

GREEN HOUSE GAS EMISSION AND MONTORING PROCEDURE

1. Purpose	:	This guideline provides information and instructions on prevention and control of Greenhouse gas emission and its monitoring from the use of electricity and DG set and air conditioning and other gaseous equipment.
2. Scope	:	Applicable to the Greenhouse gas emission and its monitoring from SEPL operations.
3. Ref. Clause	:	8.1 of ISO 14001:2015
4. Responsibility	:	It is the responsibility of MR to update and maintain this procedure. It is the responsibility of the respective functional supervisors to ensure that the job carried out conforms to this procedure.

5. Abbreviations ,Terms and Definitions:


EHS	Environmental, health and safety Management System
GHG	Green House Gas

6. Records:

S.No.	RECORD	IDENT. NO.	LOCATION
1	GHG monitoring in DG SET-HSD	FMT-EHS-018	DCC
2	GHG monitoring in LPG	FMT-EHS-018	DCC
3	GHG monitoring in AC & FRIDGE	FMT-EHS-018	DCC
4	GHG monitoring in vehicle three -wheeler- elect	FMT-EHS-018	DCC
5	GHG monitoring in GOODS VEHICLE- 4 WHEELER - HSD	FMT-EHS-018	DCC
6	GHG monitoring in electricity consumption	FMT-EHS-018	DCC

7. Amendment Details:

Rev	Date	Details Of Amendment	Approved By
0	07-07-2023	New Release	D.P. Singh
01	10-08-2023	Scope-1 updated, Scope-3 added	D.P. Singh

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8. Procedure

8.1 GHG Emission Monitoring and Control:-

A- CO2e EMISSION CALCULATION CRITERIA

Scope-1, Direct impact:-

Machines, equipment's and process at facility level that's generate greenhouse gas emission is considered in scope -1 as like, DG set, AC, Refrigerator and vehicle and other gaseous equipment (LPG).

a-GHG Emission By DG SET: input value (Liter/Month) *0.07434(Emission factor) =Output value in (tCO2e).

b- GHG Emission by LPG: input value (kg/Month)*0.002983 (Emission factor) = Output value in (tCO2e).

c-Our other plant , machinery, equipement and process does not emit GHG.

Scope-2, Indirect impact:-

Electricity consumption is consider in scope -2

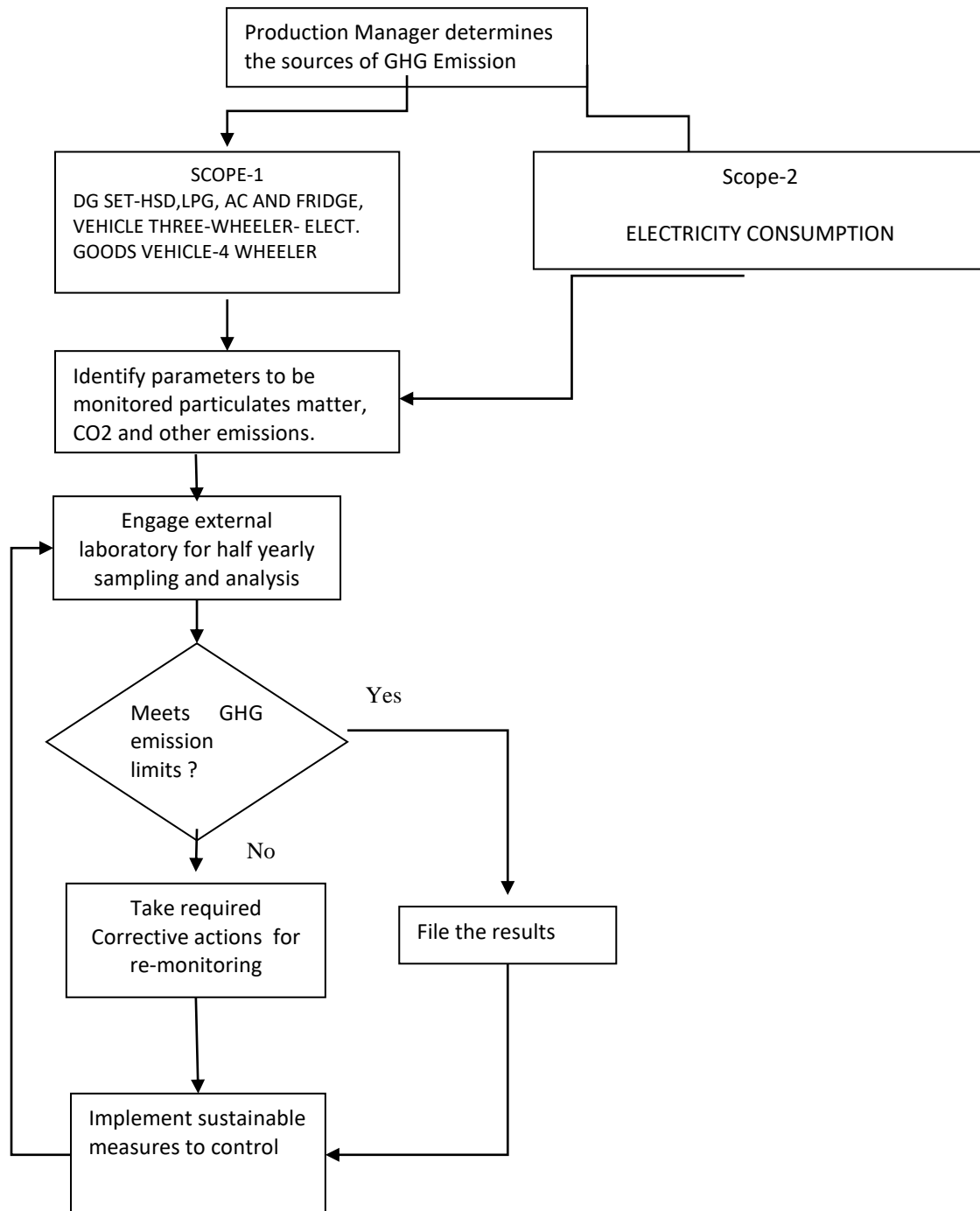
GHG Emission by Electricity consumption: input value (Kwh /Month) * 0.00082 (Emission factor) = Output value in (tCO2e).

Scope-3,We shall ensure our supply chain parteners and service providers to abide the RBA COC and applicable GHG norms . We shall arrange data from our parteners with effect from 01-04-2024.

Emission Source	Emission Factor
Electricity (Kwh/Yr.)	0.85 kg CO2 per kwh
Petrol (Liter/Yr.)	2.29 kg CO2 per Liter
Diesel (Liter/Yr.)	2.68 kg CO2 per Liter
LPG (kg/yr.)	2.98 kg CO2 per kg
Wood (kg/Yr.)	1.8 kg CO2 per kg

NOTE- Target of GHG Emission reduction 10% of 112.53 (tco2e) for FY 2023-24

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B-HOW TO MONITORING GHG EMISSION-

	U/M	Jun-23	May-23	Apr-23
Scope 1				
	Activity			
DG SET-HSD	LTRS			
	Equivalent Co2-Ton/month(tCo2e)			
LPG	KGS/MONTH			
	Equivalent Co2-Ton/month(tCo2e)			
AC & FRIDGE	Equivalent Co2-Ton/month(tCo2e)			
Vehicle-Three Wheeler-Elect.	Equivalent Co2-Ton/month(tCo2e)			
GOODS VEHICLE-4 WHEELER-HSD	Equivalent Co2-Ton/month(tCo2e)			
	Scope-1 Total Equivalent Co2-Ton/month(tCo2e)			
Scope 2				
	Electricity			
	KWH			
	Equivalent Co2-Ton/month(tCo2e)			

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	Scope-2 Total Equivalent Co2-Ton/month(tCo2e)			
Production - Qty	Nos/Unit			
Cost	INR			
	G. Total-Equivalent Co2-Ton/month(tCo2e)			
	Carbon Foot print Per Unit of Product-Equivalent Co2-Ton/month(tCo2e)			
	Carbon Foot print Per Unit of INR CR. Value-Equivalent Co2-Ton/month(tCo2e)			

We shall monitor, keep, maintain and update GHG emission records as RBA COC and other applicable norms.

C-PUBLIC REPORTING:


We shall report our GHG emission and monitoring through our website

www.sahasraelectronics.com.

D-ENERGY CONSUMPTION AND COST EFFECTIVE WAYS FOR ENERGY EFFICIENCY:

1-We shall improve energy efficiency –

- By using new manufacturing techniques as acceptable to our customers.
- By switching to lower emitting / clean fuels.
- By replacement of energy efficient machines.
- By replacement of old AC and Fridge to new efficient star rating HVAC.
- By control and practice to switch of lights, AC, computers and other equipment’s when not in use or lunch/tea breaks.
- By using/replacement LED bulbs, solar lights and other smart energy efficient luminaries.
- We shall install energy saving devices (Power analyzer) .
- We shall take expert opinion before purchase of any equipment having compressor, chiller or heating process .
- Maintaining efficient housekeeping .
- Using natural lights at optimum level at the places where it can be replaced by installed lights.

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- We shall switch to green energy in phased manner.
- We shall avoid mass market , unnecessary traveling and use car/vehicle pooling for official travel and goods delivery . For meetings we shall avoid personal meetings and shall be replaced by electronic/hybrid meetings .
- We shall refuse to accept single use plastics.
- We shall monitor carbon capture, utilization and unnecessary storages with effect from FY 2024-25.
- We shall reduce meet / dairy consumption at our facility with consent of employee and visitors.
- We shall do audit for GHG emission annually.
- We shall increase plantation and work towards zero discharge.