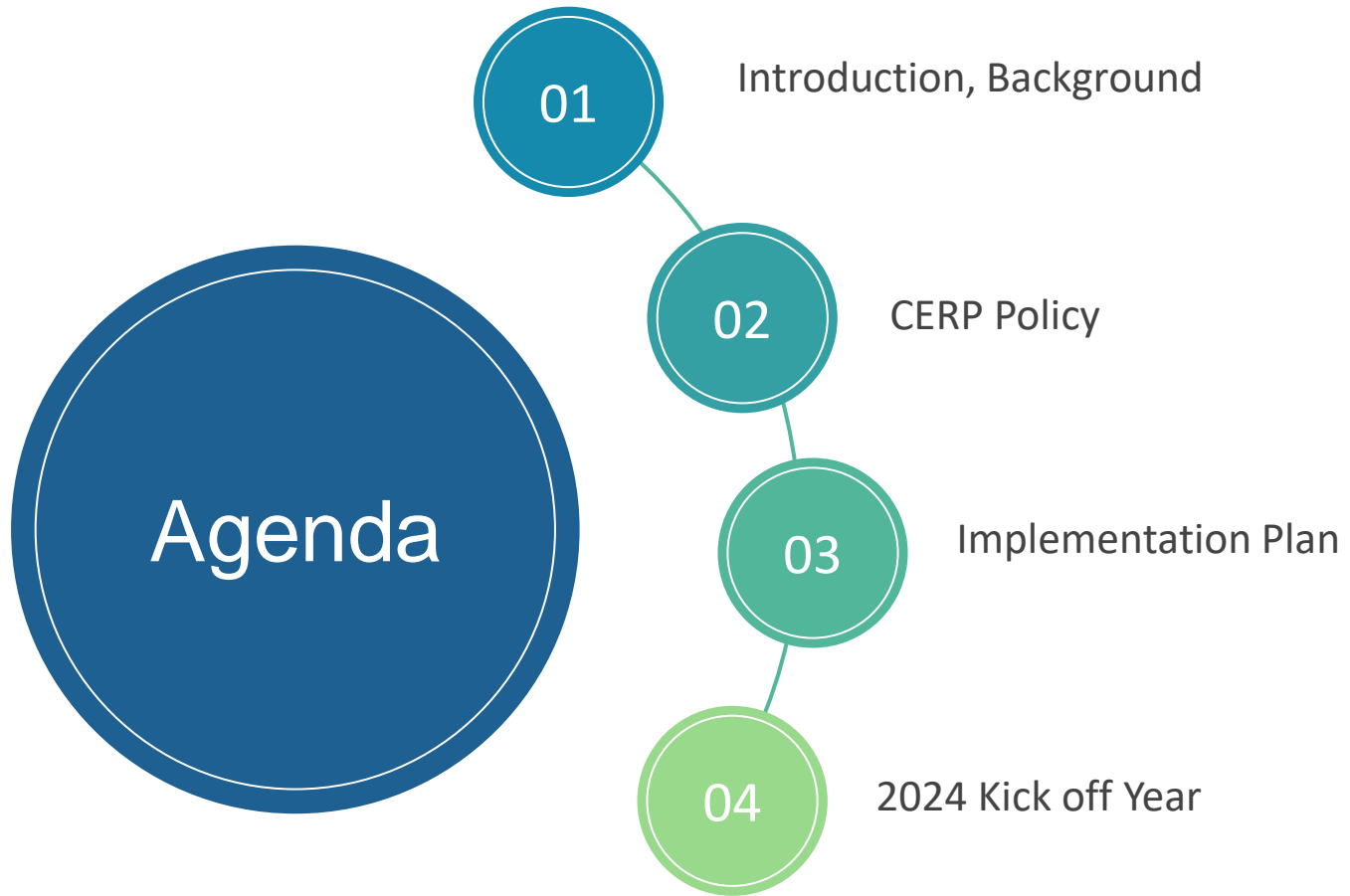


CERN Environmentally Responsible Procurement CERP

Project Status and next steps

ILO Forum Meeting, 2024 March 19th





Introduction - DG VISION since 2016



"Increasing CERN's visibility through its impact on society"
 Environmental and sustainability considerations must be included in all we do *ab initio*



First Environment Report 2017-2018

Second Environment Report 2019-2020

Third Environment Report 2021-2022
 -Dec 23

ISO 50001 Certification

CERP Policy approved
 - June 23

Implementation plan
 - Dec 23

"CERN should become a role model for environmentally-aware scientific research laboratory"



CERN Environment Priority Objectives

More details in <https://hse.cern/environment-report-2021-2022>

ENERGY

1215 GWh

The Laboratory is committed to limiting rises in electricity consumption to 5% up to the end of Run 3 compared to the 2018 baseline year, which corresponds to a maximum target of 1314 GWh, while delivering significantly increased performance of its facilities. It is also committed to increasing energy reuse.

EMISSIONS

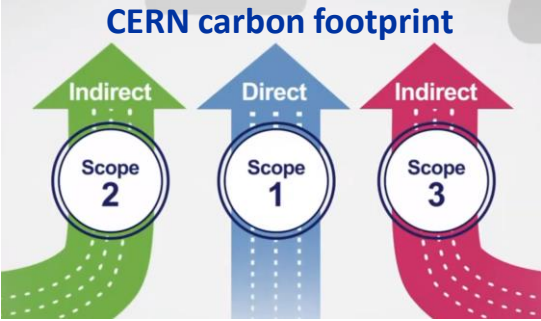
184 173 tCO₂e

CERN's objective is to reduce direct emissions by 28% by the end of Run 3 compared to the 2018 baseline year, which corresponds to a maximum target of 138 300 tCO₂e.

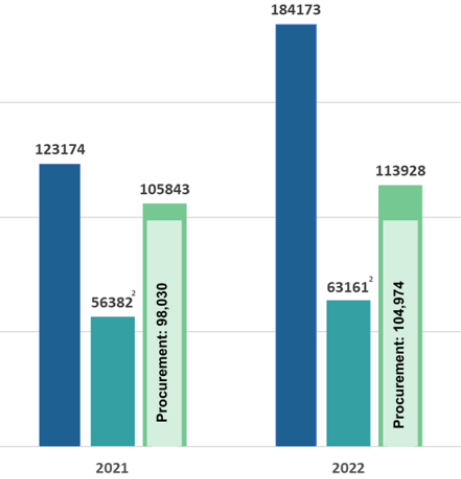
WATER AND EFFLUENTS

3234 ML

The Laboratory is committed to keeping the increase in its water consumption below 5% up to the end of Run 3 compared to the 2018 baseline year, which corresponds to a maximum target of 3651 ML, despite a growing demand for water cooling at the upgraded facilities.



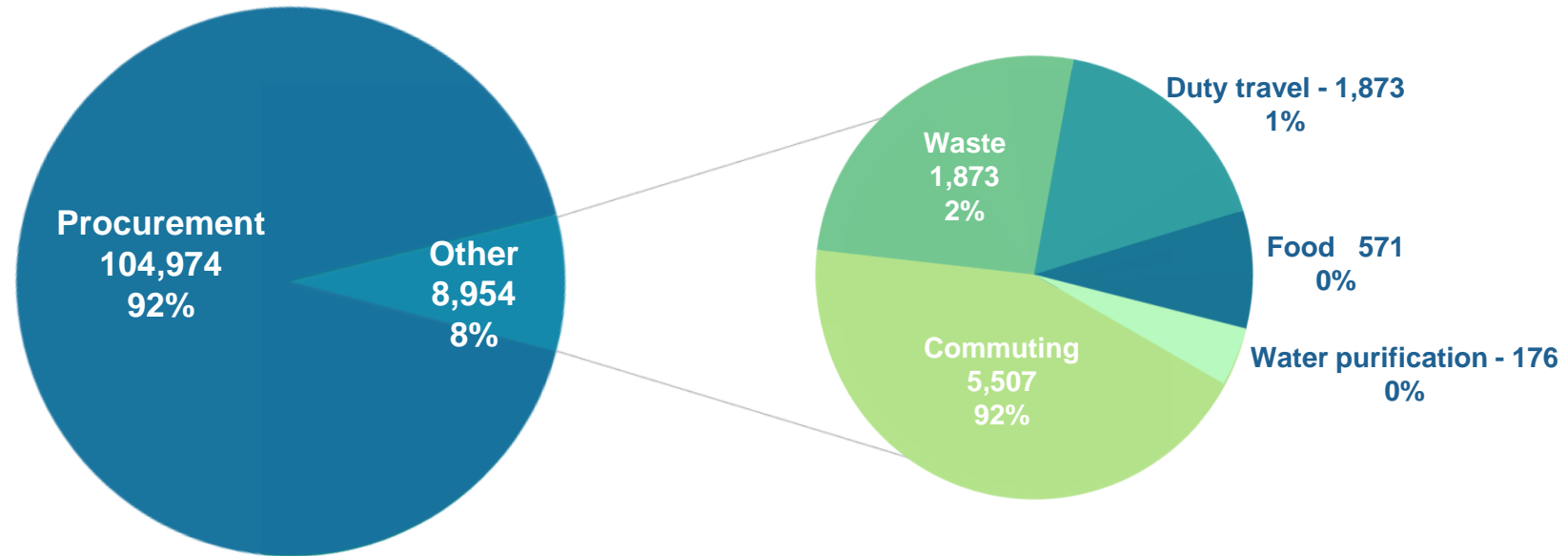
- Report on Scope 3 emissions for the first time
 - Objectives set for scopes 1 and 2 emissions, for now
- Scope 1 (direct): 184 173 tCO₂e
 Scope 2 (energy) : 63 161 tCO₂e
 Scope 3 (indirect) : 113 928 tCO₂e



³ Spend-based Scope3 procurement estimates (Exiobase)

Scope 3 Emissions :

2022 CERN+TEAMS indirect emissions (SCOPE 3) in tCO₂e



40% of global emissions are driven from organisations through their purchases.

~35% at CERN

In 2022, > 90% of CERN's indirect (Scope 3) emissions resulted from purchases of goods & services.

40% of CERN's annual funding is spent with its suppliers.

Suppliers' sustainability maturity impacts CERN's ability to be "an environmentally aware scientific laboratory".

CO₂ emitting procurement families

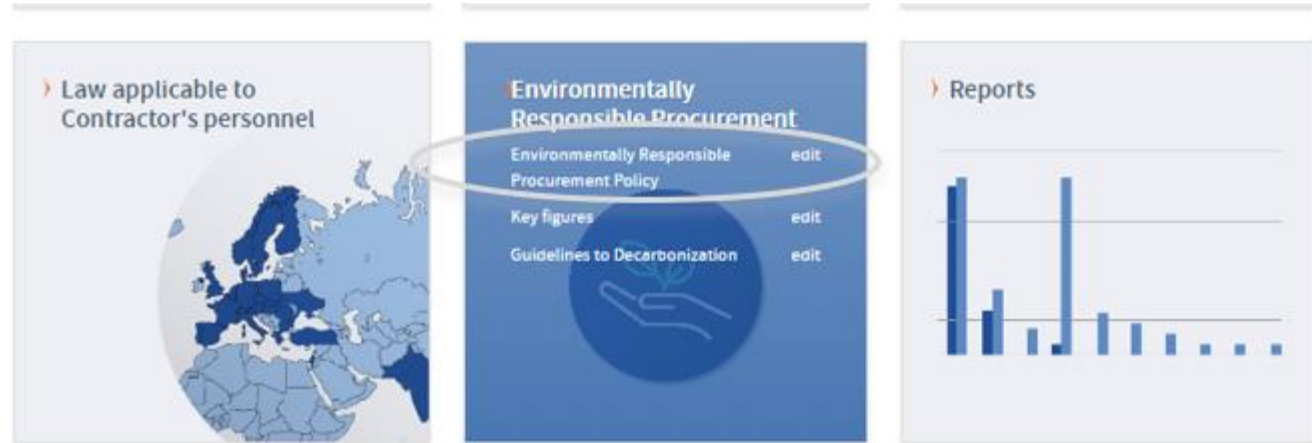
Top 6 CO₂ emitting Procurement families



CERN Environmentally Responsible Procurement Policy (1/3)

CERP Policy available on the Procurement Website

Approved in June 2023 by CERN Extended Directorate



CERP Policy (2/3)

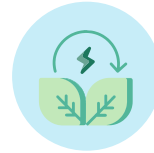
CERN will embed environmental responsibility **where appropriate** throughout all phases of the procurement process, including at the design phase. [...]

Careful and reasoned attention will be given to the need for the procurement, the specificities of the goods or services being procured, **the choice of the supplier, the terms of procurement and the principle of continuous improvement**. [...]

CERP Policy (3/3)

The Organization undertakes to:

Integrate environmentally responsible procurement practices into current and future supply chains



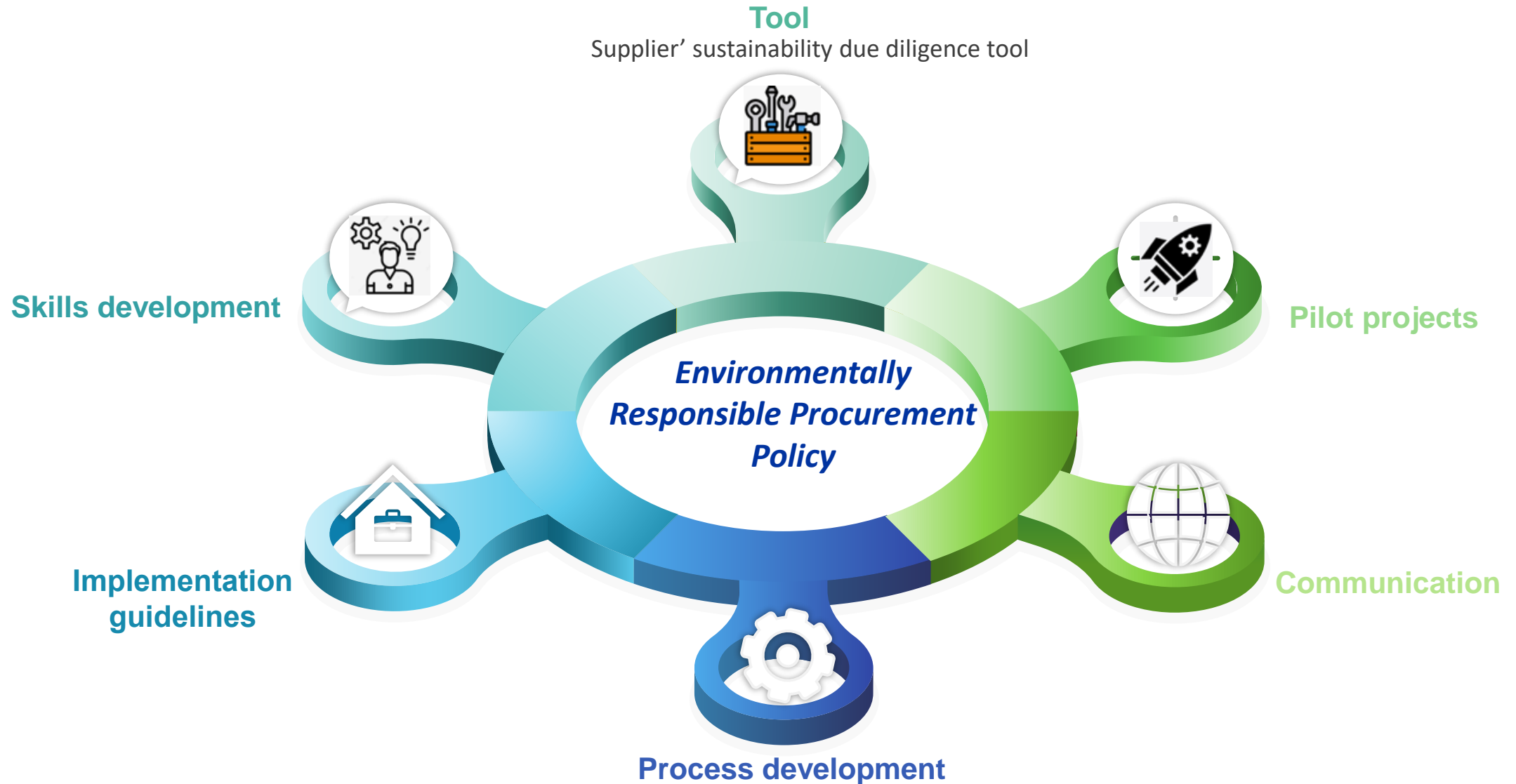
Measure the impact of environmentally responsible procurement

Communicate with, and give guidance to, the CERN community on implementing, monitoring and reporting on environmentally responsible procurement;

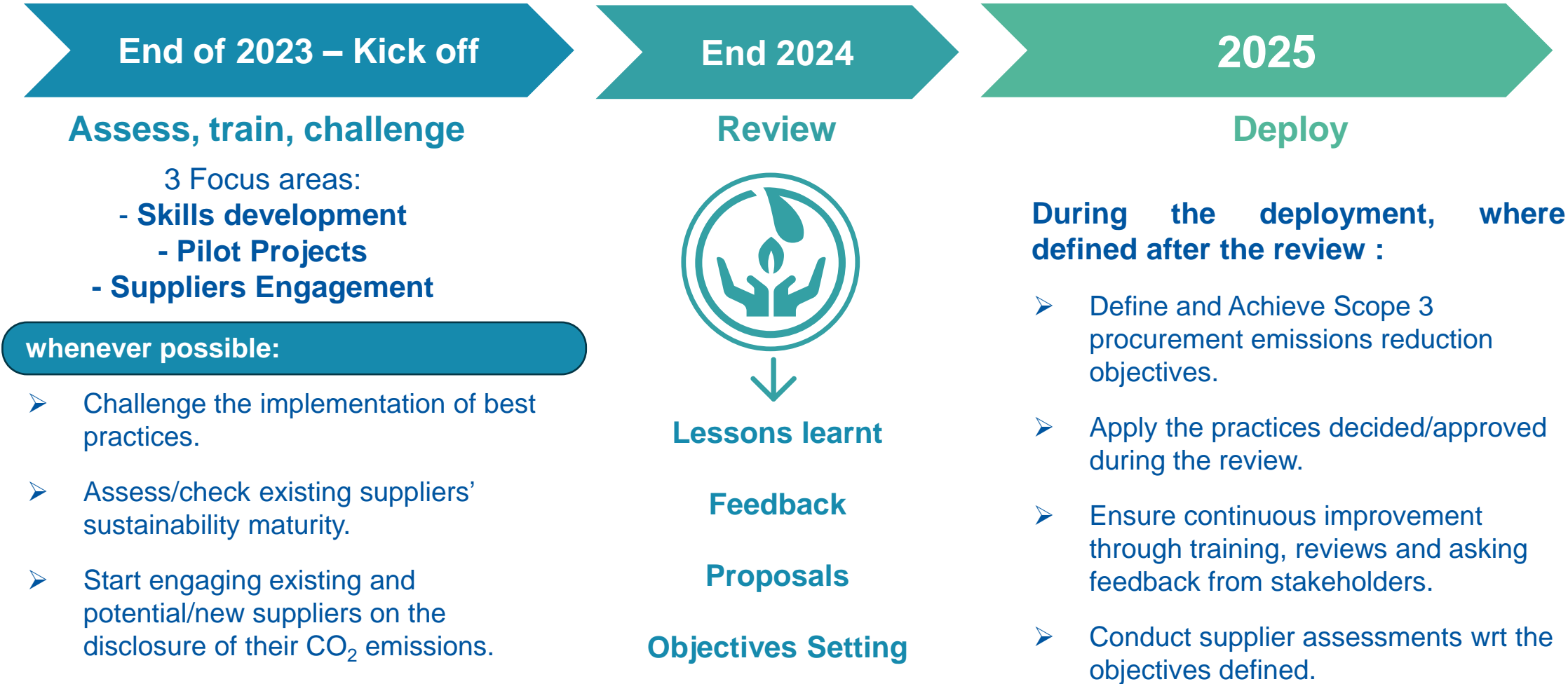


Demonstrate and share, where appropriate, best practice for environmentally responsible procurement with its Member States and other organisations, particularly other research laboratories. [...]

CERP Policy - Implementation Plan



CERP implementation - A phased approach



In practice

Need for the procurement

WHY
do I buy?

Specificities of the goods/services procured

WHAT
do I buy?

Choice of the supplier

WHOM
I buy from?

Terms of procurement

HOW
do I buy?



CERP Policy implementation – Process

At earliest possible stage of Procurement Process:

Challenging procurement strategy (Startup meeting)

Challenging the implementation of environment criteria

Decision: Yes / No

Request for information at MS stage

Case by case or
Systematic ?

- If it does not significantly limit competition OR impact the balanced industrial return OR price, then mandatory/desirable environment criteria should be included in MS for prequalification and in the technical specification at tender stage or included in adjudication basis
- Contract performance : SLA, energy monitoring (ISO50001 compliance), CO2 emissions disclosure improvements etc...

Collect Data /share lessons learnt eventually update/develop objectives and guidelines.

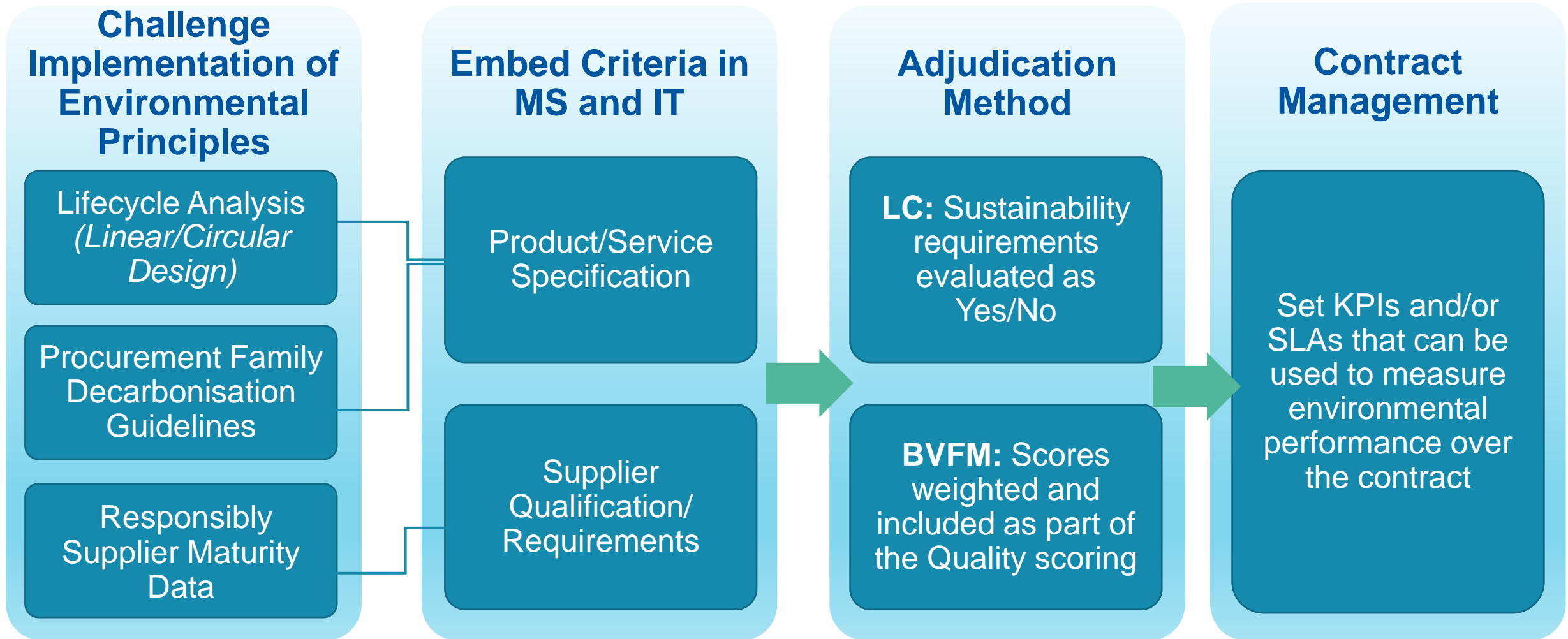
- MS & IT
- Adjudication
- Contract follow up

Market maturity
Best practices & guidelines
TCO analysis

Minimum level of action

Replies from suppliers are mandatory/collected/reported

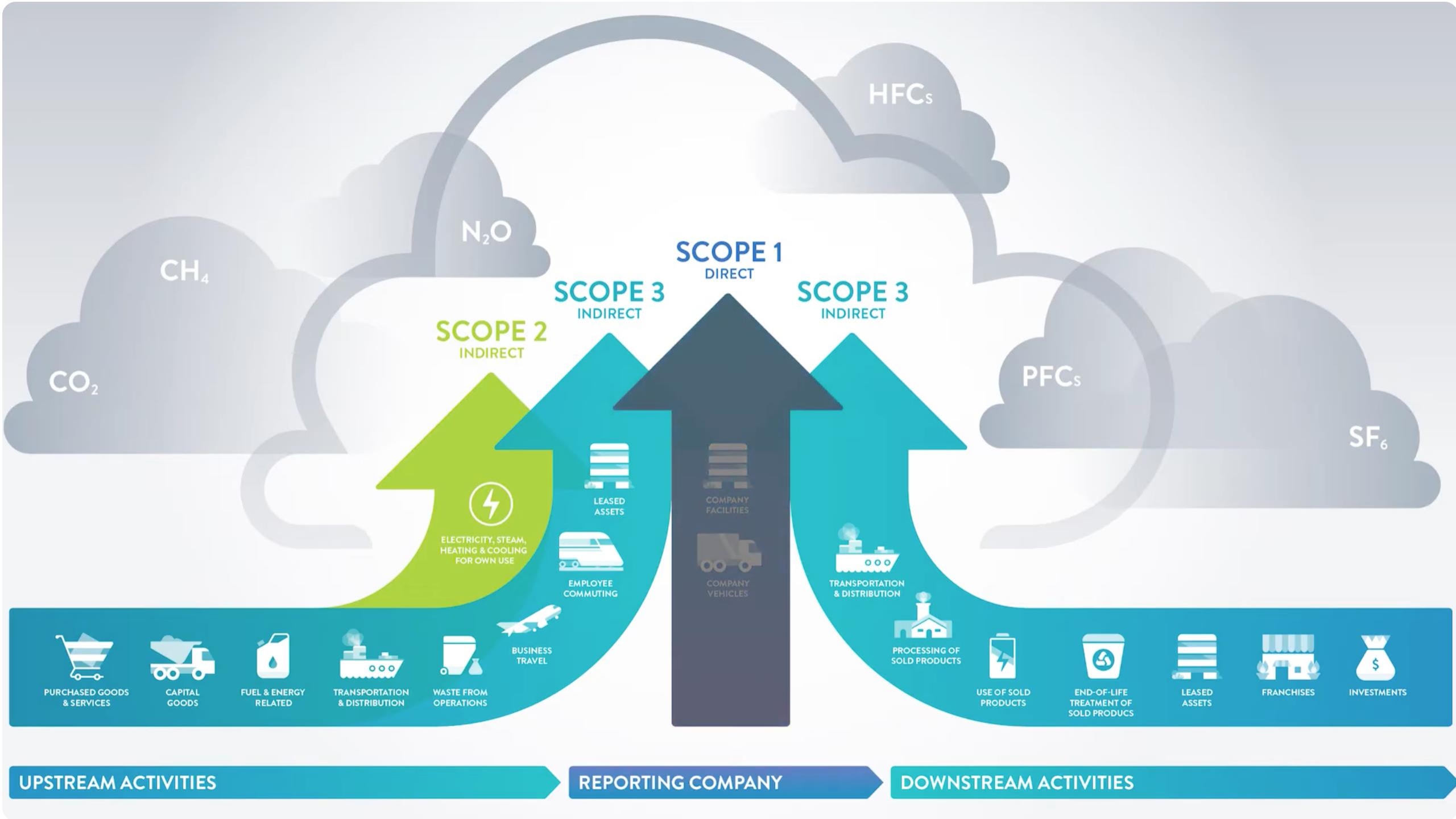
Approach adopted in Pilot Projects



Involvement of IPT-PI at each step of the procurement process to facilitate the implementation of the Policy in close collaboration with the Departments' Technical Officers

Conclusion:





UPSTREAM ACTIVITIES

REPORTING COMPANY

DOWNSTREAM ACTIVITIES

- PURCHASED GOODS & SERVICES
- CAPITAL GOODS
- FUEL & ENERGY RELATED
- TRANSPORTATION & DISTRIBUTION
- WASTE FROM OPERATIONS
- BUSINESS TRAVEL
- LEASED ASSETS
- EMPLOYEE COMMUTING
- COMPANY FACILITIES
- COMPANY VEHICLES
- TRANSPORTATION & DISTRIBUTION
- PROCESSING OF SOLD PRODUCTS
- USE OF SOLD PRODUCTS
- END-OF-LIFE TREATMENT OF SOLD PRODUCTS
- LEASED ASSETS
- FRANCHISES
- INVESTMENTS

SCOPE 2
INDIRECT

SCOPE 3
INDIRECT

SCOPE 1
DIRECT

SCOPE 3
INDIRECT



ELECTRICITY, STEAM, HEATING & COOLING FOR OWN USE



LEASED ASSETS



EMPLOYEE COMMUTING



COMPANY FACILITIES



COMPANY VEHICLES



TRANSPORTATION & DISTRIBUTION



PROCESSING OF SOLD PRODUCTS



USE OF SOLD PRODUCTS



END-OF-LIFE TREATMENT OF SOLD PRODUCTS



LEASED ASSETS



FRANCHISES



INVESTMENTS

What are Scope 1, 2 and 3 emissions?

[Full video: ESG Base](#)

