

MITIGATE ESG PLATFORM GHG INVENTORY AND REPORTING GUIDELINES

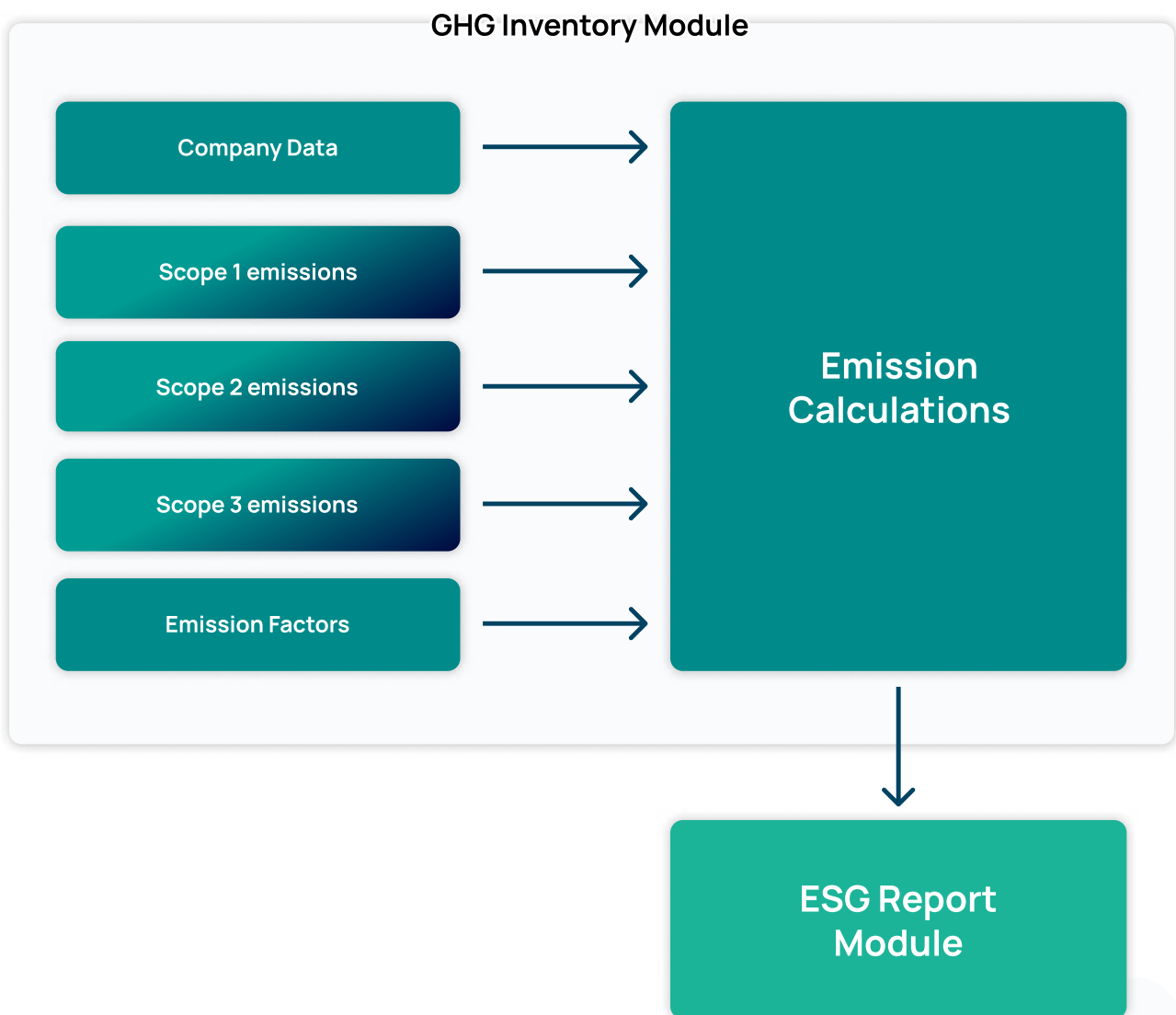
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1. GHG INVENTORY MODULE

The Mitigate ESG Platform has GHG Inventory Module integrated with the Reporting Module. GHG emission calculations and results are automatically integrated in an ESG report in appropriate data points.

The Module high-level architecture:



2. GHG INVENTORY DATA SETS

In the Platform companies can enter and manage the following information about GHG emission sources and the Platform will automatically calculate corresponding emissions:

SCOPE 1: DIRECT EMISSIONS

1. Combustion of fuels in stationary sources

like heating and power generation for buildings and industrial processes.

2. Combustion of fuels in mobile sources

that the company owns or controls, such as cars, trucks, ships, airplanes, and construction equipment.

3. Fugitive emissions

which come from leaks or releases of GHGs, such as refrigerant leaks from air conditioning systems and methane leaks from pipeline systems.

4. Process emissions

from physical or chemical processing such as CO₂ released from the calcination step in cement manufacturing, or emissions from the production of chemicals or metals.

5. Waste emissions

that occur from waste that is owned or controlled by the organization, like methane emissions from landfills.

SCOPE 2: INDIRECT EMISSIONS FROM ENERGY PURCHASES

1. Purchased Electricity

Emissions from the generation of purchased electricity that is consumed by the reporting company. This includes emissions from both renewable and non-renewable sources of electricity that are part of the regional or national grid mix. Data source: Utility data (e.g., electricity bills, steam usage logs). Any renewable energy certificates (RECs) or guarantees of origin (GOs) purchased.

- **Location-Based Method:** This method reflects the average emissions intensity of grids on which energy consumption occurs (using regional or national averages).
- **Market-Based Method:** This method reflects the emissions from electricity that companies have purposefully chosen (or contracted) and can include specific claims associated with renewable energy purchases through instruments such as renewable energy certificates (RECs) or guarantees of origin (GOs).

Dual reporting is particularly useful for organizations engaging in energy attribute certificate trading or specific renewable energy contracts. This approach can demonstrate the impact of an organization's efforts to procure lower-carbon electricity beyond what is provided by the grid.

2. Heat and Steam

Emissions from the production of heat or steam that is purchased by the company. This can include district heating systems or external industrial processes that provide heat or steam to the organization.

3. Cooling

Emissions associated with cooling activities, such as district cooling systems, where the production source is external to the organization.

SCOPE 3: OTHER INDIRECT EMISSIONS

1. Purchased Goods and Services

Emissions from the production of goods or services that are purchased or acquired by the company in the reporting year.

2. Capital Goods

Emissions from the production of capital goods (e.g., machinery, equipment, buildings) used by the company.

3. Fuel- and Energy-Related Activities (Not Included in Scope 1 or 2)

Emissions related to the production of fuels and energy purchased and consumed by the organization that are not covered in Scope 1 or Scope 2.

4. Upstream Transportation and Distribution

Emissions from transportation and distribution of products in the supply chain before they arrive at the organization.

5. Waste Generated in Operations

Emissions from the disposal and treatment of waste generated in the operations of the company.

6. Business Travel

Emissions from transportation of employees for business-related activities in vehicles not owned or operated by the company.

7. Employee Commuting

Emissions from transportation of employees between their homes and their worksites.

8. Upstream Leased Assets

Emissions from the operation of assets leased by the company but that are not included in Scope 1 or 2.

9. Downstream Transportation and Distribution

Emissions from transportation and distribution of products after they are sold and leave the organization, including the end-of-life transportation of products.

SCOPE 3: OTHER INDIRECT EMISSIONS (CONTINUATION)

10. Processing of Sold Products

Emissions from the processing of intermediate products sold by the company into finished products.

11. Use of Sold Products

Emissions that occur during the use-phase of goods and services sold by the company.

12. End-of-Life Treatment of Sold Products

Emissions from the disposal or recycling of products once they have reached the end of their life.

13. Downstream Leased Assets

Emissions from the operation of assets leased out by the company, such as vehicles or equipment.

14. Franchises

Emissions from franchise operations that are not included in Scope 1 or 2.

15. Investments

Emissions related to investments made by the company, including investment in funds or financial instruments.

3. EMISSION FACTORS

⚠ The list is frequently updated. Please ask the Mitigate Team for the most recent emission factors.

In the Platform we use the following emission factors, gathered from official data sources:

1. Fuels
2. Bioenergy
3. Refrigerants
4. Cars and motorbikes (73 factors)
5. Vans and HGVs
6. Electricity
7. Heat and steam
8. District cooling
9. Well to tank fuels
10. Transmission and distribution losses
11. Water supply and treatment (41 factors)
12. Primary material production (39 factors)
13. Landfill disposal
14. Flights
15. Hotels
16. Sea
17. Land
18. Vans, HGVs, cargo ship, freight flights, rail and sea tanker
19. Cars, taxis, bus, rail
20. Food (11 factors)
21. Home office

4. REPORTING

Emissions are reported under the “**E1-6, Gross Scopes 1,2,3 and Total GHG emissions**”. In the Platform by default are supported the following emission data points:

Scope 1

1. Combustion of fuels in stationary sources
2. Combustion of fuels in mobile sources
3. Fugitive emissions
4. Process emissions from physical or chemical processing
5. Waste emissions that occur from waste

Scope 2

1. Purchased Electricity
2. Heat and Steam
3. Cooling

Scope 3

1. Purchased Goods and Services
2. Capital Goods
3. Fuel- and Energy-Related Activities (Not Included in Scope 1 or 2)
4. Upstream Transportation and Distribution
5. Waste Generated in Operations
6. Business Travel
7. Employee Commuting
8. Upstream Leased Assets

9. Downstream Transportation and Distribution
10. Processing of Sold Products
11. Use of Sold Products
12. End-of-Life Treatment of Sold Products
13. Downstream Leased Assets
14. Franchises
15. Investments

👉 A user can add unlimited custom emission data points according to the specific needs.

