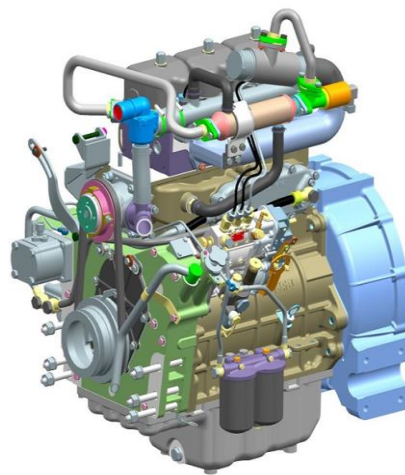


SUSTAINABILITY REPORT

2021-2022



SWARAJ ENGINES LTD

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1. SUSTAINABILITY JOURNEY

Swaraj Engines have taken a step towards sustainability journey in the year 2018 in support with Mahindra Central Sustainability team with internal stakeholders. SEL derived its own separate sustainability policy duly approved and signed by CEO. The drive is initiated and applied from top to bottom approach with regular reviews and assessment by top management.

1.1 REPORTING:

The reporting period of Swaraj Engines for sustainability reporting is from 1st April 2021 to 31st March 2022. The sustainability material issues which are relevant to the business are identified from the framework of Global Reporting Initiative (GRI) standards. GRI is a global institution for developing framework of sustainability reporting based on the business's performance economy, environment, and society, in collaboration with United Nation Environment Programme (UNEP).

1.2 SUSTAINABILITY STRUCTURE



1.3 SUSTAINABILITY POLICY

The sustainability policy signed by CEO is available on Swaraj Engines website.
 “<https://www.swarajenterprise.com/Uploads/PolicySustainabilityNew.pdf>”

1.4 SUSTAINABILITY ROADMAP

S no	Commitment	Metrics	F18 Actual Baseline Year	F22	F22 Actual	GRI INDICATOR
1	Specific Carbon footprint reduction	Tonnes/Engine	0.0678	20 % Less F18	0.059 (13%>F18)	G4-EN21
2	Specific Electrical Consumption reduction	KWH/Engine	82.63	8 over F18	71.95	G4-EN3
3	Co2 Mitigation by renewable Power	%	0%	1% of F21	0%	
4	Increase in recycle water	KL	10020	15%>F18	7273 (27%>F18)	
5	Reduction on specific water consumption	KL/Engine	0.758	3%<F18	0.369 (51%< F18)	G4-EN8
6	Increase in Rainwater harvesting	KL	0	4%>F19	3000	
7	Safety Management A. Reportable Injury Reduction B. Non-Reportable Injury Reduction	Nos	A. 00 B. 01	0 0	A. 00 B. 01	G4-LA6
8	Awareness to all the supplier	No's	Preparation of awareness module	35 Suppliers	0	
9	Supplier self-assessment and green award	No's	Preparation of assessment criteria	35 Suppliers	0	

2. STAKEHOLDER ENGAGEMENT

Internal Stakeholders are identified as per the material issues established from GRI indicators. The departmental expertise of the stakeholder is responsible for the specific materiality and its improvement projects.

Monthly Review is done by core team of sustainability and assessment of the same done by top management quarterly. One- one meetings are done with responsible stakeholders on the projects and actions taken. The core team planned and organised various events and activities to promote sustainable activities through competitions, quiz's, interaction session on safety, women empowerment, environment etc. The feedback after every event is taken into consideration and improvement done accordingly.

2.1 SAFETY WEEK CELEBRATIONS

During safety week from 4 March to 10 March 2022, series of events were organised for all the stakeholders to improve safety-based behaviour and promote Environment, Health & Safety among employees. To encourage employees on various safety parameters such as training on firefighting, mock-drill, safety oath, rangoli competition, skit, online quiz competition, poster making, and slogan writing competitions were held. More than 100+ participants of all grades throughout plant participated in various events and won prizes.



2.2 TREE PLANTATIONS

The tree plantations are done at various locations by both internal and external stakeholder. Approximately 5000+ trees have been planted in year 2021-22 with involvement of top management, employees to sustainability advocates who support SEL in various outdoor activities.



2.3 DIVERSITY AND INCLUSIVITY

The one important step towards sustainable development goal (SDG 5) – Gender Equality and emphasis on women empowerment has always been the crucial part of corporate social responsibility through PRERNA. Around 1000+ women have been benefitted through trainings organised on tractor driving, seasonal crops & mushroom farming, stitching & sewing, e-Krishi application and so on.



2.3.1 The health & well-being (SDG-3) promoted through general medical check-ups, health awareness sessions, haemoglobin tests, bio-degradable sanitary napkins distribution, renovation of washrooms at govt. school and so on resulting in 15000+ approximate beneficiaries covered under SDG-3.

2.3.2 Women diversity in SEL has escalated from **08 women** in 2020-21 and reached **39 women** by the end of March 2022. Now, **02 lines are exclusively managed by Women in Plant**. Empowering women have always been the mission of Swaraj Engines Ltd. (SEL). Being a part of Mahindra, women empowerment is considered as DNA of the company. Be it inhouse or on the social part, this has been the key focus area in every term. In SEL it started in the year 2019, where the **first female engineer hired in maintenance department** as graduate trainee to work on shop floor. This is the milestone of change on shop floor that has been embarked. The **concept of POWER: Promote-Orient-Weave-Engage-Recognize** is the approach embraced by us to bring forth gender diversity. The second milestone is handover of the complete 'Connecting Rod Line' to be operated and managed by female employees, for the first ever time in Swaraj Engines history. **Now, the complete A shift is run by women employees**. Now they are deployed in other areas like Assembly, Machine shop, Quality, ME, Maintenance, Security, Housekeeping.



It is a pride moment for us, as Swaraj Family, to welcome and provide opportunity for all these wonderful women. We want to promote women on all platforms internally and externally to help them become financially independent and offer them with various opportunities to excel.

The various engagement activities had been conducted such as festival celebrations, health sessions, interaction sessions to promote Health, Safety and emphasize on women POWER.



Women Cricket



Skit on road safety



Cancer awareness session

3. MATERIALITY

The material issues are aligned with sustainability roadmap for every 3 consecutive years. The material issues are discussed internally and re-validate after continuous assessment. Since, 2018-19 the sustainability roadmap exists for three consecutive years. The team has planned for re-validation of the sustainability roadmap for FY23 to FY25 based on the last years assessment. The involvement of top management, core team and key stakeholders will be involved in the formation of the same.

3.1 GRI G4 INDICATORS

Swaraj Engines Limited is monitoring & disclosing following GRI G4 indicators

Sr. No.	Indicator	Indicator Name
1	G4-EN3 (Fuel)	Direct energy consumption by primary energy source
2	G4-EN3 (Electricity)	Indirect energy consumption by primary source
3	G4-EN8_G4-EN10	Total water withdrawal by source
4	G4-EN21_Stack	Stack Emissions
5	G4-EN23	Total weight of waste by type and disposal method
6	G4-EN31	Total environmental protection expenditures and investments by type
7	G4-LA6	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region

**** Based on GRI indicators that are inline with our business priorities, the material issues of Swaraj Engines are Carbon foot print, Carbon Neutrality, Water positive, Renewable energy, Sustainable Development Goals (SDGs) thru CSR Management, Waste management, Health and Safety, Sustainability Capability building and Green supply Chain.**

From the above established material issues, certain specific targets were established in sustainability roadmap and sincere efforts towards the accomplishment have been carried out.

4. CARBON EMISSIONS

The carbon emissions are categorized in scope 1, 2 & 3 are identified and monitored as per the Science Based Targets (SBTi) applicability.

4.1 SCIENCE BASED TARGETS

The Science Based Targets (SBT) initiative is a partnership between CDP, UN Global Compact, WRI and WWF, which helps companies determine how much and how quickly they need to reduce their greenhouse gas emissions, in line with the Paris Agreement's goal of limiting global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

Setting emission and carbon footprint reduction targets in line with climate science is a great way to future-proof growth for us. In 2019, Swaraj Engines targets were approved by SBTi for scope 1,2 and 3 to reduce emissions by 2033.

TARGET STATEMENT:

*Swaraj Engines Limited commits to reduce scope 1 and scope 2 GHG emissions 70% per engine manufactured by 2033 from the base year 2018.

*Swaraj Engines Limited also commits to reduce scope 3 GHG emissions 30% per engine sold by 2033 from the base year 2018.

4.2 SCOPE OF SEL SBT EMISSIONS

The following categories are continuously measured and monitored to plan actions to mitigate emissions to reduce our carbon footprint.

Scope 1 – Direct emissions – Diesel/ LPG consumption

Scope 2 – Indirect emissions – Electricity Consumed from Grid

Scope 3 – Indirect emissions (06 categories out of 15 categories)

4.3 TOTAL ABSOLUTE GHG EMISSIONS

The emissions are declared for current and previous years on Scope 1 (Direct emissions), scope 2 (Indirect emissions) and scope 3 (Other indirect emissions) during production is appended below:

Emissions (tCO2)	Unit of Measure	Base Year (2018)	Target Year (2033)	Year (2019-20)	Year (2020-21)	Current Year (2021-22)
Scope (1 + 2)	tCO2	7,225	2,673	6338	7399	7635
Engines Manufactured	Nos	-	-	-	-	116866
Scope 3	tCO2	15,685,021	13,390,080	14,227,281	18,314,697	18,800,028
Engines Sold	Nos	-	-	-	-	116811

5. ENERGY PRODUCTIVITY EP100

EP100 is a global corporate energy efficiency initiative by Climate Group, bringing together businesses committed to measuring and reporting on efficiency improvements.

Energy productivity is the ratio of economic output to energy consumption. By implementing efficiency measures, EP100 members improve their energy productivity and enhance savings- while reducing greenhouse gas (GHG) emissions.

Swaraj Engine is listed on the climate group EP100 members in their website.

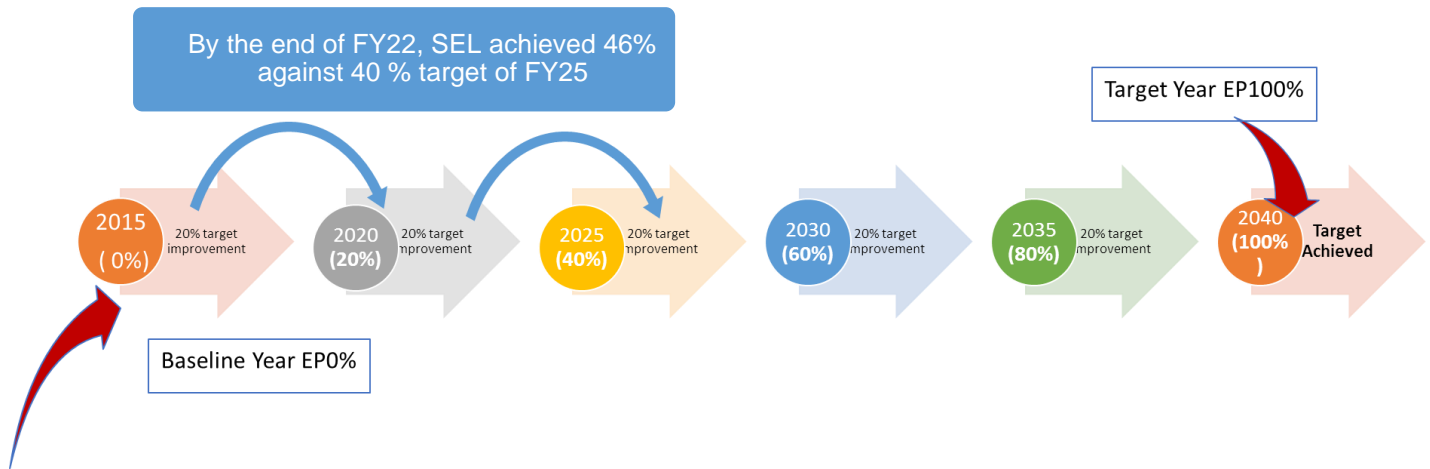
<https://www.theclimategroup.org/ep100-members>

Swaraj Engines has become a proud member of EP100 in year 2018 and signed a commitment to double our energy productivity by the year 2039-40. Since, then we have covered electricity, diesel, and LPG as part of EP100 monitoring to improve productivity and efficiency.

5.1 EP100 TARGET STATEMENT:

****SEL commits to double the energy productivity i.e., 3.818 Engine per GJ by FY-40 from base year F-15 with 1.909 Engine per GJ.**

5.2 EP100 ROADMAP:



5.3 EP100 PERFORMANCE:

Parameter	Unit of Measure	Base Year (2015)	Target Year (2040)	Current Year (2021-22)
Energy Productivity (EP100)	Engine/GJ	1.909	3.818 EP to be doubled from base year	2.781

Note: The resource use is monitored per unit of equivalent engine manufactured

***Swaraj Engines have proudly achieved target 5 years ahead of it’s time i.e.**

46 % target (w.r.t. to baseline year 2015) in the year 2021-22 against 40 % target of the year 2024-25.

Hence, we have taken an internally commitment in line with the top management, to revise the EP100 targets to double the productivity by 2035 against 2040 timeline.

5.4 ENERGY CONSERVATION PROJECTS

The Company's endeavour is to reduce carbon emissions, water consumption and increase in the use of renewable energy and enhance recycling of waste. The indicative list of various projects implemented in this regard, saving approximately 52000 KWH units per annum, is as under:

The following projects towards energy conservation were taken during the year:

- Incorporation of programmable timers across air conditioners for optimum utilization of A. Cs
- Centralized switching of air circulators to mitigate undesirable running of fans subsequently reduction in power consumption and carbon footprint.

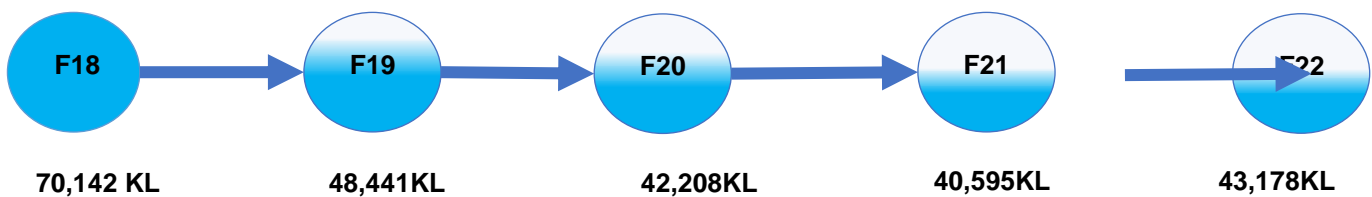
- Provision of noncorrosive and contamination free aluminium airline by replacing MS pipe along with auto shut off valve having low distribution losses resulting in savings towards compressed air generation power consumption.
 - Provision of occupancy sensors at office areas to switch off the electrical gadgets automatically in unoccupied spaces consequently reduction in energy cost by reducing energy waste.
 - Reduction in consumption of diesel in engine testing by reducing testing cycle time subsequently reduction in emissions.
 - **Capital investment on energy conservation equipment: 60 Lacs**
 - **Overall annualized savings for the year – 20 Lacs (Appx.)**
- Above initiatives besides being energy efficient are also environment friendly.

6. WATER POSITIVE JOURNEY

To become Water positive is the part of business as well as national commitment towards global sustainability targets. SEL’s initiatives towards becoming water positive has begun from 2018 as the base year.

SEL is committed to improve the water productivity and reduce fresh water as well as ground water consumption that paves path to become water positive industry and aims to conserve water for future generations. To meet all the needs and to reduce the consumption has been a challenging yet rewarding journey for Swaraj Engines.

The year on year annual water consumption as follows:



6.1 WATER CONSERVATION PROJECTS AND IMPACT

The list of various projects implemented saving approx. 2600 KL per annum

- Provision of air-cooled air compressor with water cooled air compressor subsequently elimination of cooling tower
- Utilization of MC water in place of extracting the water from ground thru bore well
- Close looping of water flow system in engine testing for higher HP model.
- Misted nozzle faucet for sink and basins are installed.
- Provision of pipeline to save water during fire drill.



Water saved per annum through water conservation projects



Rainwater recharged through earth pits and pond adoption



Approx. per annum underground water saved by utilizing MC water

6.2 WATER POSITIVE JOURNEY DATA:

FY	Total Water Consumption KL	Recycled water KL	Rainwater recharge KL	Initiatives
F18	70142	10020	0	Strategy Planning 1. Closed looping of water
F19	48441	8455	0	1. Rainwater recharge pits 2. Water saving projects 3. MC water in place of borewell
F20	42208	6929	1290	1. Adoption of pond in owned area 2. Bifurcation of areas into human need, Manufacturing process & cooling tower & improvement projects as per the major consumers
F21	40595	7391	13026	1. Pond Adoption & it's maintenance 2. Water conservation projects
F22	43178	7273	13026	1. Water conservation projects

6.3 SPECIFIC WATER CONSUMPTION:

Resource Use	Unit of Measurement	Previous Year	Current Year	Target
		2020-21	2021-22	2022-23
Specific Water Consumption	KL/Engines	0.35	0.36	0.32

7. WASTE MANAGEMENT

It is the Company's ongoing endeavour to have a mechanism to recycle products and limit the waste arising out of production of engines. Majority of the Company's suppliers are supplying material into returnable packaging. The sourcing team has achieved elimination of single use plastic in downstream activities by more than 90 percent. The waste generated during machining of components is recycled by supplying the same to the Foundry of Mahindra & Mahindra Ltd.-Swaraj Division. Other scrap generated is disposed through authorised scrap dealers.

More than 75% of the waste is recycled through various processes.

Total Waste generated in FY22: 1,507 tons approximately.

S No	Types of Waste	Unit	Recycling Method
1	ETP Sludge	Kgs	Lifted by govt. approved official
2	Spent Oil	Kgs	Lifted by govt. approved official
3	Empty Drums	Kgs	Lifted by govt. approved official
4	Oil Soaked Clothes	Kgs	Lifted by govt. approved official
5	E- Waste	Kgs	Recycled by certified supplier
6	Food Waste	Kgs	Converted into manure and used in SEL horticulture
7	Packaging	Kgs	Lifted & reused by supplier
8	Wood	Kgs	Lifted & reused by supplier
9	Cast Iron	Kgs	Reused by foundry in casting
10	Mild Steel	Kgs	
11	Steel Structure	Kgs	

SEL is planning for study, assessment and certification for Zero waste to Landfill for year 2022-23.

8. SAFETY

Safety is every industry’s utmost priority and concern. SEL has maintained the reportable accident to be zero for more than 3 year and non-reportable accident to be one this year. The safety highlights of FY22 as follows.

- Fire safety projects: Installation of automatic fire sprinkler system & automatic modular type fire-extinguishers at defined areas as well as fire detection and alarming system in new facility have been done.
- Audits on electrical safety, fire safety, general safety and so on have been conducted by internal and external auditors
- Safety week celebrated within plant for a week inclusive of mock drills, fire training, poster making, slogan writing & rangoli competitions, skit competition on topics of safety, health, and environment.
- Conducted mock drill, introduced BBS-2, 96% closure of safety observations throughout the year.



Table-Top Exercise on EPRP



Slogan & Posters



BBS-2 Training