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# Sustainability Targets

Supply Chain Sustainability

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# Agenda

- ② Sustainability commitment
- ② What sustainability parameters are pursued?
- ② Customers targets for supply chain
- ② RECAP: QuoteWin information
- ② ANNEX

# Commitment from our CEO



**Revathi Advaiti, CEO, Flex**

**Sustainability, including environmental, social and corporate governance (ESG), has long been the bedrock of Flex operations. Now more than ever, it's important for us to do our part and contribute to a sustainable future.**

As we aim to become the most trusted partner in manufacturing, we have a responsibility to not only deliver on our stakeholders' expectations but to do so in a sustainable manner. We are well-positioned to deepen our sustainability commitment by building on our investments and experiences of years past. To this end, we are working toward [our most ambitious goals yet with a timeline to meet them by 2030](#) and a commitment to net-zero by 2040. As we look to significantly lower emissions throughout our global operations, Flex is a proud member of the [Science Based Targets initiative](#), which aligns us to the Paris Agreement's goal to limit climate change.

Our 2030 goals also continue our focus on cultivating a safe, inclusive and respectful workplace that values the diverse backgrounds, perspectives and talents of our people, who are at the heart of our operations. Our commitments inspire us to continue holding ourselves and our partners to the highest ethical standards, act with integrity and further drive transparency and accountability.

# What sustainability metric are pursued?

## Emissions

Gases from human activities that trap heat from the sun and warm the planets surface, creating a greenhouse effect and global warming, divided into scope 1 and 2.



## Renewable Energy

Fuels and energy obtained from sources that are ultimately replenished from natural solar and gravitational energy flows.



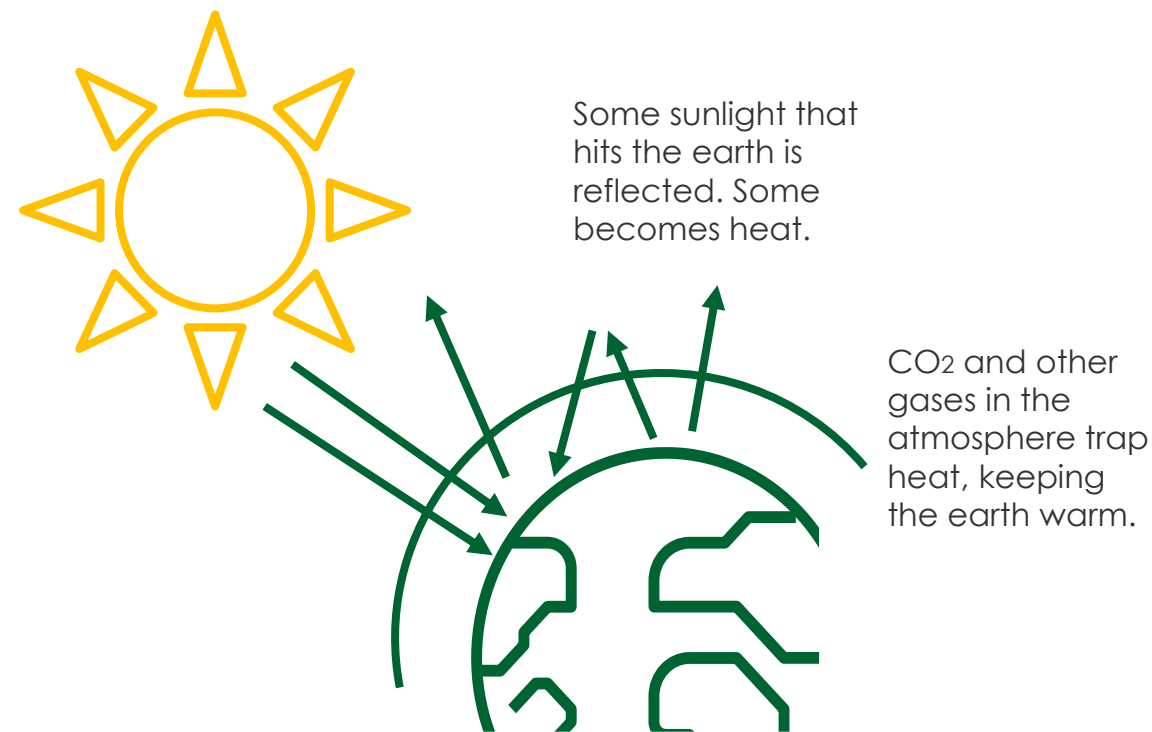
## Recycled materials

Waste materials reprocessed into products, materials or substances whether for the original or other purposes by a recovery operation, ideally, the material can be processed again and again (circular).

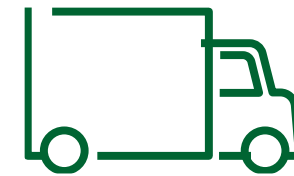


# What are Emissions?

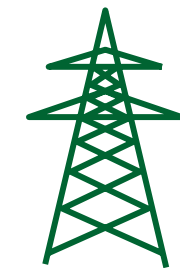
**Emissions** are gases from human activities that trap heat from the sun and warm the planet's surface, creating a greenhouse effect and global warming



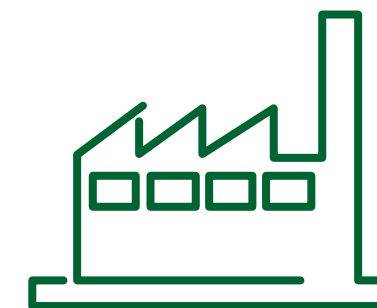
**Primary sources** of emissions are the burning of fossil fuels for **electricity, heat and transportation**



**Mobile combustion**



**Use of non-renewable energy**



**Manufacturing Industry**

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

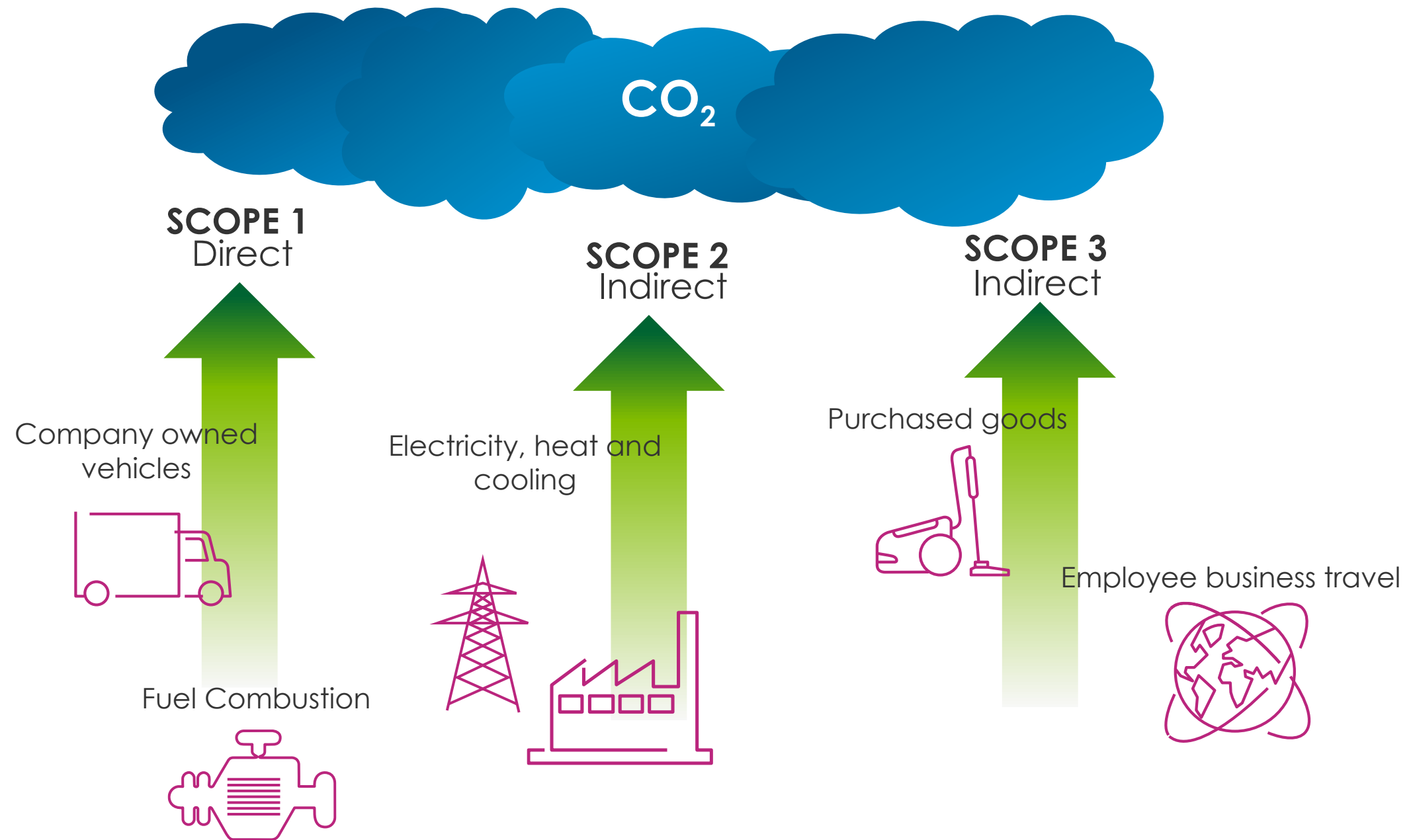
# What does Scope 1, 2 and 3 mean in emissions?

When talking about **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).

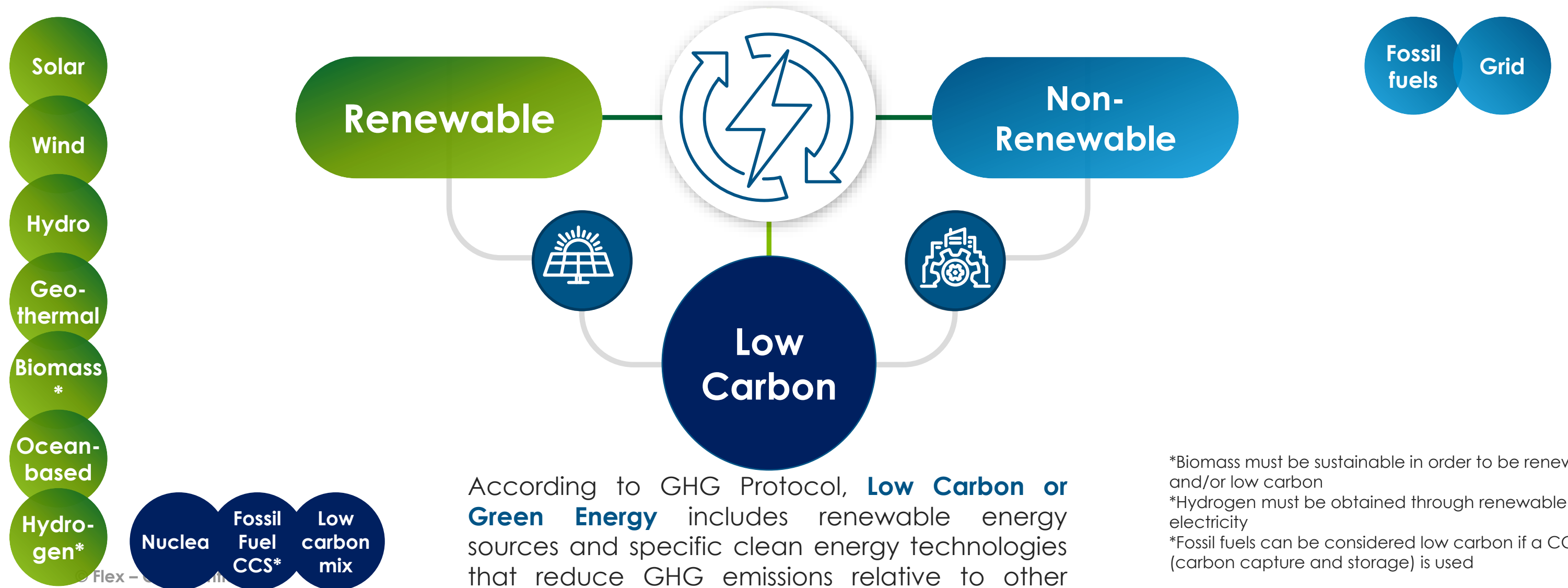


# Energy sources

## 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

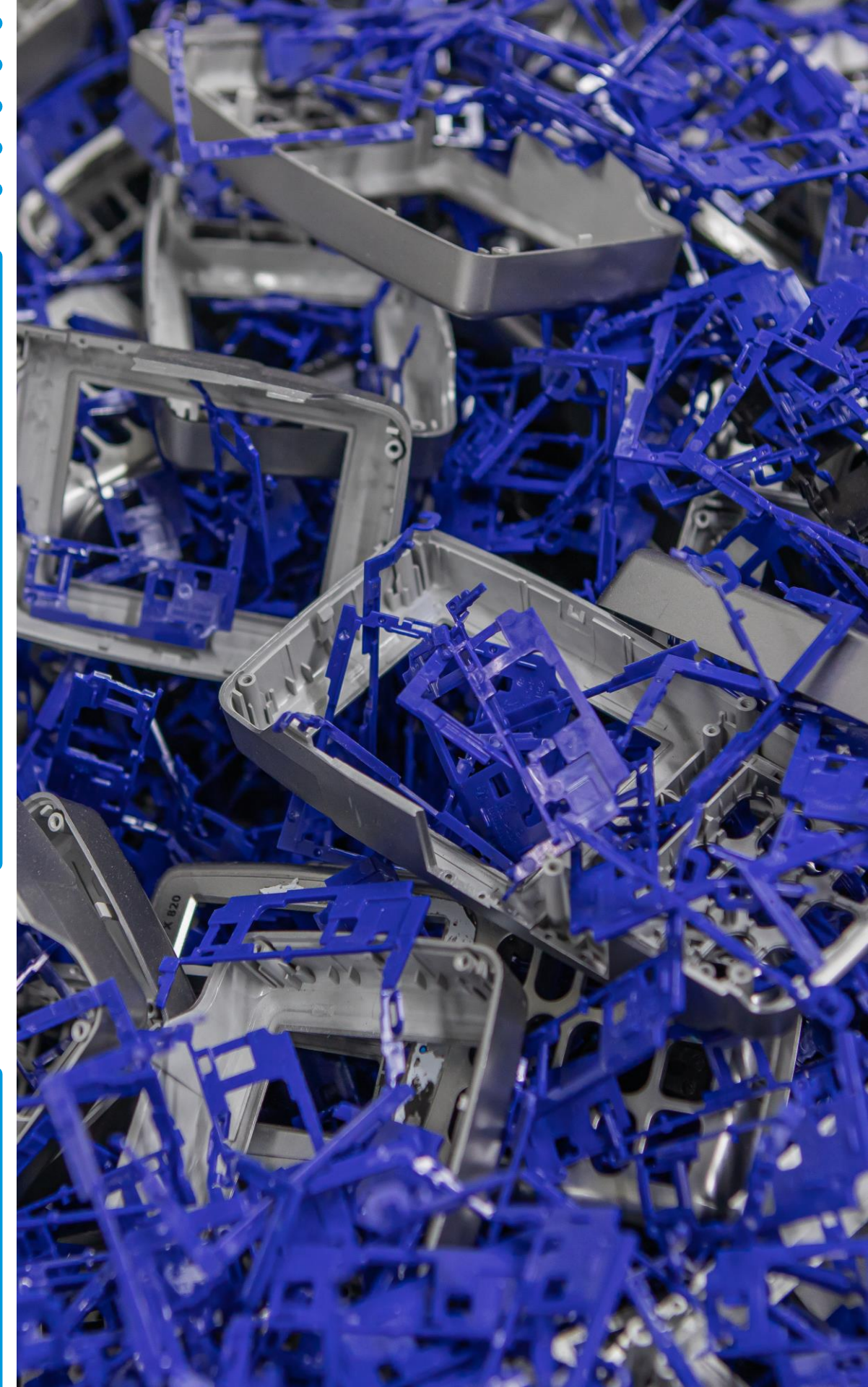
\*Fossil fuels can be considered low carbon if a CCS (carbon capture and storage) is used

# Recycled materials

Recycled materials that will be divided depending on their source:

- **Pre-consumer:** recycled materials from industrial processes
- **Post-consumer:** recycled materials from end-customer usage
- **Reutilization:** recycled materials from the same process

Flex is requesting information during RFQs and awarded projects







# Customer requirements: Sustainability Targets

# Supply Chain Sustainability Customer Requirements

Data reporting

Target setting



# Emission and Energy Targets

## Overarching

### Data required for an emission target\*:

**Base year:** Starting point to reduce emissions

**Target year:** Last year to achieve target

**% of reduction:** emissions to be reduced and is free to choose

**Emission source:** scopes, business units, sites, locations, etc.

### Data required for an energy target\*:

**Activity:** Consumption and/or generation

**Energy carrier:** Any carrier

**Target year:** 2025, 2030, 2040, 2050, etc.

**% of RE in target year:**  
> 0%

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

Company A commits to increase 30% of renewable electricity consumption of by 2030.

\*Information required by sustainability protocols to have an approved targets, this is a best practice from customers perspective



# Emission, energy and recycled material targets

## Product-level

Customers are advancing in their sustainability requirements, from soliciting data report to identifying hot spots for specific sustainability targets, which include:

**Emission reduction per part number\***

**Renewable energy target per part number\***

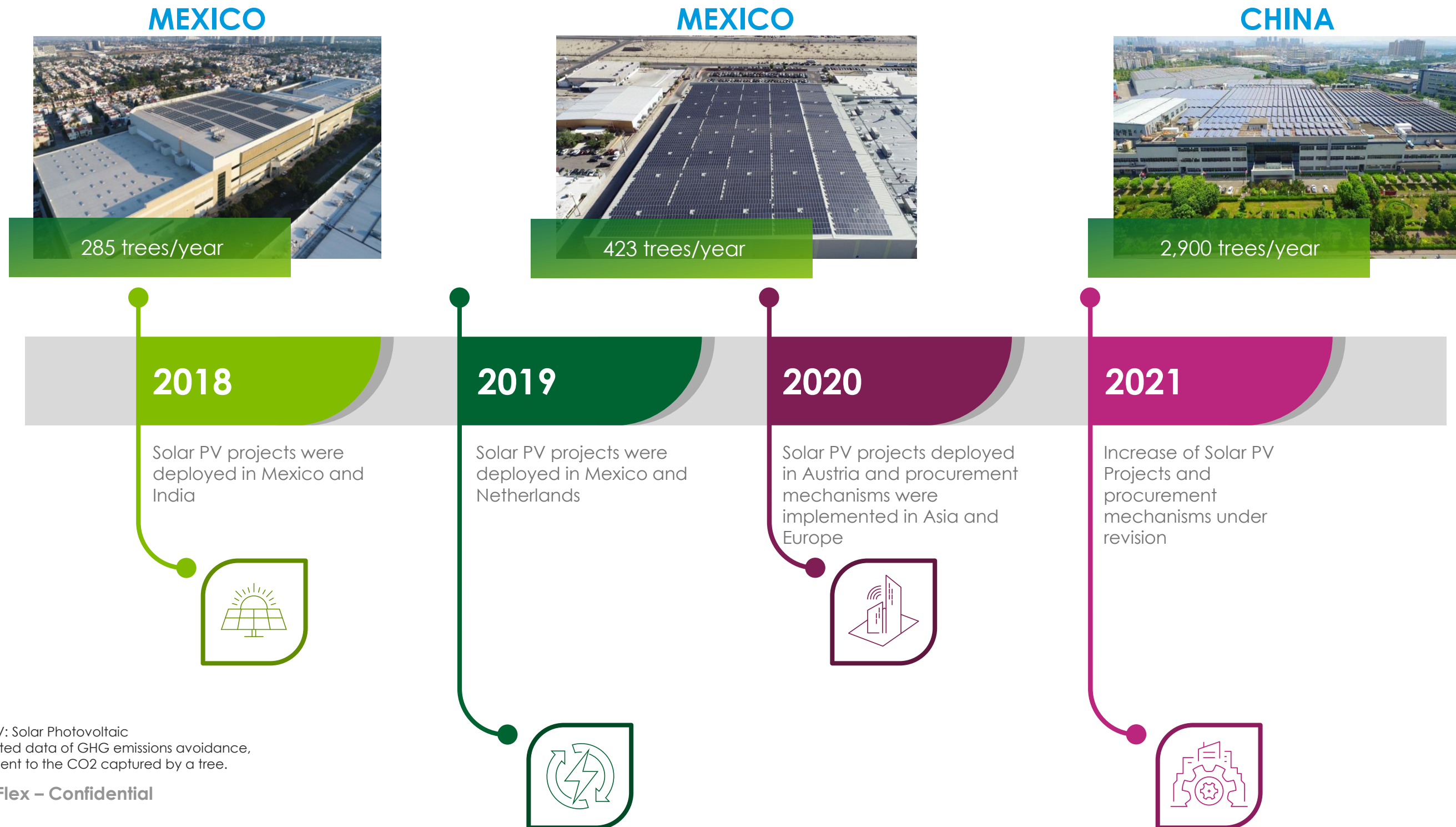
**Recycled materials per part number\***

Each requirement is aligned with suppliers and customers, we encourage you to start visualizing the industry expectations

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\*Targets can be aligned to processes, part numbers or materials

# Flex's Renewable Energy Maturity



Solar PV: Solar Photovoltaic  
 \*Estimated data of GHG emissions avoidance, equivalent to the CO2 captured by a tree.



# RECAP: QUOTEWIN INFORMATION

# Sustainability QW Columns

SupplyWin interface showing mandatory fields highlighted in yellow. The table includes columns for Sustainability validation date, kWh NON-RE p/part, kWh RE p/part, and kg CO2 p/part. The values for these columns are 10/13/23, 0, 0, and 0 respectively.

Quantity	Scale5 Unit Price	Sustainability validation date	Transit Time (Weeks)	kWh NON-RE p/part	kWh RE p/part	kg CO2 p/part	Supplier Product Code	Part Description
		10/13/23		0	0	0		RES 100R 1% 0W063 0402
				0	0	0		RES-CHIPSPECIAL10MOHM1%25121W7
								RES 17.8K +-1% .063W TKF TC=0+
								THRMSTR,0402,47.00KOHM,1.00%
								RES 0R01 5% 0W50 1206
								VARISTOR/400PF 42VRMS 60VDC 25

**Mandatory fields example**

- Columns will be marked yellow
- If you don't have the information requested, **input 0**

## Optional fields example

- Columns are marked in gray
- The columns could be empty with no values

SupplyWin interface showing optional fields highlighted in gray. The table includes columns for Recycled content, Scale1 From Quantity, Scale1 Unit Price, Scale2 From Quantity, Scale2 Unit Price, Scale3 From Quantity, Scale3 Unit Price, Scale4 From Quantity, and Scale4 Unit Price. The values for these columns are No, empty, empty, empty, empty, empty, empty, empty, and empty respectively.

Recycled content	Scale1 From Quantity	Scale1 Unit Price	Scale2 From Quantity	Scale2 Unit Price	Scale3 From Quantity	Scale3 Unit Price	Scale4 From Quantity	Scale4 Unit Price
No								



# Sustainability QW Columns View

- Recycled Content Field: Select (Yes/No) from drop-down menu
- Validation date: Input the date you are providing the information

The screenshot displays the 'Sustainability QW Columns View' interface. On the left, a 'Recycled content' dropdown menu is open, showing 'No' as the selected option. Below it are three more dropdown menus. On the right, a 'Sustainability validation date' field contains '10/13/23', with a calendar pop-up for October 2023. The calendar shows the 13th as the selected date. Below these elements is a table with the following columns: 'Sustainability validation date', 'Transit Time (Weeks)', 'kWh NON-RE p/part', 'kWh RE p/part', and 'kg CO2 p/part'. The table contains two rows of data, both with values of 0 in the last three columns.

Sustainability validation date	Transit Time (Weeks)	kWh NON-RE p/part	kWh RE p/part	kg CO2 p/part
10/13/23		0	0	0
		0	0	0



# Emissions Calculation Tool

Flex has developed an emissions calculation tool to enhance the collaboration and partnership towards our supply base, it is focused to assist organizations to calculate:



All calculations supported in the tool are based in the GHG Protocol

# How to use Flex's Emissions Calculation Tool?

PRODUCT SUSTAINABILITY DATA									
Collect data form									
Supplier Company Name	Supplier-123			How to Calculate Emissions & Energy per part number according to the GHG Protocol					
Point of Contact	NA			Global emissions			Global energy		
Supplier-123's CY 2022	\$24,000,000.00			Scope 1	77,032.00	tonCO2e	Renewable energy consumption	10,505.00	MWh
				Scope 2	799132.00	tonCO2e	Non-renewable energy consumption	1,789,323.00	MWh
				Methodology for emissions accounting	<a href="#">GHG PROTOCOL</a>		Renewable Energy intensity	0.000437708	MWhUSD
				Emissions Intensity	0.036506833	tonCO2e/U	Non-renewable SD Energy intensity	0.074555125	MWhUSD

1

2

3

- 1 Fill in your company name and revenue (Flex will not request this file)
- 2 If already known, fill in your company's latest:
  - Scope 1 emissions
  - Scope 2 emissions
- 3 If already known, fill in your company's latest:
  - Renewable energy consumption
  - Non-renewable energy consumption

# Product-level emissions and energy consumption

1

2

Sustainability Information per MPN										
MPNs	Emission Intensity	PN Price	Emissions per part number	Units	Renewable energy intensity	Renewable energy consumption	Units	Non-renewable energy intensity	Non-renewable energy consumption	Units
PN-1234	0.003650683	0.5000 USD	1.8253416667	kgCO2e	4.37708E-05	0.0218854167	kWh	0.007455513	3.7277562500	kWh
PN-1235	0.003650683	1.8000 USD	6.5712300000	kgCO2e	4.37708E-05	0.0787875000	kWh	0.007455513	13.4199225000	kWh
PN-1236	0.003650683	0.7500 USD	2.7380125000	kgCO2e	4.37708E-05	0.0328281250	kWh	0.007455513	5.5916343750	kWh
PN-1237	0.003650683	0.4500 USD	1.6428075000	kgCO2e	4.37708E-05	0.0196968750	kWh	0.007455513	3.3549806250	kWh
PN-1238	0.003650683	0.6200 USD	2.2634236667	kgCO2e	4.37708E-05	0.0271379167	kWh	0.007455513	4.6224177500	kWh
PN-1239	0.003650683	2.6800 USD	9.7838313333	kgCO2e	4.37708E-05	0.1173058333	kWh	0.007455513	19.9807735000	kWh
PN-1240	0.003650683	5.5500 USD	20.2612925000	kgCO2e	4.37708E-05	0.2429281250	kWh	0.007455513	41.3780943750	kWh
PN-1241	0.003650683	2.2000 USD	8.0315033333	kgCO2e	4.37708E-05	0.0962958333	kWh	0.007455513	16.4021275000	kWh

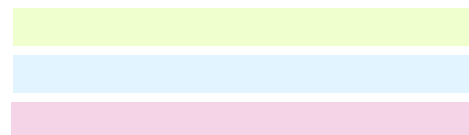
The only fields you have to fill are column 1 and 2

1

Fill in the PN to calculate its sustainability data

2

Fill in the PN Price (**Flex purchasing price**) to allocate emissions and energy as the GHG Protocol establishes



Product-level data is marked in these colors



# Q & A

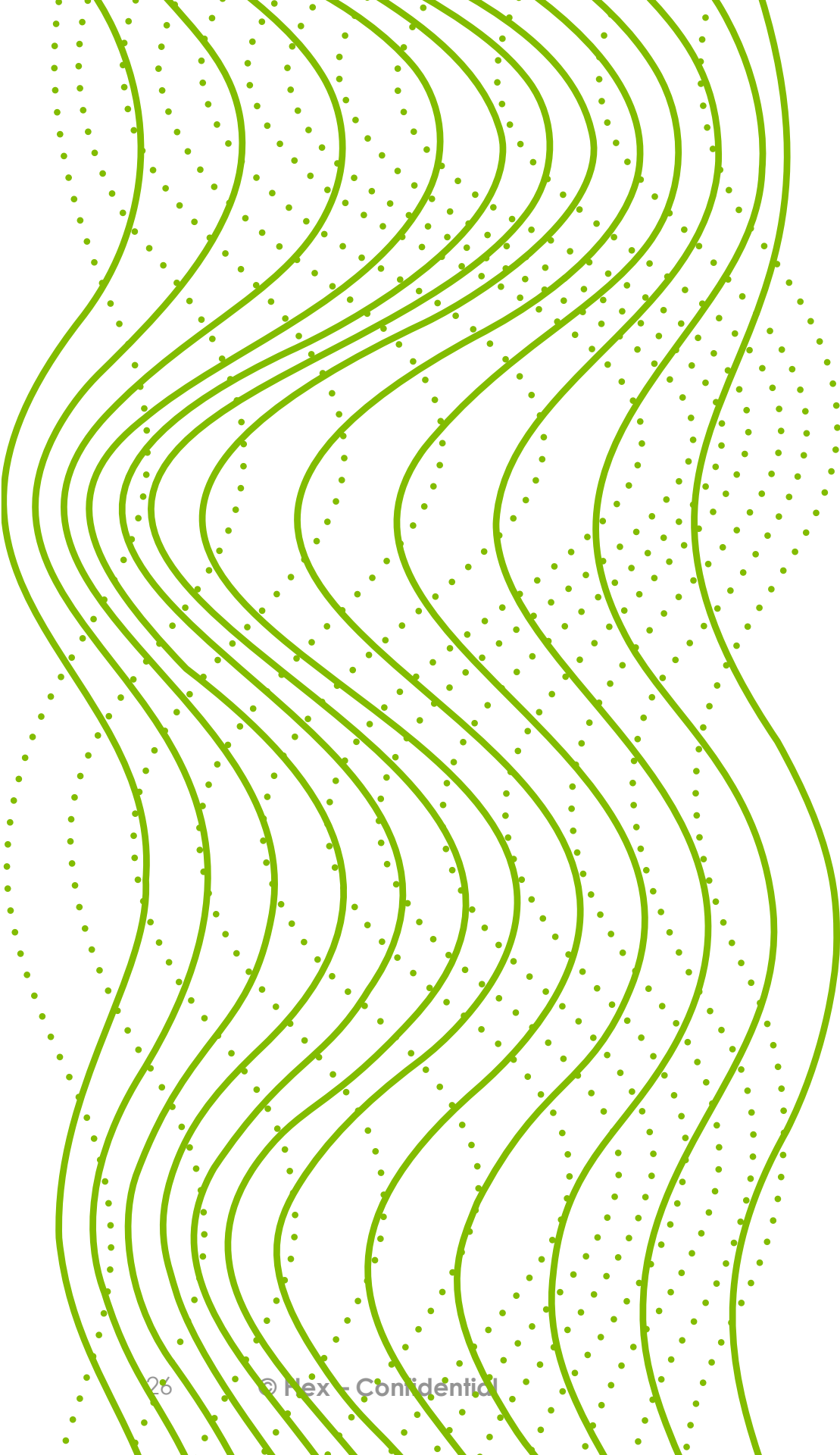
Contact us at:

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**Thank  
you!!**



# ANNEX

# Sustainability Resources for Flex's Supply Base

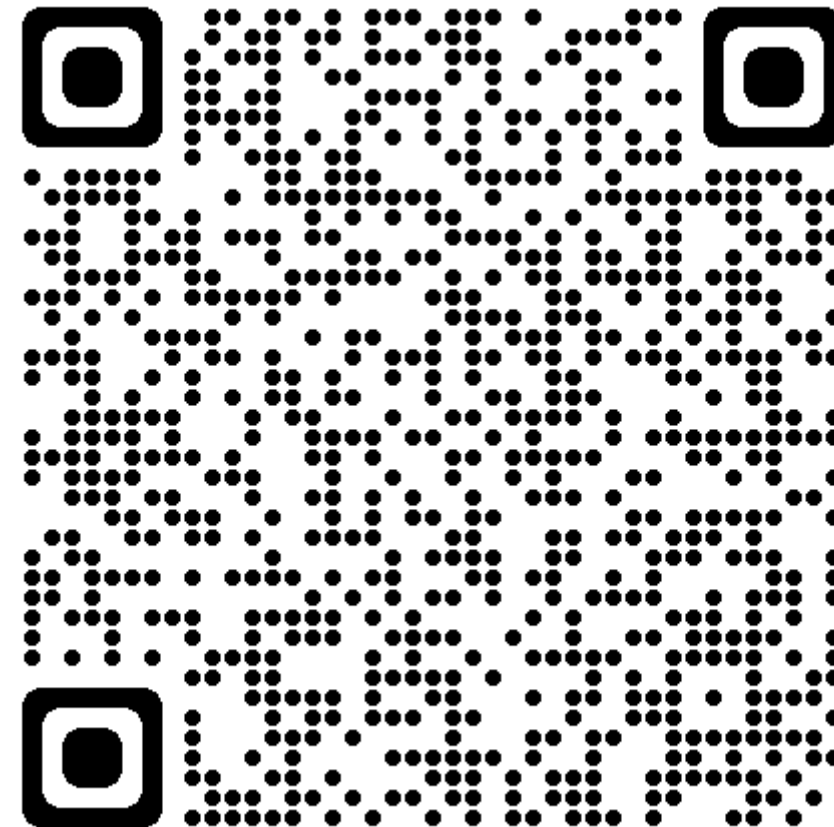
Flex has created an external webpage for suppliers to revisit emission and energy calculation trainings.



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You will be able to find the following materials:

- Webinar recordings
- Emission and energy calculation tools
- Presentations



<https://flex.com/solutions-and-services/supply-chain/sustainability-resources-for-flexs-supply-base>

# How to respond to recycled content in QuoteWin?



**Recycled content allows us to reduce emissions attributed to a product**

**Please review the material description in order to answer correctly**

**Select one of the following options:**

**YES** → if the material description mentions the usage of recycled material in the manufacturing process of the part number quoted

**NO** → if the material description doesn't mention the usage of recycled material in the manufacturing process of the part number quoted

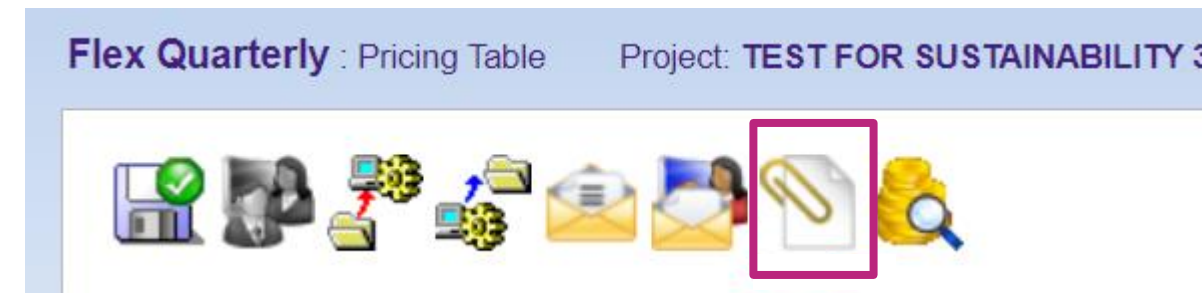
NOTE: if available please share the IMDS/spec data sheet

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# How to attach documents in QuoteWin?

- File attachment can be found in the clip:
  - You will find the supplier sustainability guide
  - **You will be able to upload documents**



Supplyframe  
**SupplyWin** Admin | Logout

RFQ Awards

Select a Project Enter Pricing View Reports

Flex Quarterly : Pricing Table : Attachments Project : TEST FOR SUSTAINABILITY 3

**Project Attachments:** Download All

File	Description	Size	View
------	-------------	------	------

**Part Attachments:** Download All

Part Number	File	Description	Size	View
-------------	------	-------------	------	------

**Files Sent To You:** Download All

File	Description	Size	TimeStamp	User	View
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**Files You Uploaded:** Download All

File	Description	Size	TimeStamp	User	View	Delete
<input type="button" value="Choose Files"/> No file chosen	<input type="button" value="Upload"/>					

# How to manually calculate product-level emissions?

According to the Product Life Cycle Accounting and Reporting Standard from GHG Protocol, an approach on revenue and product cost can be implemented.



The data needed to estimate emissions at product level is:

- 🌐 **Global emissions**
- 🌐 **Global revenue**
- 🌐 **Part number price**

$$\text{Product-level emissions} = \frac{\text{Global emissions}}{\text{Global revenue}} \times \text{Part number price}$$

As an example:

- 🌐 **Global emissions: 739,024 KG CO<sub>2</sub>e**
- 🌐 **Global revenue: 24,000,000 USD**
- 🌐 **Part number price: 28 USD**

$$\text{Product-level emissions} = \frac{739,024 \text{ KG CO}_2\text{e}}{24,000,000 \text{ USD}} \times 28 \text{ USD}$$

$$\text{Product-level emissions} = 0.86 \text{ KG CO}_2\text{e/PN}$$

Part Number Price → Flex's purchasing price  
Distributors shall request emissions to the manufacturer

# How to calculate product-level energy?

The data needed to estimate energy at product level is:

- 🌐 **Global non-renewable energy**
- 🌐 **Global renewable energy**
- 🌐 **Global revenue**
- 🌐 **Part number price**

The formula followed to obtain product level-energy:

As an example:

$$\text{Product-level energy} = \frac{\text{Global energy consumption}}{\text{Global revenue}} \times \text{Part number price}$$

- 🌐 **Global non-renewable energy: 1,789,323 kWh**
- 🌐 **Global renewable energy: 572,583 kWh**
- 🌐 **Global revenue: 24,000,000 USD**
- 🌐 **Part number price: 28 USD**

$$\text{Product-level non-renewable energy} = \frac{1,789,323 \text{ kWh}}{24,000,000 \text{ USD}} \times 28 \text{ USD}$$

$$\text{Product-level renewable energy} = \frac{572,583 \text{ kWh}}{24,000,000 \text{ USD}} \times 28 \text{ USD}$$

$$\text{Product-level non-renewable energy} = 2.08 \text{ kWh/PN}$$

$$\text{Product-level renewable energy} = 0.66 \text{ kWh/PN}$$

Part Number Price → Flex's purchasing price  
Distributors shall request emissions to the manufacturer



# Additional resources

## Acronyms

- **GHG** → Greenhouse Gas
- **KG CO2** → kilograms of carbon dioxide
- **USD** → United States Dollars
- **PN** → Part Number
- **kWh** → kilowatt per hour (energy consumption unit)
- **IMDS** → International Material Data System
- **SPEC** → product specification sheet

## Links

- [Product Life Cycle Accounting and Reporting Standard from GHG Protocol](#)
- [Scope 1 & 2 GHG Inventory Guidance](#)