



Environmental Report 2023

Then, Now & Beyond

ESPI's Current Status - FY 24

- Calculated Scope 1 and 2 emissions for the last five FYs.
- Process is in place for continuous monitoring of Scope 1 and 2 emissions.
- Evaluated existing sustainability initiatives and quantified them.
- Set near-term emission reduction targets, validated by SBTi.
- Conducted energy audit to identify opportunities for reducing energy consumption.
- Strategizing increased solar panel installations to raise renewable electricity share from 19% in 2022.

Performance Details

1. Emission
2. Energy

Emission Performance

	Jan'23 - Dec'23	Jan'22 - Dec'22
Scope 1 Emissions (tCO2e)	253.68	263.59
Scope 2 Emissions (tCO2e)	681.87	801.43
Scope 3 Emission (tCO2e)*	-	-
Total Emissions S1 +S2 (tCO2e)	936	1065

*We will be disclosing our scope 3 emissions in the coming years.



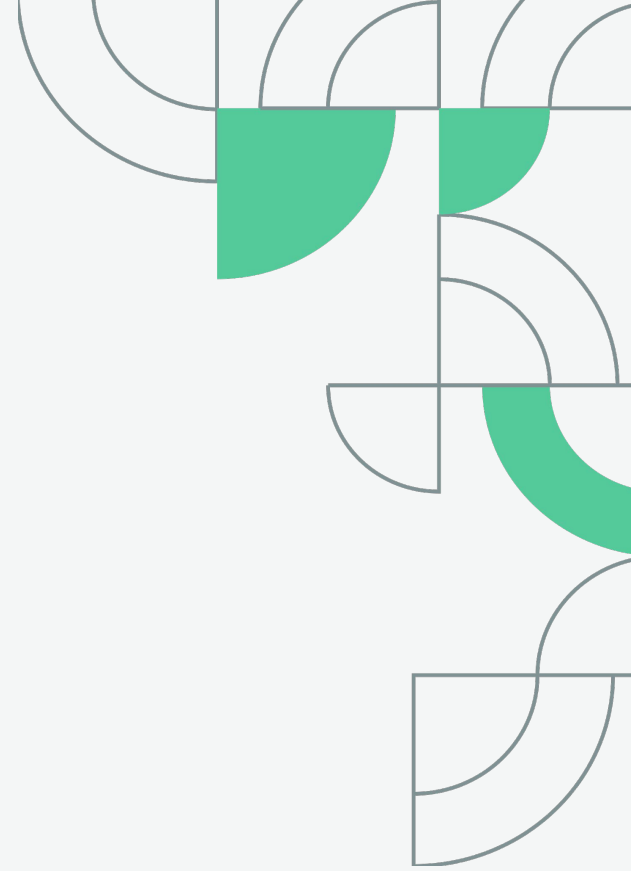
Energy Performance

	Jan'23 - Dec'23	Jan'22 - Dec'22
Non Renewable		
Electricity	8,14,300 kWh	8,75,885 kWh
Fuel	1,097 GJ	1,657 GJ
Renewable		
Electricity	2,62,994 kWh	2,06,645 kWh

Phase-wise Progress

1. Emission calculation
2. Baseline and target preparation
3. Reduction action plan

Phase 1: Emission Calculation



Data Used for Emission Calculation

Fossil Fuel (Scope 1)

- Diesel (Gen-sets & boilers): Apr'18 - Dec'23
- Diesel (Company owned vehicles): Nov'09 - Dec'23
- LPG: May'18 - Dec'23

Fugitives (Scope 1)

- Fire Suppressants: Jan'18 - Dec'23
- Refrigerants: Feb'18 - Dec'23

Electricity (Scope 2)

- Non-renewable: Mar'18 - Dec'23
- Renewable: Oct'18 - Dec'23

Scope 3 Emission Calculation

We have identified the following Scope 3 emission sources relevant to Espi's operations:

- **Business travel**
- **Employee commute**
- **Goods & services purchased**
- **Waste**
- **Water**

Our focus would be on measuring, analyzing, hotspot identification, and reducing emissions from these sources as well in FY 24-25.



ESPI's Emission Dashboard

<<

< Analysis Report / Overview

S

Analysis Report

Overview

Electricity

Travel

Water

Waste

Fossil Fuel

Fugitives

Heat & Steam

Data Management

Action

Settings

Overview

Last updated on: 09 Jan 2024, 10:09 AM

Date: Jan/2020 → Dec/2023

Emission: All

Facility: All

[View processed data](#)

Total emissions

5188.99 tCO₂e

For time: Jan 2020-Dec 2023

Emissions avoided

796.45 tCO₂e

For time: Jan 2020-Dec 2023

Emissions offset

Data Unavailable

Total energy consumed

26003.59 GJ

For time: Jan 2020-Dec 2023

Most emitting source

Electricity

For time: Jan 2020-Dec 2023

Most emitting facility

ESPI

For time: Jan 2020-Dec 2023

Emission over time

View by: Monthly

Emitted
Avoided
Offset

● Electricity ● Fossil Fuel ● Fugitives

Apr'23

5996.29 kgCO₂e

Min Emitted

Mar'22

159.39 tCO₂e

Max Emitted

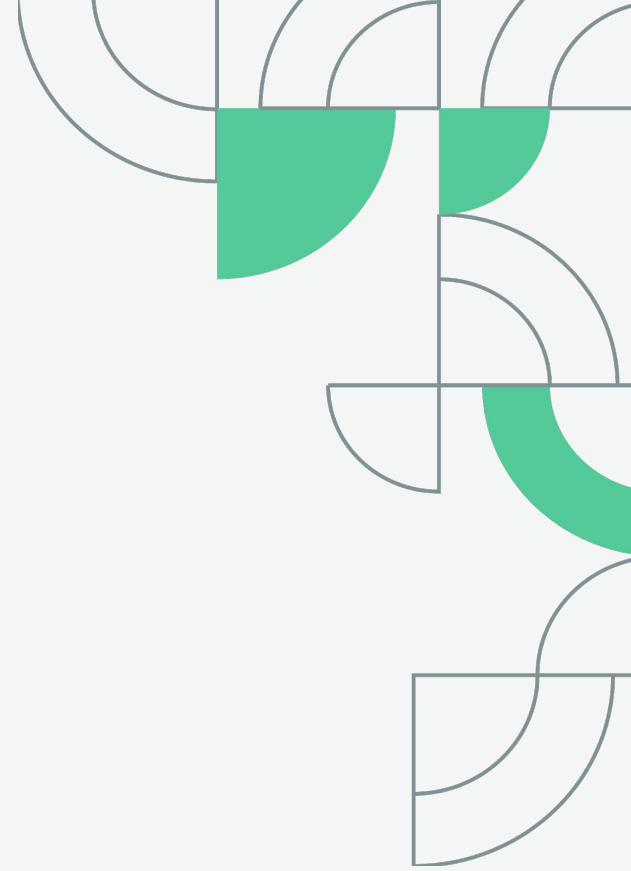
Emission breakdown by source

Emission Source	Emission (CO ₂ e)
Electricity (76.8%)	3987.62 T
Fugitives (14.6%)	755.97 T
Fossil Fuel (8.58%)	445.39 T

Emission breakdown by scope

Scope	Emission (CO ₂ e)
Scope 1 (23.2%)	1201.37 T
Scope 2 (76.8%)	3987.62 T

Phase 2:
**Baselining and Target
Preparation**



Base Year Scenarios

If base year is	Target year	Base year emission	Expected reduction % from base year	Target year emission
2018	2030	818	50%	406
2019	2030	948	46%	510
2020	2030	1093	42%	634
2021	2030	1288	42%	747
2022	2030	1065	42%	692

*All emission values are in tCO₂e

2021 is the most recent year which represents the company's typical GHG profile and has sufficient forward-looking ambition to reach net zero by 2050. And as per the SBTi guideline we have chosen 2021 as a base year.



Base Year Scenarios



SCIENCE
BASED
TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION


PARTNER ORGANIZATIONS



CDP
DISCLOSURE INSIGHT ACTION



United Nations
Global Compact



WORLD
RESOURCES
INSTITUTE



WWF

The meaningful and consistent tracking of emissions performance over the target period requires companies to establish a base year.

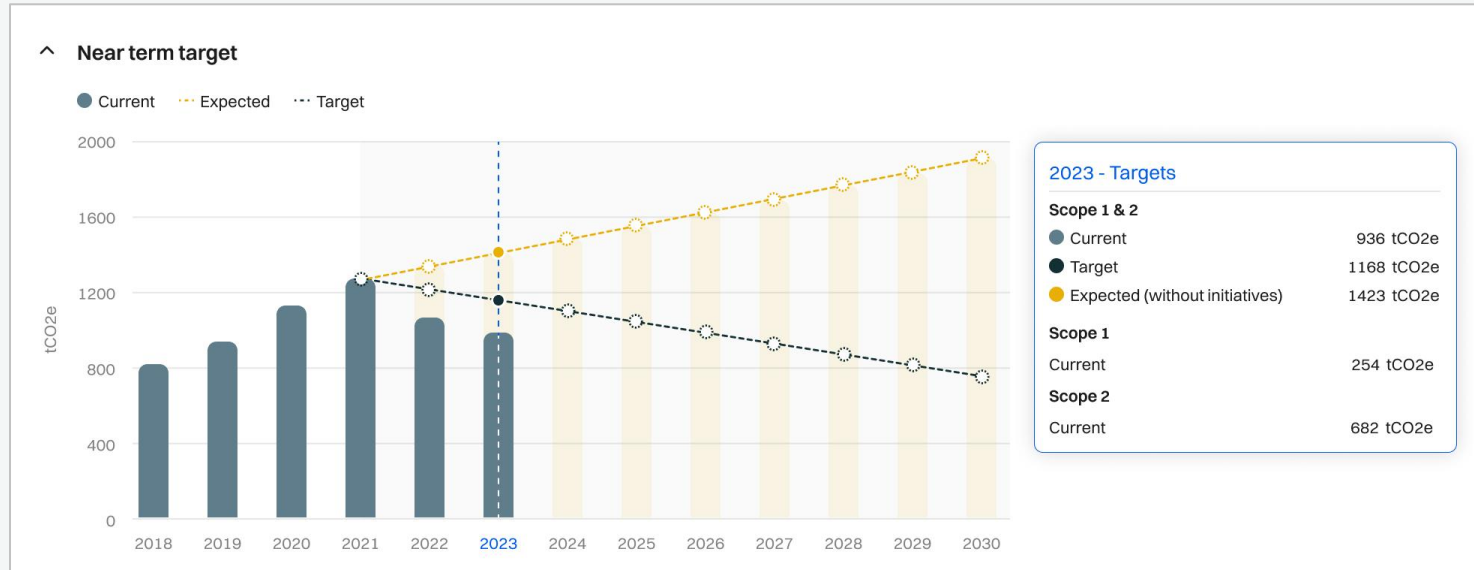
Three considerations are important for selecting a base year. First, verifiable data on scope 1, 2, and 3 emissions should exist for the base year. **It is recommended that companies choose the most recent year for which data is available as the base year.**

Second, the base year should be representative of a company's typical GHG profile. Companies can assess representativeness by comparing inventories and business activity levels over time.

Third, the base year should be chosen such that the target has sufficient forward-looking ambition.

Why 2021 is chosen as base year: As per SBTi's recommendation the most recent year with the company's typical GHG profile, having sufficient forward-looking ambition should be chosen as the base year.

Final Target - Approved by SBTi



ESPI commits to reduce scope 1 and scope 2 GHG emissions **by 42% in 2030 from a 2021** base year, and to measure and reduce its scope 3 emissions.

A Leader in the Pharma Sector

Near-term target ▾ Net-zero target ▾ Temperature alignm... ▾ SME x Pharmaceuticals, Bio... x Scope ▾ Region ▾ India, Asia x
 Date published ▾

COMPANY ▲ NEAR-TERM TARGET ⓘ NET-ZERO TARGET ⓘ ORGANIZATION TYPE ⚙

Espi Industries & Chemicals Private Limited
 India, Asia TARGETS SET - SME View less ^

Organization type: SME
Sector: Pharmaceuticals, Biotechnology and Life Sciences
Company temperature alignment: 1.5°C
Business Ambition for 1.5°C commitment: ✖

Target language: This target was approved using a streamlined target validation route exclusive to small and medium-sized enterprises (SMEs).
<https://sciencebasedtargets.org/faqs-for-smes/> Espi Industries & Chemicals Private Limited commits to reduce scope 1 and scope 2 GHG emissions 42% by 2030 from a 2021 base year, and to measure and reduce its scope 3 emissions. DOWNLOAD ALL DATA ▾

TARGETS / COMMITMENTS

ACTION	STATUS	TARGET	SCOPE	TARGET CLASSIFICATION	BASE YEAR	TARGET YEAR	DATE PUBLISHED
Target	-	Absolute	1+2	1.5°C	2021	2030	2023-10-05

Showing 1 - 1 of 1 Per page 10 ▾ < >

- **1st and only** SME in the Pharma sector to get SBTi approval in India.
- **1st** Indian company in the Pharma sector with an approved 1.5°C scenario target.
- **2 more** Indian companies (non-SME) in the pharma sector with approved target aligned with 2°C.
- **11** Indian companies (non-SME) in the Pharma sector who have committed to set a target (but haven't set one yet).

*Data as of 28th Dec 2023



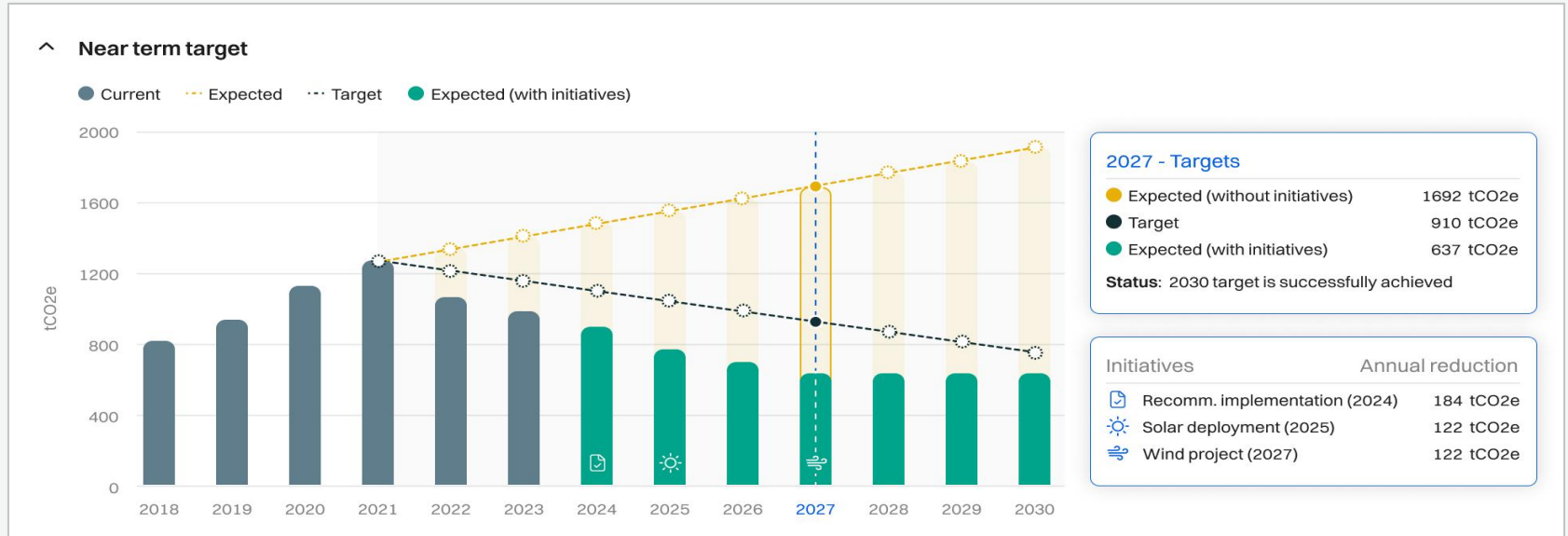
Approach, Tools & Standards Used

- Base Year Selection:** Methodology for selecting the base year adheres to SBTi's guidelines.
- Target Setting:** We used Sprih's target setup tool, which is aligned with the SBTi guidelines.
- Emission Calculation:** For accurate calculations, we relied on the GHG Protocol, a recognized standard in the field.
- Emission Factors:** Emission factors were taken from reputable sources such as the IPCC, UK Defra, etc., ensuring the utmost credibility and reliability.

Phase 3: Reduction Action Plan



Reduction Path - Aligned with SBTi guidelines



We met our 2023 GHG emission reduction goal per SBTi's recommendation and remain on track to achieve our final target by 2030.



Actions Items for FY 23-24

1. Conduct sustainability awareness workshops
2. Conduct an energy audit
3. Implement audit recommendations

Action 1: Awareness Workshop

Hosted a workshop for senior and mid-level management.



Internal dependency:	Senior & mid-level management
External dependency:	Climate experts
Status:	Done
Investment required:	Not applicable (conducted by Sprih)
Payback period:	No direct savings
Annual saving potential:	No direct savings
Annual % reduction as compared to base year:	Not applicable

Action 2: Forensic Energy Audit

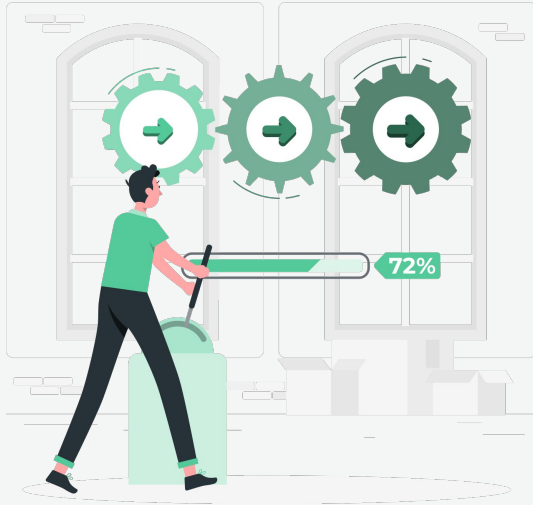
Auditors conducted a thorough examination of equipment/utility energy consumption and efficiency patterns.



Internal dependency:	Facility management team
External dependency:	Energy auditors
Status:	Done
Investment required:	~3 lakhs
Payback period:	No direct savings
Annual saving potential:	No direct savings
Annual % reduction as compared to base year:	Find details in the next slide

Action 3: Implement Audit Recommendations

Planning to implement all the feasible recommendations from the energy audit report.



Internal dependency:	Senior management
External dependency:	External vendors
Status:	In progress
Investment required:	72 lakhs
Payback period:	4 years
Annual saving potential:	184 tCO ₂ e
Annual % reduction as compared to base year:	14% (if all the recommendations are implemented)

Actions Items for FY 24-25

1. Solar deployment
2. Tree plantation

Action 1: Solar Deployment

Planning another solar deployment of ~150 kW capacity in FY 2025.

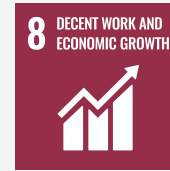


Internal dependency:	Senior management
External dependency:	Solar deployment agencies
Status:	Under discussions
Investment required:	~57 lakhs
Payback period:	~2.5 years
Annual saving potential:	~183 tCO ₂ e
Annual % reduction as compared to base year:	~14%

Action 2: Tree Plantation

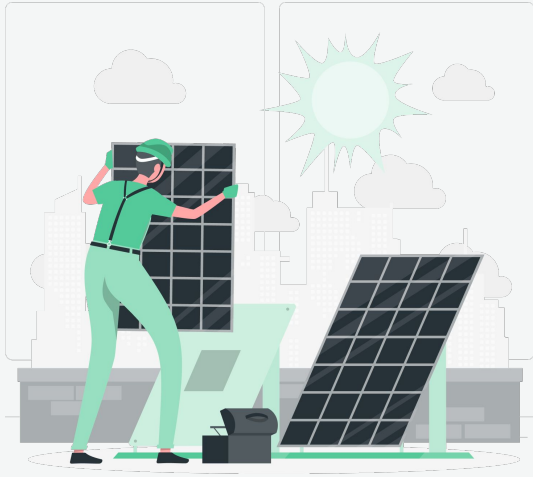
Going beyond numbers for a holistically sustainable future

- Plan to partner with a third-party organization for tree plantation to create impact aligned with UN SDGs.



Actions Items for FY 26-27

1. Investment in wind project



Action 1: Investment in Wind Project

Planning to invest in a wind farm project of ~100 kW capacity in FY 2027.

Internal dependency:	Senior management
External dependency:	Agencies involved in wind farm projects
Status:	Being planned
Investment required:	~56 lakhs
Payback period:	~3 years
Annual saving potential:	~122 tCO ₂ e
Annual % reduction as compared to base year:	~9.47%



Thank You!



dhruv.chadda@espiindia.com