

# CARBON FOOTPRINT CALCULATIONS

# 1. PURPOSE

To describe the methodology used by the OHLA Group to measure and calculate the annual carbon footprint derived from its activity.

# 2. AREA OF APPLICATION

The area of application used to calculate OHLA's carbon footprint is international, at the Group level, which includes Obrascón Huarte Lain, S.A., and its subsidiaries. All projects, works, services and offices that have had production or reflected activity during the year are considered. Those projects developed in joint ventures will be considered when the OHLA Group's participation exceeds 50%. This scope is the same as that used for the non-financial information included in the OHLA Group's Consolidated Management Report..

Hereinafter, we will refer to all the companies as the OHLA Group or OHLA.

# 3. SCOPE

Every year the OHLA Group quantifies the greenhouse gas emissions (hereinafter GHG) derived from its activity by considering the following scopes:

- Scope 1: Direct GHG emissions from OHLA's own or controlled sources
  - Stationary source combustion: emissions derived from the consumption of fuels in static or fixed equipment.
  - Combustion from moving sources: emissions derived from fuel consumption in vehicles and machinery.
- Scope 2: indirect GHG emissions associated with OHLA Group electricity consumption
  - Electricity: emissions derived from the consumption, purchase, or acquisition of electricity by the OHLA Group.
  - Electricity losses in the transport grid.
- Scope 3: Emissions that are a consequence of OHLA Group's activities but occur in sources that are not owned or controlled by the OHLA Group. The categories are calculated according to the "GHG Protocol Corporate Value Chain (Scope 3) Standard." This protocol categorizes Scope 3 emissions into 15 subcategories. The subcategories applicable or relevant to OHLA are:

- CATEGORY 1: Emissions associated with the supply chain (purchase of products and services).
- CATEGORY 2: Emissions associated with capital goods.
- CATEGORY 3: Emissions associated with the life-cycle of fuels and energy consumed.
- o CATEGORY 4: Emissions associated with the transportation and distribution of goods.
- o CATEGORY 5: Emissions associated with the management of generated waste.
- CATEGORY 6: Emissions associated with business travel by air, train, bus, and car, as well as hotel nights.
- CATEGORY 7: Emissions from employees commuting to the work center.
- CATEGORY 8: Emissions associated with leases (upstream).
- CATEGORY 9: Downstream distribution of goods.
- o CATEGORY 15: Investments.

A table with the excluded categories and the relevant justification is included in Annex 2.

All GHGs included in the United Nations Framework Convention on Climate Change (UNFCCC)/Kyoto Protocol are considered for this calculation :

- Carbon dioxide (CO2)
- Methane (CH4)
- Nitrous oxide (N2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF6)

OHLA also reports other pollutant emissions not classified as GHG:

- Sulfur oxides (SOx)
- Nitrogen oxides (NOx)
- Carbon monoxide (CO)
- Volatile organic compounds (VOCs)
- Particulate Matter (PM)

#### 4. PROCEDURE FOR CALCULATING THE OHLA GROUP'S GHG EMISSIONS

#### **REPORTING AND DATA COLLECTION CAMPAIGN**

Once the annual organizational perimeter of the OHLA Group has been identified, the Sustainability Department, in coordination with each of the divisions of the OHLA Group, establishes who will be responsible for reporting the environmental information for each of the projects and works that have been active throughout the calendar year.

Each of the project managers reports the data through an online reporting tool. All data entered in the tool are validated, in the first instance, by an immediate superior in each work or project, and, in the second instance, their consistency is reviewed by the Sustainability Department. Furthermore, reporters can upload evidence on the tool to support the reported data. This reporting process is usually performed between the months of December and January of each year.

Once the data collection campaign is completed, the data is verified by an independent third party. Following this process, the Sustainability Department is responsible for consolidating the data and entering it into the OHLA Group's carbon emissions calculator.

#### CALCULATION OF EMISSIONS

The Group's emissions calculation methodology has been developed considering the GHG Protocol, PAS 2050, ISO 14064, ISO 14069, and Encord Construction CO2 Measurement Protocol standards.

On the other hand, and in particular, for Scope 3 emissions, the greenhouse gas inventory has been carried out following the UNE ISO 14064-1:2012 standard, following the GHG protocol (Scope 3 Emissions of the GHG Protocol) of the World Business Council for Sustainable Development (WBCSD), and the World Resources Institute (WRI)

The effect of the emission into the atmosphere of a given weight of a GHG is not the same depending on the gas. Each gas has a "global warming power" (GWP), an index that compares the relative power of the gases listed above and their contribution to the greenhouse effect. The GWP compares GHGs to CO2, and therefore the GWP of CO2 is 1.

Thus, to quantify the different GHGs and convert them to an equivalent in terms of CO2, the Intergovernmental Panel on Climate Change (IPCC) published a list of global warming potentials for the different GHGs, which is used as a reference.

To determine the emissions derived from its activity, OHLA uses a tool for calculating the Group's carbon footprint, which uses the following general formula:

# **GHG** emissions = activity data x emission factor

<u>GHG emissions</u>: as a result of this formula, a determined amount (g, kg, ton, etc.) of carbon dioxide equivalent (CO2) is obtained.

<u>Activity data</u>: is the parameter that defines the degree or level of activity generating GHG emissions. For example, the amount of natural gas used in heating (m3 of natural gas).

<u>Emission factor (EF)</u>: means the amount of GHG emitted per unit of the parameter "activity data." These factors vary depending on the activity in question, and in the case of fluorinated gases, the emission factor is equivalent to the GWP.

Specific sources of emission factors for the OHLA Group Carbon Footprint Calculator can be found in Annex 1. These emission factors are updated periodically to obtain the most accurate GHG emissions data.

A number of measurement units are required for each activity data that will be part of OHLA's carbon footprint. Each of the scopes is described in more detail below.

**Scope 1**: Includes combustion from stationary and mobile sources. The origin of the information is primary fuel consumption data for each source type.

Fixed Combustion	Mobile Combustion	
Diesel fuel (I)		
Gasoline (I)		
Biodiesel (I)		
Bio-alcohol (I)		
Natural gas (m <sup>3</sup> )	-	
LPG (I)	-	

Scope 2: includes:

- Electricity consumption (kW/h)
- Electricity losses in transmission and distribution (kW/h)

# **Scope 3**: It includes the following categories:

CATEGORY	DESCRIPTION	<ul> <li>Volume of water consumed (<sup>m3</sup>)</li> <li>Materials (t<sup>m3</sup>)</li> <li>Secondary data:         <ul> <li>Expenditure items (€) (per country).</li> </ul> </li> <li>Expenditure items (€) (by country).</li> </ul>	
1	Emissions associated with the life-cycle of all products and services purchased by OHLA in the reporting year.		
2	Emissions associated with the life-cycle of capital assets acquired by OHLA. Capital assets are final products with an extended useful life and are treated as fixed assets or as property, plant, and equipment.		
3	<ul> <li>Emissions associated with the production of fuels and energy acquired and consumed by OHLA have not been considered within the Scope 1 and 2 inventories. The following activities are included:         <ul> <li>Emissions associated with the extraction, production, and transportation of fuels consumed by OHLA;</li> <li>Emissions associated with the extraction, production, and transportation of fuels consumed in generating electricity, steam, heat, or refrigeration consumed by OHLA, in addition to losses incurred during transport.</li> </ul> </li> </ul>	<ul> <li>Primary energy consumption data:</li> <li>Stationary combustion data: Energy consumption record for natural gas (<sup>m3</sup>), gasoline, diesel, biodiesel, and LPG (I).</li> <li>Mobile combustion data: Gasoline and diesel energy consumption record (I).</li> <li>Electricity consumption data: Grid electricity and renewable energy( kWh) consumption record.</li> </ul>	
4	Emissions associated with the transportation and distribution of products purchased by OHLA in vehicles not owned by OHLA (couriers, other physical couriers, general transport of machinery and goods, etc.). Two types of transport shall be included:	Total distance transported by the means of transport (in km). Weight (in t) hauled each way.	
5	Emissions associated with the management and recovery of waste generated by OHLA operations, including solid and liquid waste disposal. Weight (in t) of the types of waste generated by the type of waste and method of final disposal received (recovery, recycling, reuse, landfill, incineration).		
6	Emissions from employee business travel in vehicles owned and/or operated by third parties. Well-to-wheel emissions associated with business travel by air, train, bus, rental car, and hotel nights are included.	<ul> <li>Primary data:</li> <li>Number of overnight stays by geography.</li> <li>Total distance traveled (in km) by type of transportation for each country and division in which OHLA operates.</li> </ul>	
7	Emissions associated with employees commuting from their homes by different modes of travel (car, bus, train, subway, bicycle, walking, etc.).	<ul> <li>Primary data:</li> <li>Number of employees at each work center, globally.</li> <li>Secondary data:</li> </ul>	

CATEGORY	DESCRIPTION	ORIGIN OF THE DATA	
		<ul><li>Mobility patterns at the country level.</li><li>Number of working days, by geography.</li></ul>	
8	Emissions associated with the operation of assets leased by OHLA that are not included in Scopes 1 and 2 of the emissions inventory.	Expenditure items (€) (by country).	
9	Emissions due to transportation and third parties of products sold by OHLA, precast concrete, between the point of sale and the final consumer (not paid by OHLA), including retail sale and storage.	Pacadar: Information on transport and total kilometers transported.	
15	Emissions derived from OHLA's financial investments covering investees and joint ventures that are not consolidated and, therefore, have not been accounted for as part of the Company's Scopes 1 and 2.	<ul> <li>Primary data:</li> <li>Companies and joint ventures - Nature of the investee, EBIT or Scopes 1 and 2 emissions of the investee, and OHLA's percentage interest.</li> </ul>	

As a result, GHG emissions derived from the OHLA Group's annual activity are obtained. The result can be reviewed and broken down by each of the Group's divisions and by scope.

## 5. **RESPONSIBILITIES**

OHLA's Sustainability Department is responsible for carrying out the reporting campaign and data collection, reviewing and consolidating this data, and calculating the Group's carbon footprint.

For their part, the site/project managers or the environmental managers of the country/project/division concerned, coordinated by the Quality and Environment Department, will be responsible for appointing those in charge of collecting and reporting the environmental information for the year, as well as for ensuring, as far as possible, the reliability and accuracy of the data.

Finally, to ensure the veracity of the OHLA Group's carbon footprint, the activity data used, the final result of GHG emissions, and the process and methodology to obtain the calculation result are verified annually by an external auditor.

### 6. ANNEXES

# ANNEX 1: List of Emission Factors used by the OHLA Group for the preparation of the GHG Emissions Inventory.

The emission factors have been selected from the following recognized international sources, taking into account their adequacy to the activity, their free availability and their credibility. Sources of emission factors:

- IPCC Guidelines for National Greenhouse Gas Inventories-2006 (fuels)
- ITEC-Institute of Construction Technology Catalonia-2019 (materials)
- UK Government GHG Conversion Factors-2022 (Business travel, commuting, Waste, Biofuels)
- NH Hoteles Spain, Andorra and Portugal 2015 (business trips-hotel nights)
- CENSA-Center for Sustainability Accounting -2011, www.censa.org.uk (capital goods)

### • Electricity:

- 2021 MITECO Emission Factors Trading without GDOs (2022 Version)
- Sustainable Energy Authority of Ireland (2021)
- International Energy Agency (IEA) 2019 2021 Edition
- UK Government GHG Conversion Factors (2021)
- Production mix factor. Association of Issuing Bodies (AIB) (2021)
- Electricity SEN System Ministry of Energy Chile (2021)
- o US Env. Protection Agency (EPA) eGrid output emission rate

- Environment and Natural Resources Secretariat of Mexico (2021)
- International Energy Agency (IEA) 2019 2021 Edition
- Emissions Intensity Turkey's Po
- Colombian Mining and Energy Planning Unit (2020)
- Production mix factor. Association of Issuing Bodies (AIB) (2021)
- Emissions intensity of the power sector. Climate Transparency Report (2021)
- Ministry of Energy and Mines: Network Factor (2019)
- Production mix factor. Association of Issuing Bodies (AIB) (2021)
- Ministry of Industry, Energy, and Mining: INS emission factor (2020)
- Production mix factor. Association of Issuing Bodies (AIB) (2021)
- Calorific value of fuels
  - UK Government GHG Conversion Factors-2019
- Global warming potential:
  - O IPCC-AR 5 -2014

#### ANEXO 2: Table of categories excluded in Scope 3.

Category:	Definition	Justification:
10	Processing of products sold	Not applicable to the organization, as OHLA does not have products whose processing is completed by third parties before being marketed.
11	Use of products sold	OHLA's clients do not directly use its products, nor does it have road concessions from which to calculate the indirect emissions associated with their use.
12	Treatment of products	OHLA sells steel and concrete in minimal volumes used for construction with long service life. It is impossible to know its contribution to the total product for final treatment purposes or the type of treatment or recovery undertaken at its end of life, which is expected to be decades away. For this reason, besides the small volume traded, it is considered non-material. Therefore, this category is not relevant.
13	Downstream leased assets	Not applicable to the organization because OHLA has no downstream leased assets in the reporting year.
14	Franchises	It does not apply to the organization because OHLA does not have franchises.