around four times as high as those from direct operations. **Allocating your emissions provides further context to buyers** regarding the procedures adopted and/or actions taken by their suppliers.

▼Target Questions: C8.2, C8.2a & C8.2e

- ▼ Report which energy-related activities your organization has undertaken and the consumption that comes from renewable sources
- ▼ Report energy consumption accounted for at a zero or near-zero emission factor in the market-based Scope 2

▼Target Questions: SC1.1 & SC1.2

- ▼ Allocate emissions to Flex, describe challenges, and reporting capabilities
- ▼ Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate scope 1 and scope 2 emissions.

Your responses to the Supply Chain module are visible only to Flex regardless of whether you elect to make your CDP response private or public

Target Questions: SC1.2

Allocate based on the proportion of total revenue represented by Flex

Formula for allocating emissions to Flex based on revenue

$$\text{Allocated GHG Emissions} = \frac{\text{Revenue of products/services purchased by Flex}}{\text{Total revenue of products/services produced}} \times \text{Total GHG Emissions for Scope 1 or Scope 2}$$

Working example of allocating emissions to Flex based on revenue

$$250 \text{ metric tons of CO}_2\text{e allocated to Flex} = \frac{\text{US\$500,000 revenue from Flex}}{\text{US\$200,000,000 total revenue}} \times 100,000 \text{ tons of CO}_2\text{e (Company-wide Scope 1 GHG emissions)}$$

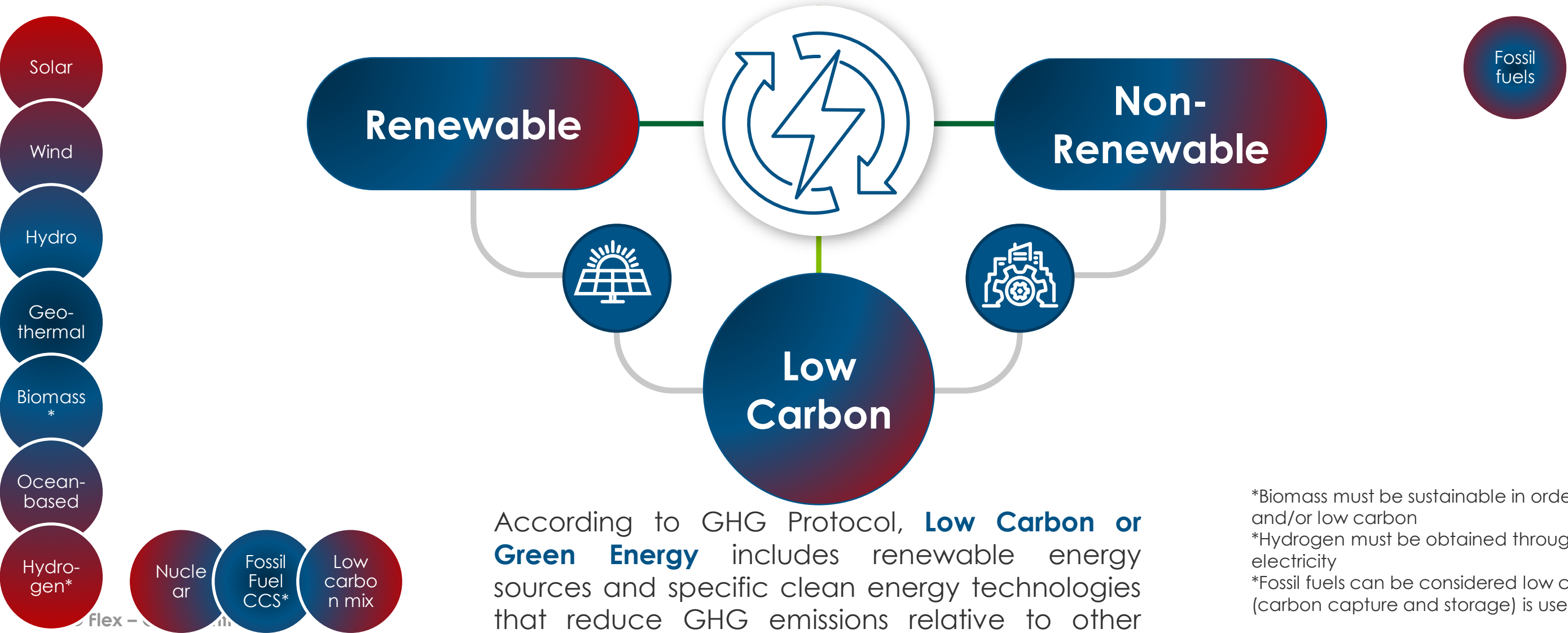
Renewable Energy Targets

Energy sources

Renewable, non-renewable and low carbon energy.

According to GHG Protocol, **renewable energy** are fuels and energy obtained from sources that are ultimately replenished from natural solar and gravitational energy flows.

Non-renewable energy are fuels and energy obtained from sources that will not be replenished in our lifetime.



According to GHG Protocol, **Low Carbon or Green Energy** includes renewable energy sources and specific clean energy technologies that reduce GHG emissions relative to other sources of energy.

*Biomass must be sustainable in order to be renewable and/or low carbon
*Hydrogen must be obtained through renewable electricity
*Fossil fuels can be considered low carbon if a CCS (carbon capture and storage) is used

Energy carriers

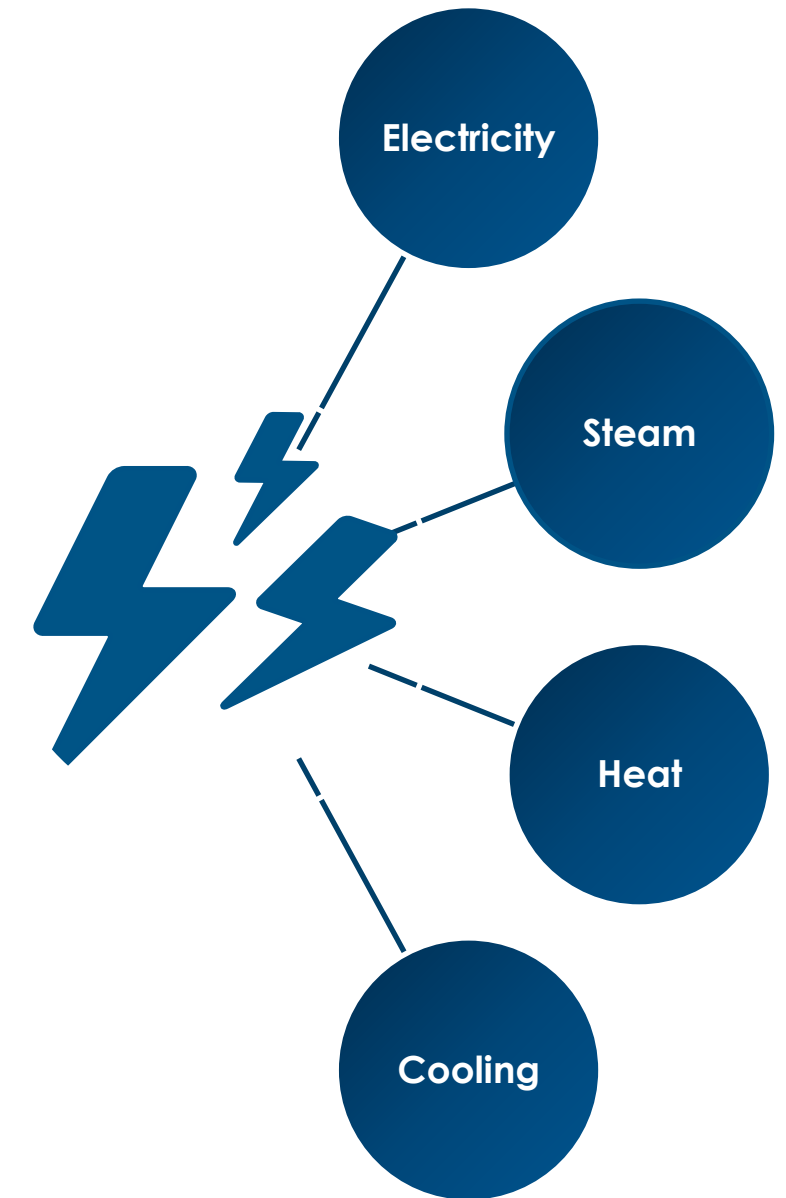
Renewable energy targets in CDP

An energy carrier is defined as a **transmitter of energy**, these occupy intermediate steps in the energy supply chain between primary sources and end-use applications.

Each energy-conversion step in the supply chain creates **energy losses and carbon emissions**.

Carriers are the secondary energy, meanwhile **resources are the primary energy**, such as, oil, natural gas, biomass, hydro, radiation, etc.

An end-use application will gather the processes in which the secondary energy (carriers) will be used, such as manufacturing, transportation, industrial services, etc.



Energy carriers considered for CDPs RE Targets. **flex**

Energy target (C4.2a)

In question C4.2a CDP will request an **energy target**, regarding low carbon and/or renewable energy.



This target could be aligned to an emission reduction target or initiative, such as RE100 or SBTi.

A single organization can have **more than 1 energy target** due to a change in coverage, energy carrier, target amount and year.

*All energy carriers must be selected

Renewable energy target

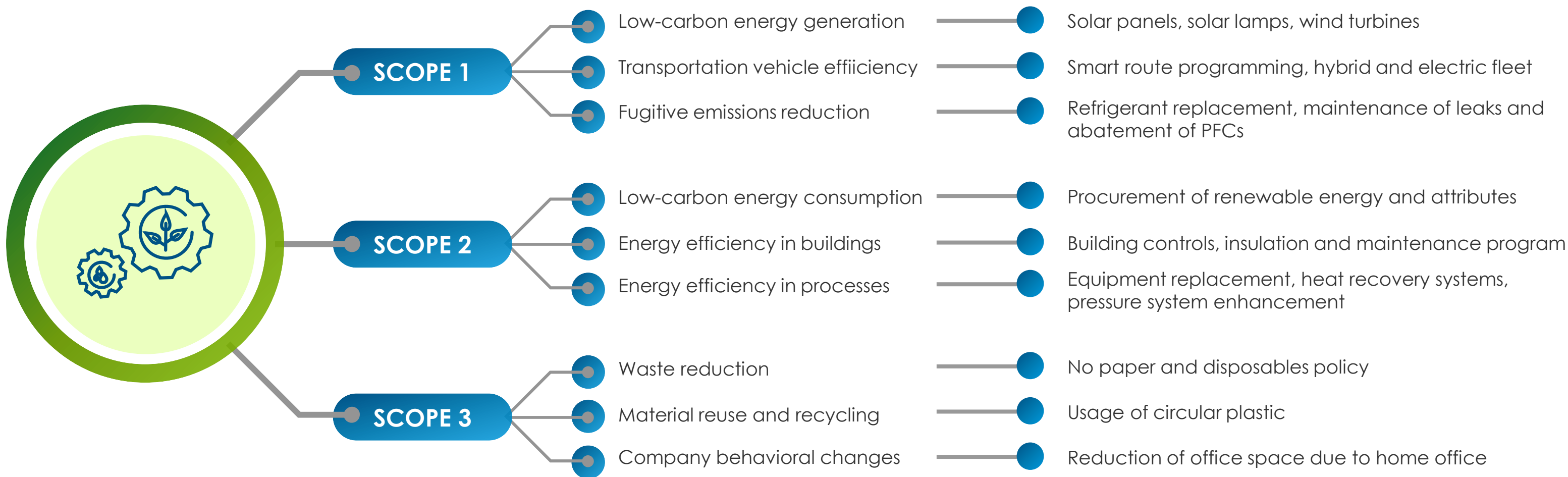
Example

CDP analyzes your data in order to consider the maturity and validity of your target, this is an example of a complete input data.

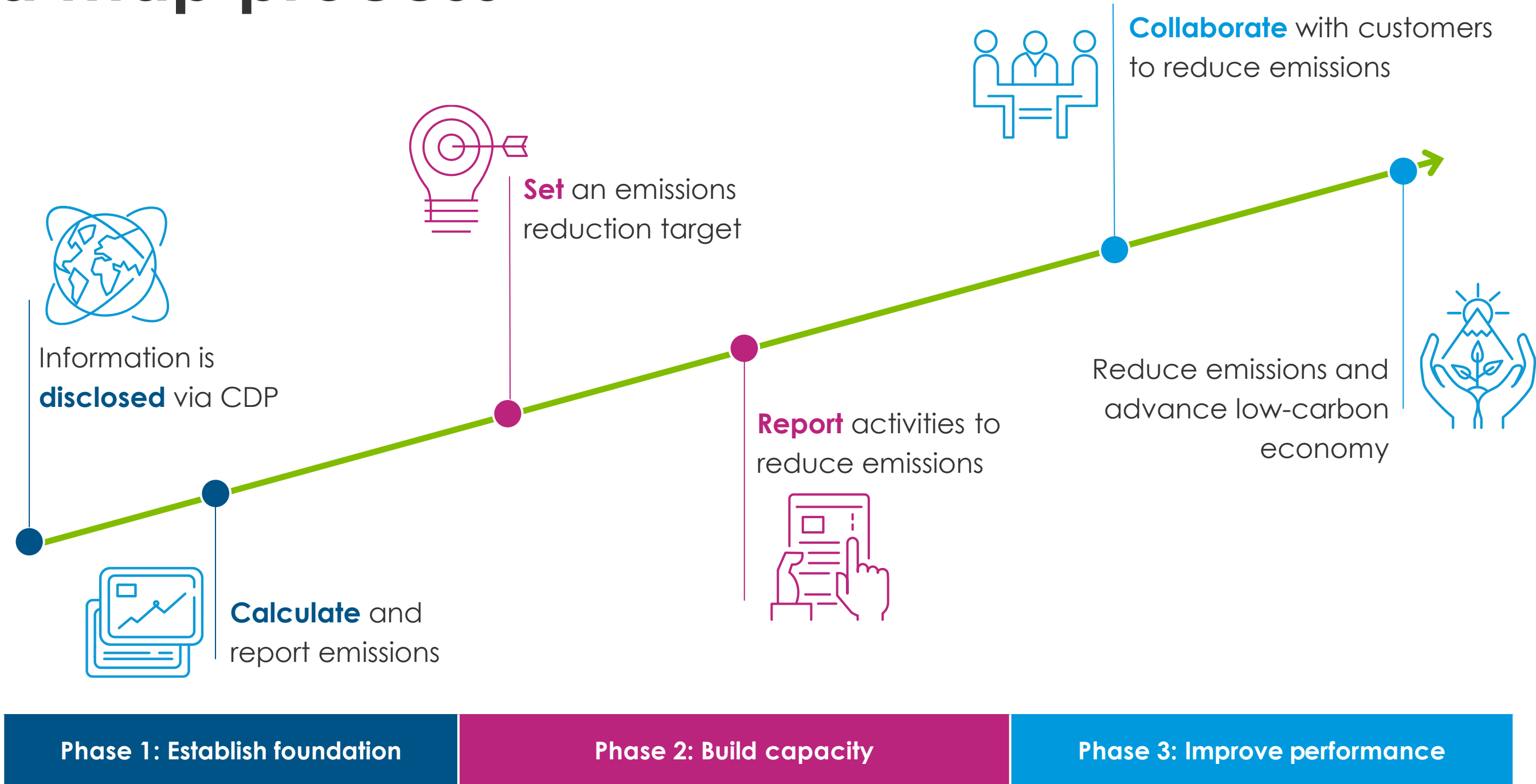
CDP Valid RE Target

- 1 **Year target was set:** 2020
- 2 **Target coverage:** China
- 3 **Energy carrier:** All energy carriers
- 4 **Activity:** Consumption
- 5 **Source:** Renewable energy
- 6 **Base year data:** 2019 (year), 0MWh (RE consumption), 0% (RE Share)
- 7 **Target year data:** 2030 (year), 350,00MWh (RE consumption), 100% (RE Share)

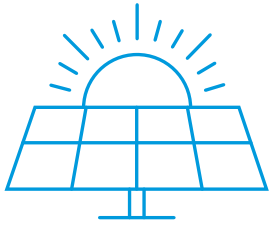
Greenhouse gas emission reduction activities



Road map process



Success Studies – Monetary & Environmental Benefits



Industry	Country	Renewable energy type	System Size [kW]	Annual Output [kWh]	Annual Carbon Saving [tonnes]	Lifetime Carbon Savings [tonnes]	Annual Monetary Savings	Source
Powerplant	Italy	Solar	3,000	4,000,000	2,330	26,795	€ 1,412,000.00	http://www.yinglisolar.com/static/assets/uploads/projects/downloads/Yingli_CS_Centrale-Poggiorsini_EN_062011-1.pdf
Manufacturing, Engineering & Transportation	Australia	Solar	100	161,800	127	593	\$ 45,300.00	https://www.infiniteenergy.com.au/commercial/case-studies-2/manufacturer/index100kw/
Research center	China	Solar and sustainable practices	65,999	1,151,033	1600	40,000 (25 years)	¥ 15 million RMB on electricity, ¥ 54,000 RMB on water	https://www.osti.gov/servlets/purl/1165010
Distributor	USA	Solar	12.92	20,995	16	80 (over system life)	\$ 4,200	https://www.infiniteenergy.com.au/commercial/case-studies-2/manufacturer/twenty-two-services13kw/
Drinks & Brewery	UK	Wind	3,500	9,000,000	2,600	65,000		https://cleaneartenergy.com/projects/ab-inbev-magor-south-wales/



FAQs and Resources

Frequently asked questions

Emission Reduction Targets

- **Is there a target Flex is asking from suppliers?**

No, there is no base target, suppliers are free to set their own targets.

- **How many targets should I set?**

There is no limit, suppliers can choose as many targets as possible.

- **What if I do not want to publicly disclose some information on the questionnaire?**

Suppliers can choose to disclose Public or Non-Public, if Non-Public is chosen only Flex will have access to the information.

Supply Chain (SC) section of the questionnaire is always treated as Non-Public Information.

- **If we have multiple sites, multiple business entities across the world do we have to roll the data up to the overall parent company or keep results at a local site level?**

Best practice in corporate GHG accounting encourages all companies to be reporting enterprise-data at the ultimate parent company level. Doing so avoids double counting and reduces reporting effort. For your CDP questionnaire, please provide as much company-wide data and information as you have available.



Further useful resources

Resources for Disclosure:

- ▼ [CDP Guidance for Companies](#)
- ▼ [FAQs – Find answers to common queries](#)
- ▼ [CDP Supply Chain Report: Changing the Chain](#)
- ▼ [CDP-ACS: Guidance for Company Classification](#)
- ▼ [Working 9-5: A guide for Small Office Based Organizations'](#)
- ▼ [Hot Climate, Cool Commerce: A Service Sector Guide to Greenhouse Gas Management](#)
- ▼ [On-Demand Technical Support:](#)
 - If you're based in Japan, contact japan@cdp.net
 - If you're based in a different Asian country, contact asia@cdp.net
 - If you're based in Southeast Asia, contact sea@cdp.net
 - If you're base in Latin America, contact reporteCDPLA@cdp.net

For all other geographic regions, contact <https://casemgmt-crm.cdp.net/>

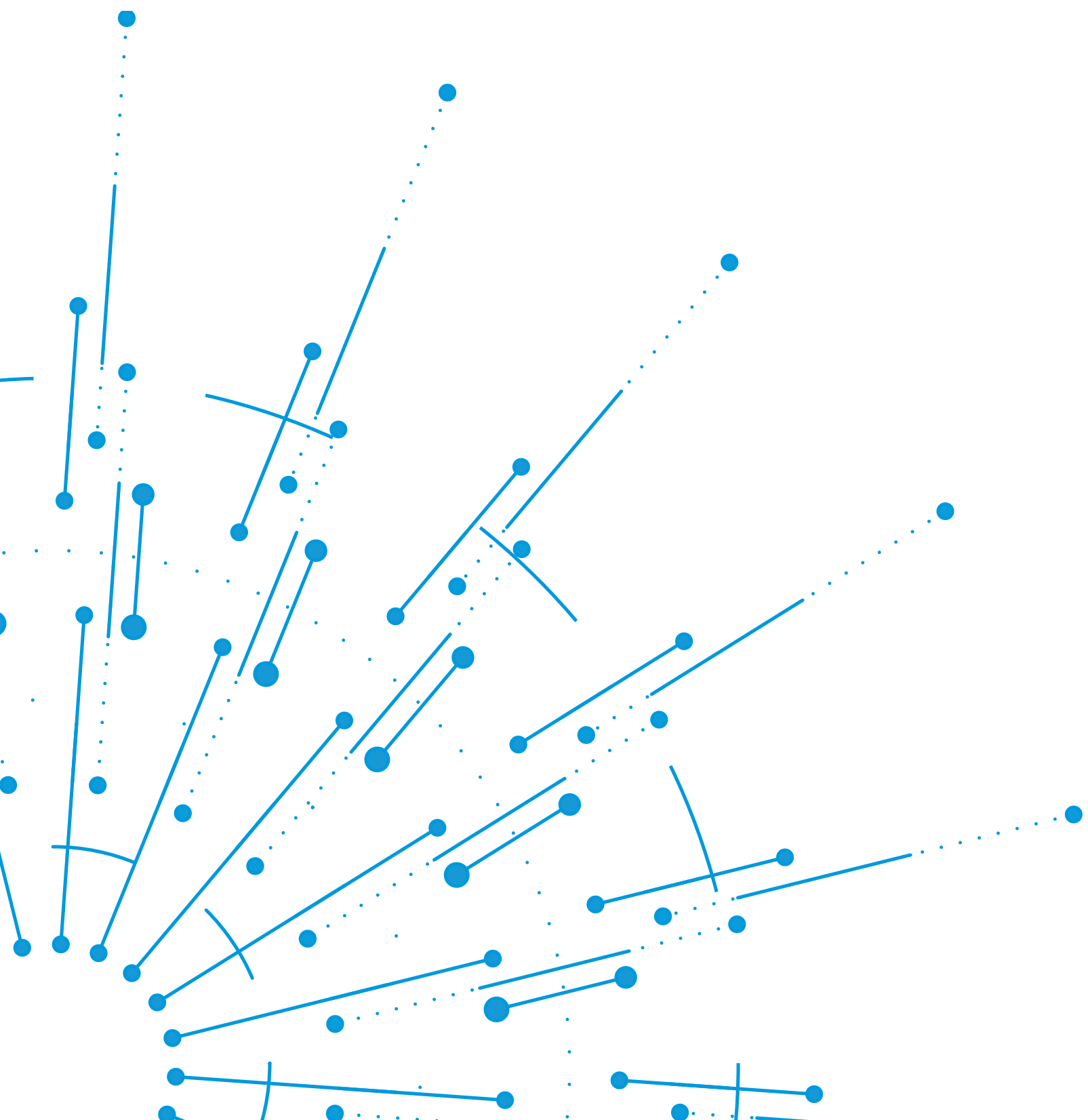
GHG Emissions Accounting and Science-Based Targets:

- ▼ [GHG Protocol Corporate Standard](#)
- ▼ [GHG Protocol Calculation Tools](#)
- ▼ [CDP Technical Note on Science-Based Targets](#)
- ▼ [FAQs- The Science Based Targets Initiative](#)

[Flex's Supply Chain Resource Webpage](#)

If you require support from Flex, please send us an email to:

- ✓ [Flex GPSC Sustainability](#)
- ✓ Contact your GCM



Q&A



If you require support from Flex,
please send us an email to:

- ✓ [Flex GPSC Sustainability](mailto:flex.gpsc@flex.com) (flex.gpsc@flex.com)
- ✓ Contact your GCM

flex®

Thank you





Disclaimer: Flex gives no warranty and accepts no responsibility or liability for i) errors or omissions in the content; ii) the accuracy or the completeness of the information and materials; and iii) any calculations, results or information derived from the use of any information contained in this document.

Under no circumstance will Flex be held liable in any way for any claim, damages, losses, expenses, costs or liabilities whatsoever (including, without limitation, any direct or indirect damages for loss of profits, business interruption or information) resulting or arising directly or indirectly from the use of or inability to use this document, or reliance on the information and materials on this document. Flex has exercised reasonable efforts to include accurate and up to date information.

