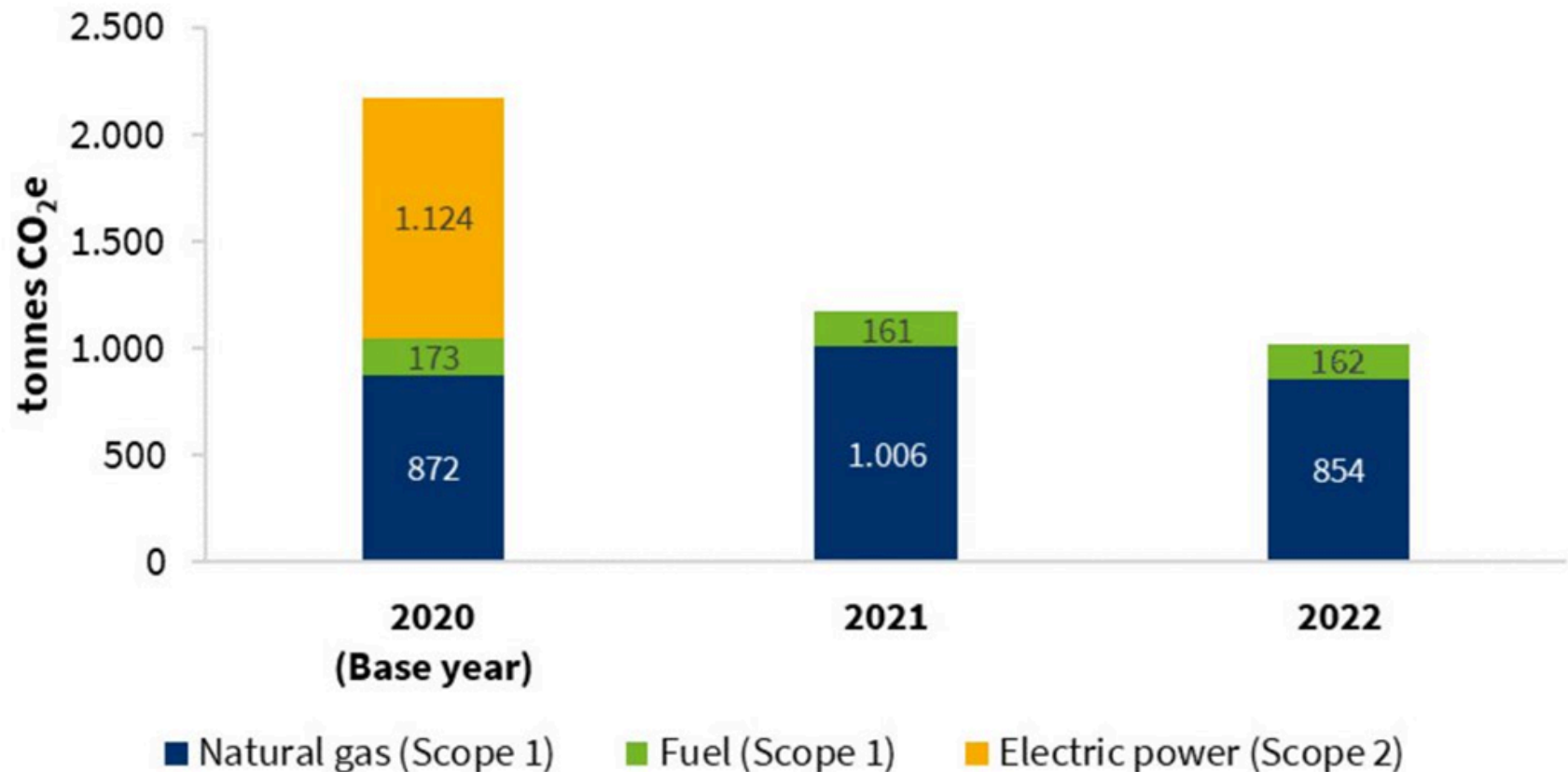


# GHG Emission Reporting Practical Guide - 2



How to Conduct a GHG Inventory?

This step-by-step guide explains how to prepare a GHG inventory following the GHG Protocol Corporate Standard, including organizational and operational boundary setting, data collection, calculation, and reporting.

# ABC Global LLC

## GHG Inventory Report 2024



### **Disclaimer:**

*This document is a simplified educational report designed to illustrate the basic requirements of GHG reporting as per the GHG Protocol Corporate Standard. It provides a general overview of emissions calculations and reporting boundaries using a hypothetical company, ABC Global LLC, as an example.*

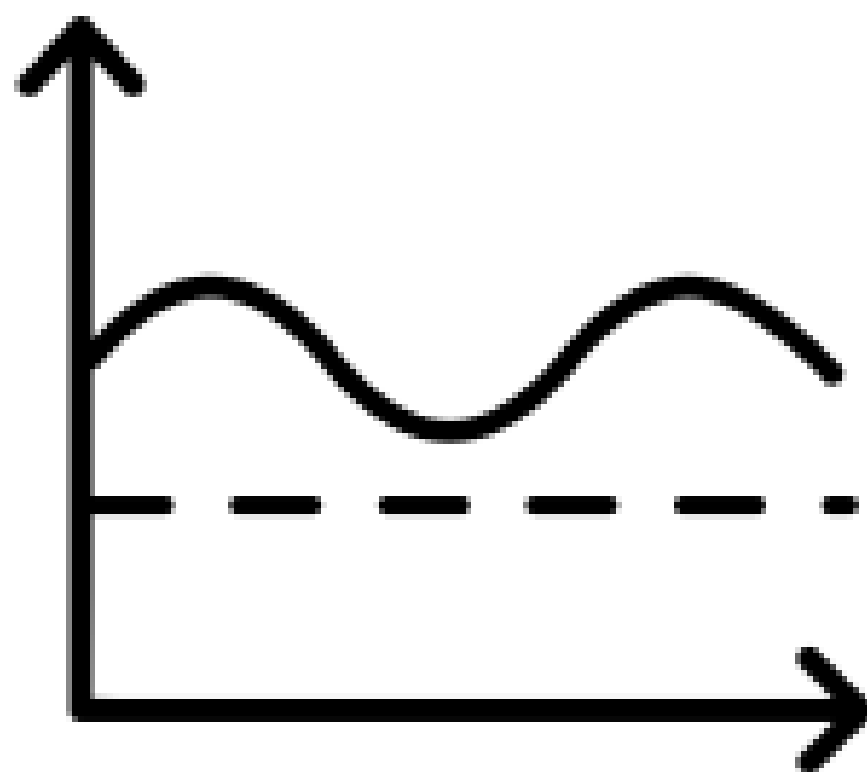
*In real-world applications, GHG inventories can be more complex and require in-depth data collection, advanced calculation methodologies, third-party verification, and compliance with specific regulatory or industry standards. For a comprehensive and accurate GHG report, please contact me for professional guidance.*

# Step 1: Organizational Boundaries

ABC Global LLC is a small business operating under the Operational Control Approach. This means that we account for 100% of the emissions from activities where we have operational control.

Included Operations:

- **Company headquarters**
- **Owned company vehicle**
- **Backup power generator**



**Baseline - 2024**

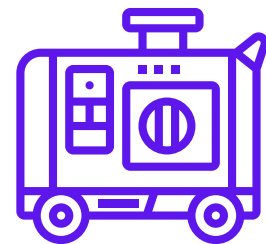
## Step 2: Reporting Boundaries

ABC Global LLC reports emissions under three scopes:

### Scope 1 (Direct Emissions)



Company car  
(Petrol-powered)



Diesel generator

### Scope 2 (Indirect Energy Emissions)



Purchased electricity

### Scope 3 (Other Indirect Emissions)



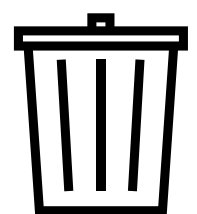
Capital goods  
(Furniture)



Business travel  
(flights)



Employee  
commuting



Waste  
(paper waste)

# Step 3: GHG Data Inventory

We gathered activity data for the reporting year 2024 from utility bills, fuel logs, and travel records.

Category	Source	Activity Data
Company Car	Petrol consumption	1,000 litres
Diesel Generator	Diesel consumption	2,00 litres
Electricity Use	UAE Grid electricity consumed	10,000 kWh
Capital Goods	Purchased office equipment	\$10,000 spent
Business Travel	Flight distance travelled	5,000 km
Employee Commuting	Distance travelled (Bus)	20,00 km
Paper Waste	Paper disposed	50 kg

# Step 4: Emission Calculation

Using standard Emission Factors, we converted activity data into CO<sub>2</sub>e (carbon dioxide equivalent) emissions.

Formula Used:

**GHG Emissions = Activity Data × Emission Factor**

# Step 5: GHG Emissions

Scope	Emission Source	Activity Data	Emission Factor	Total Emissions (kg CO <sub>2</sub> e)
1	Company Car (gasoline)	1,000 litres	2.31 kg CO <sub>2</sub> e/L	2,310
1	Diesel Generator	2,000 litres	2.68 kg CO <sub>2</sub> e/L	5,360
2	Purchased Electricity	10,000 kWh	0.5 kg CO <sub>2</sub> e/kWh	5,000
3	Capital Goods	\$10,000 spent	0.5 kg CO <sub>2</sub> e/\$	5,000
3	Business Travel (Flights)	5,000 km	0.15 kg CO <sub>2</sub> e/km	750
3	Employee Commuting	20,000 km	0.12 kg CO <sub>2</sub> e/km	2,400
3	Paper Waste	500 kg	0.94 kg CO <sub>2</sub> e/kg	470
Total	All Emissions	—	—	21,290 kg CO <sub>2</sub> e

Total GHG Emissions

21.29 tCO<sub>2</sub>e

## Step 6: Uncertainty Assessment

- Business travel data based on estimates from travel logs.
- Employee commuting data based on survey responses.
- Capital goods emissions estimated using financial data instead of supplier-specific data.
- Uncertainty Sources:  
Lack of accurate data, estimation errors, and outdated emission factors.
- Data Quality Improvement:  
Use primary data when available, verify supplier data, and track updates in emission factors.

## Step 7: Exclusions

- Purchased goods and services (beyond office equipment) were excluded due to difficulty in data collection.



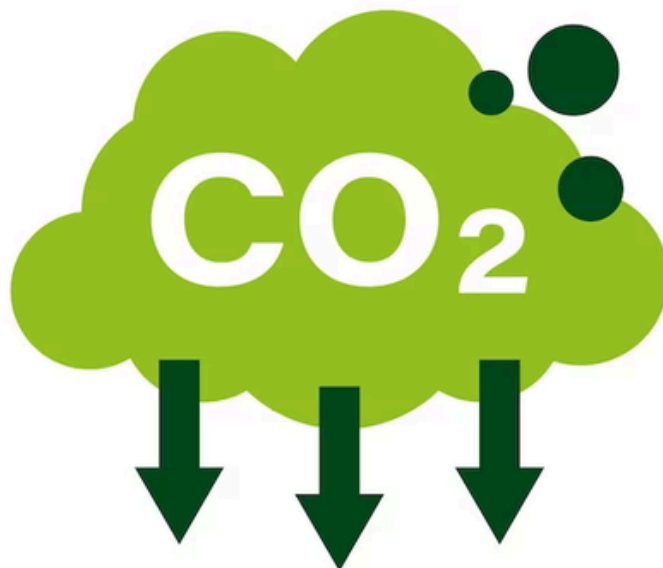
# Step 8: Next Steps for Emissions Reduction

## Emission Reduction Target for 2025:

- 30% Reduction in Scope 1 and 2 Emissions
- 10% Reduction in Scope 3 emissions

## Planned Actions to Reduce Emissions:

- Scope 1: Replace gasoline car with an electric vehicle.
- Scope 2: Switch to renewable electricity (solar power).
- Scope 3: Implement remote work policies to reduce commuting emissions.
- Scope 3: Encourage paperless office practices to cut waste emissions.





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