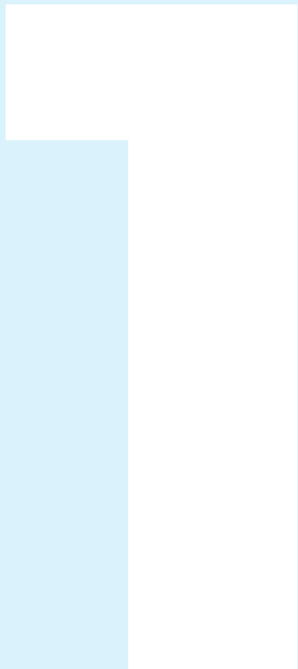


GREENHOUSE GAS EMISSION REPORT

2022



FCC CONSTRUCCIÓN'S COMMITMENT

With more than 120 years of history, FCC Construcción is the FCC Group's construction company and is a worldwide benchmark in the execution and design of civil engineering and building works, operating in more than 22 countries. Also, the FCC Group's Infrastructure area has proven experience in the development of concession projects and has a group of companies dedicated to other activities related to construction, as well as other industrial sectors (engineering, prefabrication and installations, among others).

This year, 2022, has been a very good year for FCC Construcción, marked by normality after two years of irregularities caused by the COVID pandemic. In 2022, works have recovered their production curves, reaching and even surpassing pre-pandemic levels of activity. It should also be noted that this year has been marked by the materialisation of the company's commitment to establish a roadmap towards reducing its emissions through its **Climate Change Strategy 2023-2026**, which will guide FCC Construcción's steps in the following years until it achieves zero emissions in 2050.

This Strategy, approved by the Sustainability Committee in January 2023, defines ambitious climate change mitigation and adaptation targets that directly affect the company's performance and whose effectiveness will be reviewed annually. Given the characteristics of this sector, the targets defined in the Strategy are not merely based on fixed reduction percentages, as can be seen from the application of instruments such as the SBTi (Science Based Target initiative), as the variability of emissions from one year to another depends not only on the number of projects that the company is undertaking, but also on the work type and the phase of execution. The reduction targets go further, establishing concrete and very ambitious actions to reduce emissions and adapt to climate change in order to achieve this neutrality.

Thus, this GHG Emissions Report includes FCC Construcción's commitment to transparency in the 2022 financial year, presenting its **Carbon Footprint verified** in accordance with standardised and externally verified procedures, and which includes all the activities that have



Madrid-Barcelona High Speed Line, Spain

been considered material, covering 100% of the countries in which the company operates, constituting one of the instruments for monitoring the results of the Climate Change Strategy.

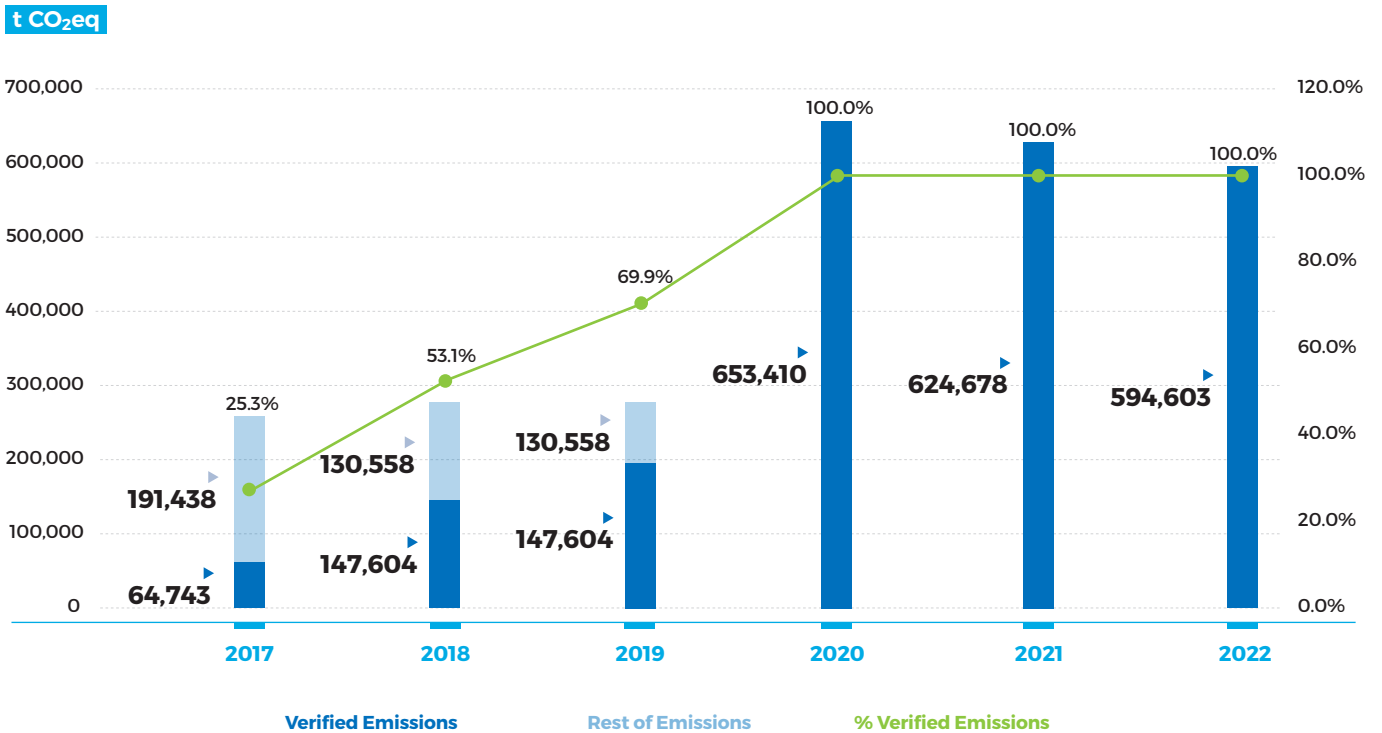
FCC Construcción hereby informs all its stakeholders of its environmental performance with regard to climate change, taking into account the two main fronts: **Adaptation**, intrinsic to the activity of the business, where the actions carried out are proving most fruitful, being internalised within the company; and **mitigation**, where great efforts are being made to obtain the best results and continuous improvement that will lead FCC Construcción to zero emissions in 2050.

After the consecutive verification in the last three years of 100% of the activity, and with the preparation and implementation of its Climate Change strategy, FCC Construcción lays the bases for compliance with one of the main environmental challenges that society faces today, besides strengthening the principles

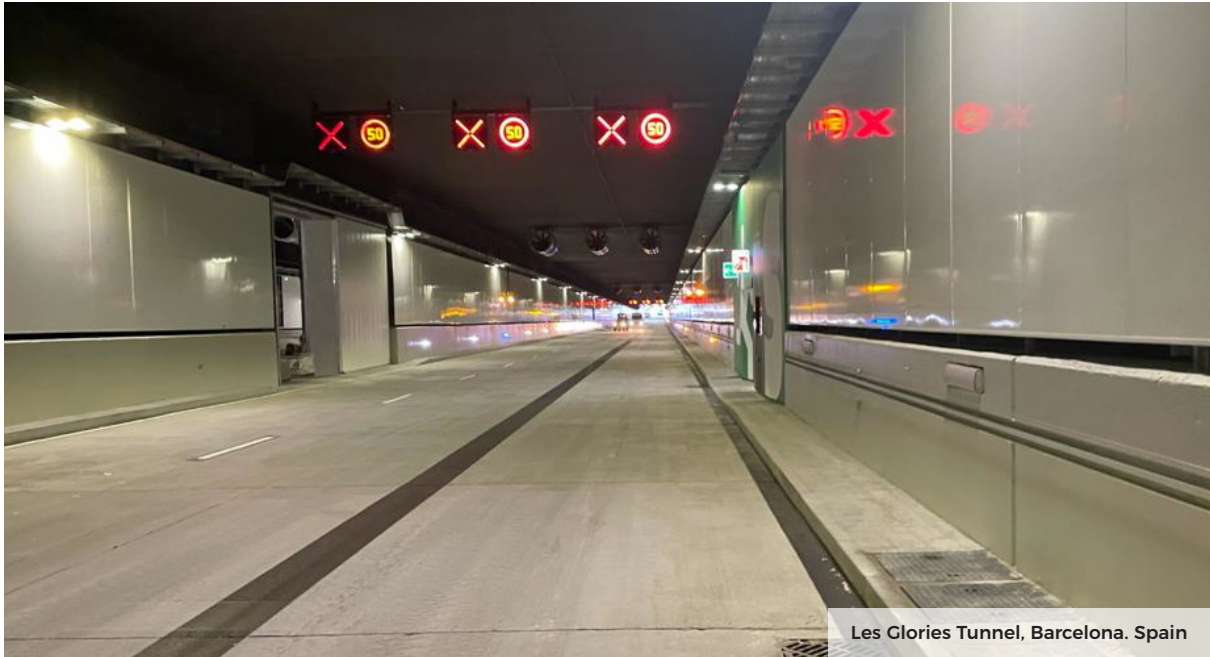
of responsibility and commitment to curbing Global Warming.

The countries accounted for in this report that quantify and verify their GHG emissions in the 2022 fiscal year remain the same as in 2021, and are: **Spain, Portugal, Bulgaria, Romania, United Kingdom, Ireland, Belgium, Netherlands, Norway, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Chile, Peru, United States, Canada, Qatar, Australia and Saudi Arabia.**

GHG EMISSIONS EMITTED AND VERIFIED



Section 2 Maya Train, Mexico



Les Glories Tunnel, Barcelona. Spain

In order to be able to carry out the absolute verification of the countries, the organization, in addition to having an Integrated Quality and Environmental Management System in place, has carried out extensive communication and dissemination work on the importance of Footprint calculation and the need to lead production processes towards footprint reduction.

The preparation of this report has been developed in accordance with the elaboration of the calculation methodologies of the company and guides for implementing and adapting the to the company's IT resources. On the other hand, it is also important to highlight the internal communication carried out within the company's own personnel to raise awareness, as well as the compilation of production data and specific emission factors for all the different countries and sources of GHG in the inventory, and the establishment of internal controls to ensure the quality of the inventory activity data, which are key to achieving FCC Construcción's targets.

The calculation and verification of such a complete and exhaustive Carbon Footprint is the result of the path initiated in 2010, when FCC Construcción began to integrate the concept of Climate Change in its organization with the design and implementation of a new protocol for the quantification of Greenhouse Gas emissions in construction, becoming the **first Spanish company in the sector to have its**

emissions externally verified by AENOR. Since then, the company has been preparing and verifying its GHG emissions report annually, progressively expanding its Scope 3 and its geographical limits in recent years to cover its entire geographical scope of action.

In addition, since 2012, FCC Construcción has also had the "**Verified CO₂**", carbon footprint certificate, which accredits both the veracity of the calculation and the inclusion of GHG emissions management in the organization's system and strategy. This initiative was awarded a runner-up prize in 2012 in the "*Management for sustainable development*" category of the European Environment Awards, granted by the *Fundación Entorno*.

In this line, FCC Construcción is progressively moving forward and is not only committed to verifying its carbon footprint at an organizational level but has also decided to do so at a project level. An example of this commitment is the achievement of the "*CO₂ Performance Ladder*"; certification in the VeenIX A9 BAHO project, whose objective is to emit the minimum amount of CO₂ possible in the project's execution operations. Of the 5 possible levels of certification, FCC Construcción (NL) has achieved the highest, level 5, which assumes consideration not only of its own project emissions, but also of the CO₂ emissions resulting from the entire chain and sector.

As a company that operates globally, FCC Construcción is committed to tackling climate change and achieving the transition to a low-carbon economy in all its areas of activity. Likewise, in its permanent exercise of awareness and transparency, FCC Construcción has been registering its verified carbon footprints every year since its creation in the **Carbon Footprint Register, compensation and absorption projects** established in 2014 by the **Spanish Ministry for Ecological Transition**, being the first construction company to appear on this public list.

For its carbon footprint from 2015 to 2021, FCC Construcción has obtained the “*Calculate and Reduce*”, label of the government, which, in addition to recognizing its involvement and capacity to quantify and verify its Greenhouse Gas emissions, distinguishes the company as one of the organizations that effectively reduces its carbon footprint, despite continuing to increase its activity. The company’s commitment to reducing its emissions is also reflected in the “**Community #ForClimate**”, platform, which it joined in 2016, following the Paris Agreement.

In addition, and since 2017, FCC Construcción reports information related to Climate

Change in line with the recommendations of the Financial Stability Board’s Task Force on Climate Related Financial Disclosures (TFCD). The TFCD report develops a framework to help companies understand and quantify the risks and opportunities related to climate change, structuring developments around Climate Change into four main blocks: “Governance”, “Strategy”, “Risk Management” and “Metrics and Targets”.

This year, also as a novelty, in accordance with the reporting requirements of Regulation (EU) 2020/852 on Taxonomy, the **FCC Group’s 2022 Sustainability Report** has published the eligibility and alignment of the FCC Group’s economic activities, in terms of volume of the different business CapEx and OpEx for the 2022 financial year were calculated for the Mitigation and Adaptation to Climate Change objectives. The classification of sustainable economic activities is a clear step forward and a major boost to guide the activity of the company and the sector, as well as that of investors, administrations, and other stakeholders, in the right direction.



Murcia tram, Spain



Industrial Bridge, Chile

Characteristics of the FCC Construcción 2022 Greenhouse Gas Emissions Report

This Report includes the Greenhouse Gas Inventory for the year **2022** of the activities carried out in the works and fixed centres of FCC Construcción located in **Spain, Portugal, Bulgaria, Romania, United Kingdom, Ireland, Belgium, Norway, Netherlands, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Chile, Peru, Canada, United States, Qatar, Australia and Saudi Arabia**, not considering the industrial activities carried out by the subsidiary companies of FCC Industrial (V Area), nor by the company Áridos de Melo. This report is the responsibility of the Quality, CSR and R&D&I Director.

The report has been prepared in accordance with the requirements set out in **UNE-EN- ISO 14064-1:2019 "Greenhouse gases. Specification with guidance, at the level of organizations, for the quantification and reporting of greenhouse gas emissions and removals"**, and in the sectoral reference of the *European Network of Construction Companies for Research and*

Development (hereinafter, ENCORD), in its May 2012 edition: "*Protocol for measuring CO₂ in construction*". This reference has been awarded the "*Built on GHG Protocol*" logo, which makes it the sectoral GHG guideline for construction.

Compared to the previous Standard UNE-EN-ISO 14064-1:2012, organizations must prepare, document and apply a process to determine which indirect emissions should be included in their GHG inventory; define and explain their own criteria for assessing the significance of indirect emissions; quantify and report significant emissions; justify exclusions of significant indirect emissions; and identify and document significant indirect emissions separately. FCC Construcción, with the support of a consultancy service, carried out a materiality analysis in 2021, which has been updated in 2022, to comply with the Standard.

The verification of the Greenhouse Gas Inventory has been carried out with a **limited** level of **assurance** by AENOR (see *Annex*).



ORGANIZATIONAL BOUNDARIES, OPERATIONAL BOUNDARIES AND EXCLUSIONS

2.1 Organizational boundaries

The consolidation of FCC Construcción's Greenhouse Gas emissions is carried out under the **operational control** approach, which is the most appropriate for the nature of the operations of the construction sector. For the quantification of Scope 1 and Scope 2 emissions (emissions associated with fuel consumption and emissions associated with electricity consumption), only those emissions over which FCC Construcción has financial control are considered, i.e., those deriving from consumption whose costs are assumed by FCC Construcción.

The information included in the 2022 GHG inventory corresponds to all facilities in Spain, Portugal, Bulgaria, Romania, the United Kingdom, Ireland, Belgium, Norway, the Netherlands, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Chile, Peru, Canada, the United States, Qatar, Australia and Saudi Arabia, with facilities being understood as works and premises, among which offices, warehouses and machinery parks are distinguished.

2.2 Operational limits

Emissions from centres within FCC Construcción's organizational boundaries are quantified, assuming the following scopes, and categories established by the standard UNE-EN ISO 14064-1:2019:

SCOPE 1 / CATEGORY 1:

DIRECT GHG EMISSIONS

These are emissions from sources owned or controlled by the company. They include emissions resulting from the combustion of fuels consumed by FCC Construcción. They are broken down into:

- ▷ Emissions associated with fuel used at projects (construction sites).
- ▷ Emissions associated with fuel consumption at premises (offices, warehouses, plant depots/maintenance facilities, etc. occupied by the company).



Major Bridge P3 of Pennsylvania, USA

SCOPE 2 / CATEGORY 2:

INDIRECT GHG EMISSIONS

Scope 2 emissions derive from the company's activity but occur at the facility where the electricity is generated. It includes emissions resulting from the generation of electricity purchased by FCC Construcción. They are broken down into:

- ▷ Emissions associated with electricity used at projects.
- ▷ Emissions associated with electricity consumption at premises.

SCOPE 3

OTHER INDIRECT EMISSIONS

These emissions are a consequence of the company's activities but are produced in sources that are not owned or controlled by FCC Construcción. It has been decided to include the following emissions under Scope 3 and categories 3 and 4:

INDIRECT GHG EMISSIONS FROM TRANSPORTATION

- ▷ Emissions associated with company staff commuting to the workplace. (**Category 3**).

Emissions associated with staff travel are considered for all countries included in the emissions report.

- ▷ Emissions associated with employees commuting to the workplace. (**Category 3**).

Emissions associated with staff travel are considered for all countries included in the emissions report.

- ▷ Emissions associated with transport of consumed materials. (**Category 3**).

Emissions from the transport to the site of concrete, asphalt agglomerate, steel, non-ferrous metals, bricks, glass, soil, soil improvers and insulation are considered.

INDIRECT EMISSIONS FROM PRODUCTS USED BY THE ORGANIZATION

- ▷ Emissions associated with the production of consumed materials. **(Category 4)**.

Emissions from the manufacture of concrete, asphalt agglomerate, corrugated steel, structural steel, track steel, non-ferrous metals, bricks, glass, insulation, earth extraction and the production of aggregates are considered.

- ▷ Emissions associated with the execution of subcontracted work units. **(Category 4)**.

They include earth-moving works, concrete pouring, steel rail laying, asphalt concrete spreading and metal structure placement.

- ▷ Emissions associated with the transport and management of waste and leftover materials **(Category 4)**.

Emissions associated with the transport of surplus soil and clean surplus rubble and emissions associated with the transport and landfill of municipal solid waste, wood waste and mixed rubble are considered.

- ▷ Indirect emissions associated with purchased energy-related activities. **(Category 4)**.

Emissions associated with the production of energy consumption and emissions from losses during the transport and distribution of electricity are considered.

- ▷ Emissions associated with the consumption of water from the supply network. **(Category 4)**.

Informative GHG emissions:

These are emissions of biogenic origin, where they are established:

- ▷ Direct emissions associated with the consumption of biofuels used at projects.
- ▷ Direct emissions associated with the consumption of biofuels used at premises.

2.3 Materiality analysis and exclusions

FCC Construcción carried out a materiality analysis in 2021, with the ultimate aim of improving the calculation of its carbon footprint and checking its response to the requirements of the UNE-EN-ISO 14064-1:2019 Standard, in addition to the priority categories of ENCORD, the proposed Analysis criteria is as follows:

- ▷ **Magnitude of emissions:** those that are quantitatively substantial.

- ▷ **Level of influence on sources:** the extent to which the organization has the capacity to monitor and reduce these emissions.

- ▷ **Access to information:** ease of obtaining the data necessary for the calculation.

- ▷ **Data accuracy level.**

- ▷ **Sector-specific guidelines:** those emissions that are considered significant based on the guidelines of a business sector.

Based on the priority categories defined by ENCORD, FCC Construcción has already identified the following: *ferrous metals* (e.g. structural and reinforcing steel); *non-ferrous metals* (e.g. aluminum cladding); *cement* (used in concrete and concrete products); *brick* (ceramics produced by firing in a kiln); *glass*; and *bituminous products* (e.g. asphalt). Two categories were not identified before 2021, and are considered a priority by ENCORD, which are: *insulation* (from non-renewable materials) and *gypsum-based products* (used in plasterboard).

The materiality study analyzed the relative impact of these two materials, in order to identify whether their contribution was significant or negligible, calculating their total contribution in terms of quantity of materials and emission factors, and following this analysis, it was determined that it was necessary to include only the emissions associated with insulation, as it was considered significant for the activity, and thus, from 2021, insulation is included in the carbon footprint calculation.

In 2022, the materiality analysis has been updated, without significant changes, and for another year, based on the resulting emissions, the **quantification of fugitive emissions** from air conditioning equipment over which it has control has been excluded from FCC Construcción's Carbon Footprint, as these have a low representativeness (**less than 0.35%**) with respect to the total emissions emitted by the company.



Totana-Lorca Railway Corridor Section, Spain

3

UNCERTAINTY AND MAXIMUM MATERIALITY

The estimated uncertainty of the emissions is a combination of the uncertainty of the emission factors and the uncertainty of the activity data.

The emission factors used for the FCC Construcción Greenhouse Gas Inventory come from official sources and are specific for each category of emission source. These emission factors are selected with a view to minimising uncertainty as far as possible. Unless there is clear evidence to the contrary, it is assumed that the probability density functions are normal and, therefore, that the uncertainty of the emission factors is low.

The activity data used are derived from invoicing data, delivery notes, measurements, and construction project data. Based on the supplementary guidance document *on uncertainty assessment* (“*GHG Protocol guidance on uncertainty assessment in GHG inventories and calculating statistical parameter uncertainty*”), developed by the ECCR of the GHG Protocol, it can be considered that the origin of FCC Construcción’s activity data guarantees the maximum achievable certainty for the different GHG emissions sources.

A maximum relative importance level of **7%** of the total reported GHG emissions has been established.



Line 4-5-6 Metro Riyadh, Saudi Arabia

4

QUANTIFICATION OF EMISSIONS

This section presents the quantification of FCC Construcción's Greenhouse Gas emissions in 2022, specifying the GHG emissions from Spain, Portugal, Bulgaria, Romania, the United Kingdom, Ireland, Belgium, Norway, the Netherlands, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Chile, Peru, Canada, the United States, Qatar, Australia and Saudi Arabia.

Firstly, emissions are classified by scopes and categories, as defined in the UNE-EN-ISO 14064-1:2019 standard:



Oriol Electrical Substation, Spain

Emissions, classified by categories and scopes (according to UNE-ISO 14064-1:2019)	t CO ₂ e - 2022 SPAIN	t CO ₂ e - 2022 PORTUGAL	t CO ₂ e - 2022 BULGARIA	t CO ₂ e - 2022 ROMANIA	t CO ₂ e - 2022 UNITED KINGDOM
Scope 1 / Category 1: Direct GHG emissions and removals	8,491.75	816.99	0.00	2,979.94	343.95
Emissions associated with fuel used at projects	7,992.11	733.17	0.00	2,621.99	331.50
Emissions associated with fuel consumption at premises	499.64	83.82	0.00	357.95	12.45
Scope 2 / Category 2: Indirect GHG emissions from imported energy	1,051.49	21.97	1.97	257.62	67.30
Emissions associated with electricity used at projects	677.56	16.64	0.00	231.01	58.54
Emissions associated with electricity consumption at premises	373.93	5.33	1.97	26.61	8.76
Associated with the consumption of electrical energy for vehicles		0.00	0.00	0.00	
Scope 3	284,784.39	6,001.69	0.56	70,724.69	20,140.30
Category 3: Indirect GHG emissions from transportation	7,842.51	475.13	0.01	13,253.76	1,723.34
Associated with employee's business travel	781.35	0.74	0.00	85.75	61.96
Associated with employee's commuting to the workplace	2,199.74	286.48	0.00	417.95	455.26
Associated with the transport of consumed materials	4,861.42	187.91	0.01	12,750.06	1,206.12
Category 4: Indirect emissions from goods purchased by an organization	276,941.88	5,526.56	0.55	57,470.93	18,416.96
Associated with the production of consumed materials	248,874.79	5,262.40	0.42	54,072.42	16,343.98
Associated with the execution of subcontracted works units	13,313.08	49.68	0.00	1,633.71	744.15
Associated with acquired energy-related activities	2,107.49	210.48	0.13	711.74	1,147.94
Associated with the transport and management of waste and surplus materials	12,626.08	3.44	0.00	1,052.46	180.54
Associated with the consumption of water from the supply network	20.44	0.56	0.00	0.60	0.35
Total Emissions	294,327.63	6,840.65	2.53	73,962.25	20,551.55

t CO ₂ e - 2022 IRELAND	t CO ₂ e - 2022 BELGIUM	t CO ₂ e - 2022 NORWAY	t CO ₂ e - 2022 NETHERLANDS
0.00	660.48	0.00	110.37
0.00	660.48	0.00	110.37
0.00	0.00	0.00	0.00
0.00	533.63	1.10	122.51
0.00	53.63	1.10	122.51
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
33.95	365.56	92.83	32,279.88
33.95	82.39	92.00	2,356.08
27.44	44.92	85.17	100.32
6.51	4.96	6.83	0.00
0.00	32.51	0.00	2,255.76
0.00	283.17	0.83	29,923.80
0.00	91.62	0.00	26,698.33
0.00	10.97	0.00	3,080.76
0.00	138.00	0.73	23.81
0.00	42.58	0.00	120.90
0.00	0.00	0.10	0.00
33.95	1,559.67	93.93	32,512.76

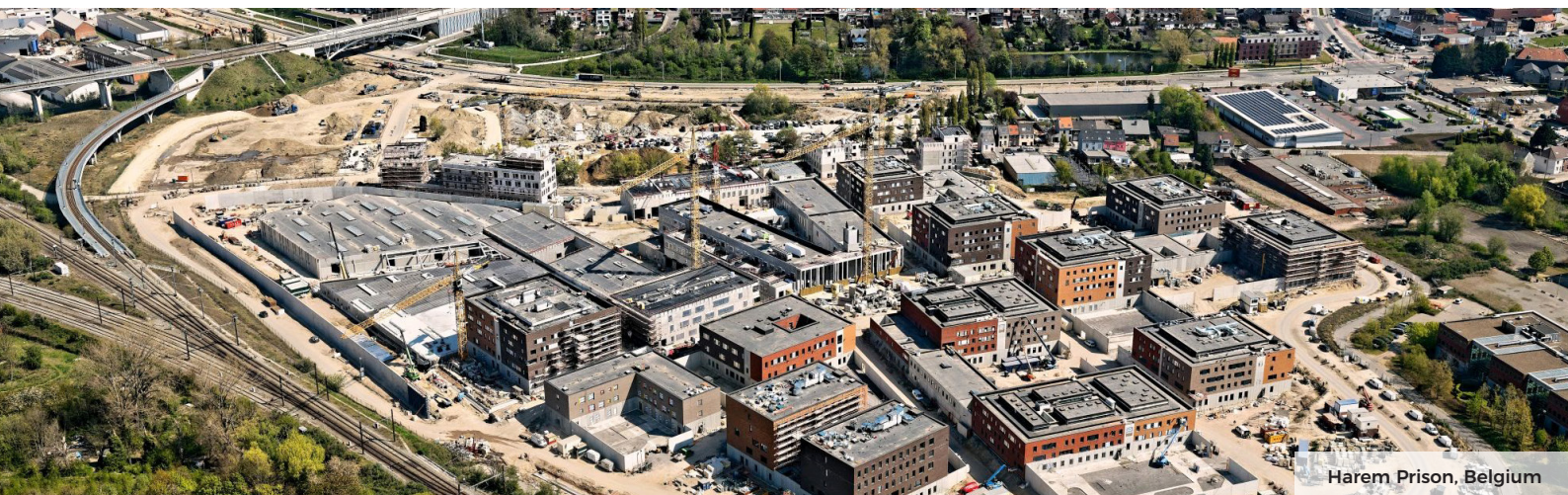


Emissions, classified by categories and scopes (according to UNE-ISO 14064-1:2019)	t CO ₂ e - 2022 NICARAGUA	t CO ₂ e - 2022 COSTA RICA	t CO ₂ e - 2022 PANAMA	t CO ₂ e - 2022 EL SALVADOR	t CO ₂ e - 2022 MEXICO	t CO ₂ e - 2022 COLOMBIA
Scope 1 / Category 1: Direct GHG emissions and removals	74.04	8.84	268.32	0.00	6.52	2.07
Emissions associated with fuel used at projects	0.00	0.00	0.00	0.00	0.00	0.00
Emissions associated with fuel consumption at premises	74.04	8.84	268.32	0.00	6.52	2.07
Scope 2 / Category 2: Indirect GHG emissions from imported energy	6.58	0.17	166.19	0.06	5.42	1.75
Emissions associated with electricity used at projects	0.00	0.00	0.00	0.00	0.00	0.00
Emissions associated with electricity consumption at premises	6.58	0.17	166.19	0.06	5.42	1.75
Associated with the consumption of electrical energy or vehicles	0.00	0.00	0.00	0.00	0.00	0.00
Scope 3	50.66	6.44	269.18	2.14	104.88	89.14
Category 3: Indirect GHG emissions from transportation	30.46	4.27	176.16	2.13	102.74	88.48
Associated with employee's business travel	0.00	0.00	123.19	0.00	70.58	36.66
Associated with employees commuting to the workplace	30.46	4.27	52.97	2.13	32.16	51.82
Associated with the transport of consumed materials	0.00	0.00	0.00	0.00	0.00	0.00
Category 4: indirect emissions from products used by the organization	20.20	2.17	93.02	0.01	2.14	0.66
Associated with the production of consumed materials	0.00	0.00	0.00	0.00	0.00	0.00
Associated with the execution of subcontracted works units	0.00	0.00	0.00	0.00	0.00	0.00
Associated with acquired energy-related activities	18.63	2.17	80.28	0.01	2.14	0.66
Associated with the transport and management of waste and surplus materials	1.57	0.00	12.66	0.00	0.00	0.00
Associated with the consumption of water from the supply network	0.00	0.00	0.08	0.00	0.00	0.00
Total Emissions	131.28	15.45	703.69	2.20	116.82	92.96

4. QUANTIFICATION OF EMISSIONS

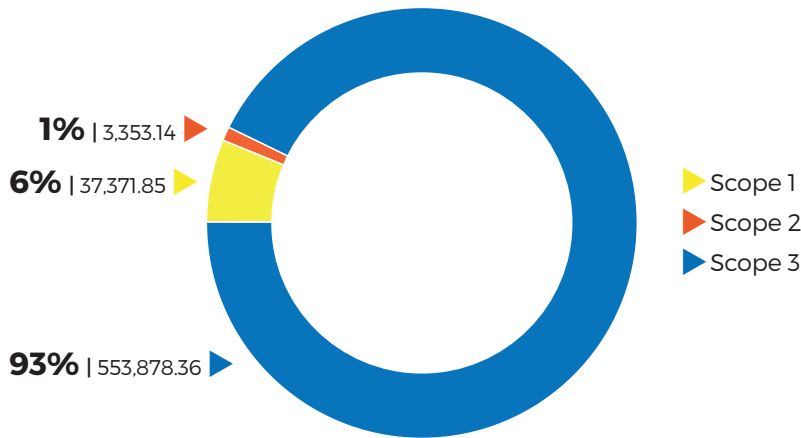
t CO ₂ e - 2022 CHILE	t CO ₂ e - 2022 PERU	t CO ₂ e - 2022 USA	t CO ₂ e - 2022 CANADA	t CO ₂ e - 2022 CATAR	t CO ₂ e - 2022 AUSTRALIA	t CO ₂ e - 2022 SAUDI ARABIA	t CO ₂ e - 2022 (Report) TOTAL
1,218.82	2,677.48	0.00	0.00	0.00	0.00	19,712.28	37,371.85
1,206.72	2,662.45	0.00	0.00	0.00	0.00	19,712.28	36,031.07
12.10	15.03	0.00	0.00	0.00	0.00	0.00	1,340.78
57.80	960.86	11.11	0.60	0.00	17.78	67.23	3,353.14
51.01	959.12	0.00	0.00	0.00	0.00	67.23	2,718.35
6.79	1.74	11.11	0.60	0.00	17.78	0.00	634.79
	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62,160.20	66,020.67	86.92	339.86	27.90	106.95	10,189.57	553,878.36
934.31	637.44	86.38	339.83	27.90	106.13	1,538.60	29,934.00
258.66	328.75	86.38	259.98	19.03	98.63	820.91	3,290.42
87.57	11.09	0.00	79.85	8.87	7.50	297.02	4,043.44
588.08	297.60	0.00	0.00	0.00	0.00	420.67	22,600.14
61,225.89	65,383.23	0.54	0.03	0.00	0.82	8,650.97	523,944.36
59,277.24	61,988.84	0.00	0.00	0.00	0.00	4,127.92	476,737.96
666.41	1,452.17	0.00	0.00	0.00	0.00	44.34	20,995.27
279.27	728.79	0.52	0.03	0.00	0.79	4,473.60	9,927.21
1,001.89	1,196.28	0.00	0.00	0.00	0.00	5.11	16,243.51
1.08	17.15	0.02	0.00	0.00	0.03	0.00	40.41
63,436.82	69,659.01	98.03	340.46	27.90	124.73	29,969.08	594,603.35

Category 1/ Scope 1 (Emissions classified by GHG type)	t CO ₂ eq 2022			
	CO ₂	CH ₄	N ₂ O	Total GEI
Spain	8,390.16	2.44	99.15	8,491.75
Portugal	814.34	0.91	1.73	816.98
Bulgaria	0.00	0.00	0.00	0.00
Romania	2,970.19	3.34	6.42	2,979.95
United Kingdom	339.33	0.20	4.43	343.96
Ireland	0.00	0.00	0.00	0.00
Belgium	659.50	0.42	0.57	660.49
Norway	0.00	0.00	0.00	0.00
Netherlands	110.21	0.07	0.10	110.38
Nicaragua	73.79	0.08	0.16	74.03
Costa Rica	8.81	0.01	0.02	8.84
Panama	267.44	0.30	0.58	268.32
El Salvador	0.00	0.00	0.00	0.00
Mexico	6.34	0.13	0.05	6.52
Colombia	2.06	0.00	0.00	2.06
Chile	1,214.83	1.36	2.62	1,218.81
Peru	2,668.62	3.07	5.79	2,677.48
USA	0.00	0.00	0.00	0.00
Canada	0.00	0.00	0.00	0.00
Catar	0.00	0.00	0.00	0.00
Australia	0.00	0.00	0.00	0.00
Saudi Arabia	19,646.45	21.97	43.86	19,712.28
TOTAL	37,172.05	34.30	165.48	37,371.85

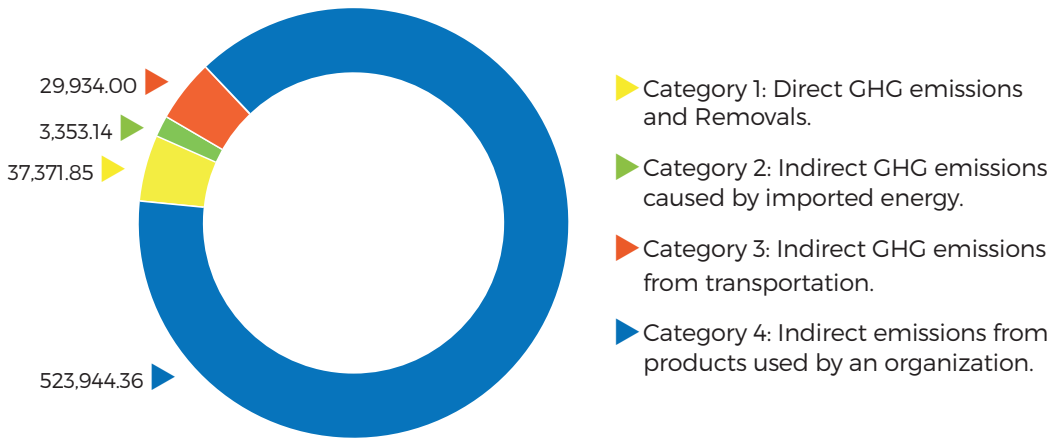


Harem Prison, Belgium

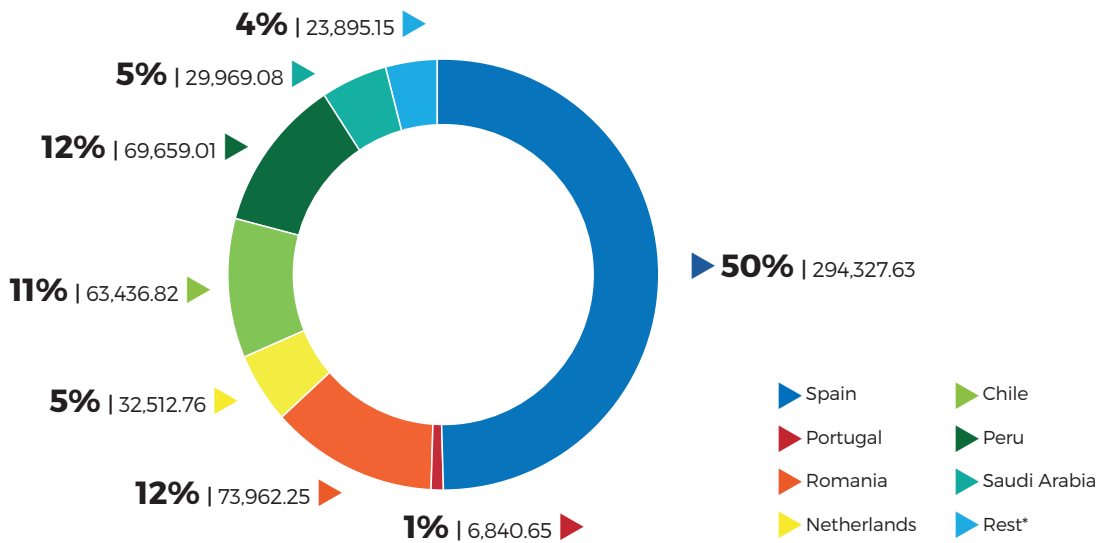
GHG EMISSIONS 2022 BY SCOPE (TCO₂eq)



GHG EMISSIONS CLASSIFIED BY CATEGORY (TCO₂eq)

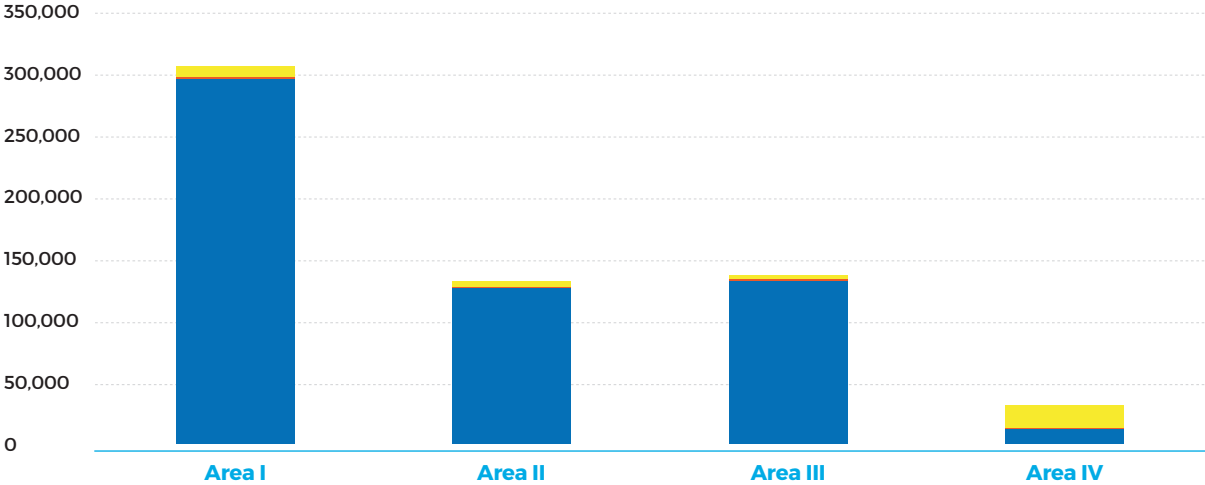


GHG EMISSIONS 2022 PER COUNTRY (TCO₂eq)



* Emissions from Bulgaria, United Kingdom, Ireland, Belgium, Norway, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Canada, United States, Australia and Qatar.

GHG EMISSIONS 2022 BY SCOPE AND FCC CONSTRUCCIÓN AREA (TCO₂eq)

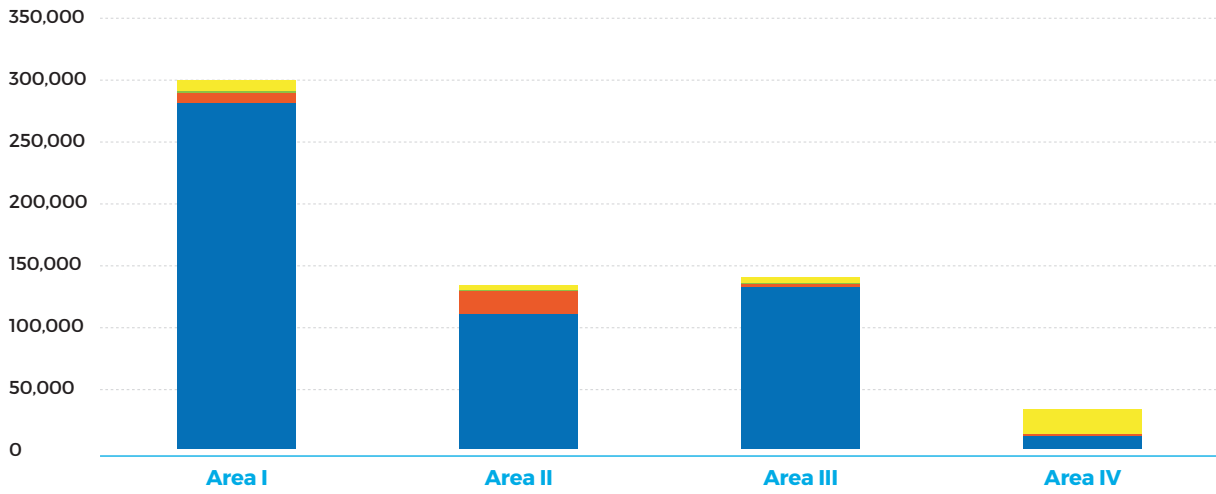


	Area I	Area II	Area III	Area IV
Scope 1	9,308.74	4,094.74	4,256.09	19,712.28
Scope 2	1,073.46	984.13	1,210.54	85.01
Scope 3	290,786.08	123,637.77	129,130.09	10,324.42

Area I: Spain and Portugal. Area II: Europe. Area III: America. Area IV: Middle East and Oceania



GHG EMISSIONS 2022 BY CATEGORY AND FCC CONSTRUCCIÓN AREA (TCO₂eq)

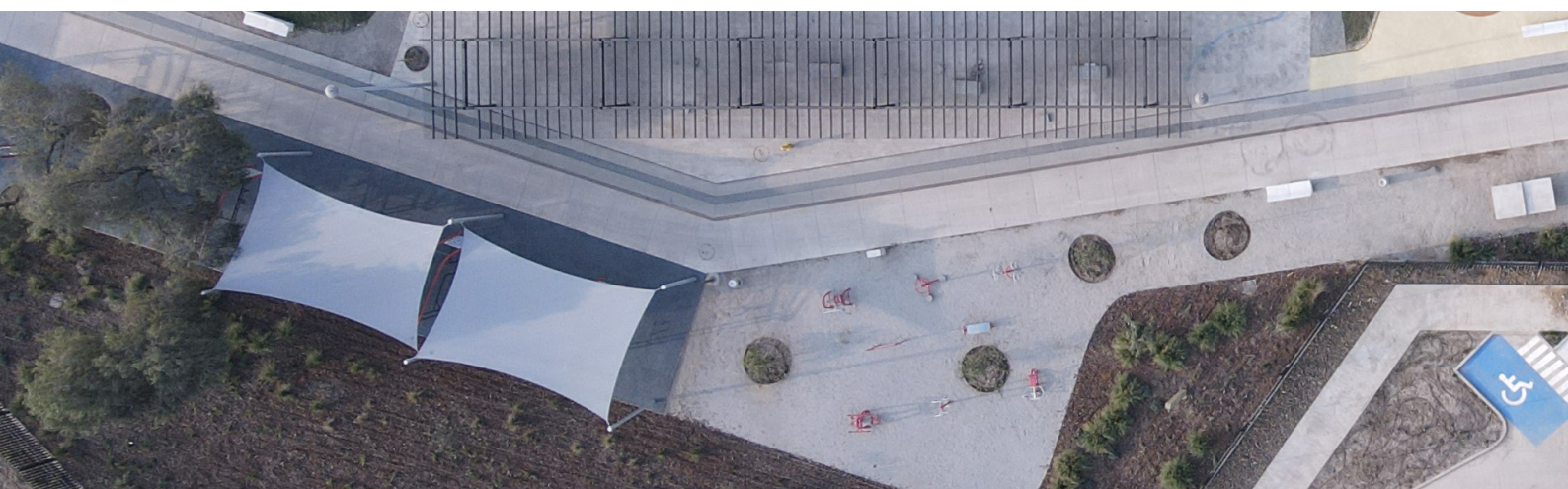


	Area I	Area II	Area III	Area IV
Category 1	9,308.74	4,094.74	4,256.09	19,712.28
Category 2	1,073.46	984.13	1,210.54	85.01
Category 3	8,317.64	17,541.53	2,402.20	1,672.63
Category 4	282,468.44	106,096.24	126,727.89	8,651.79



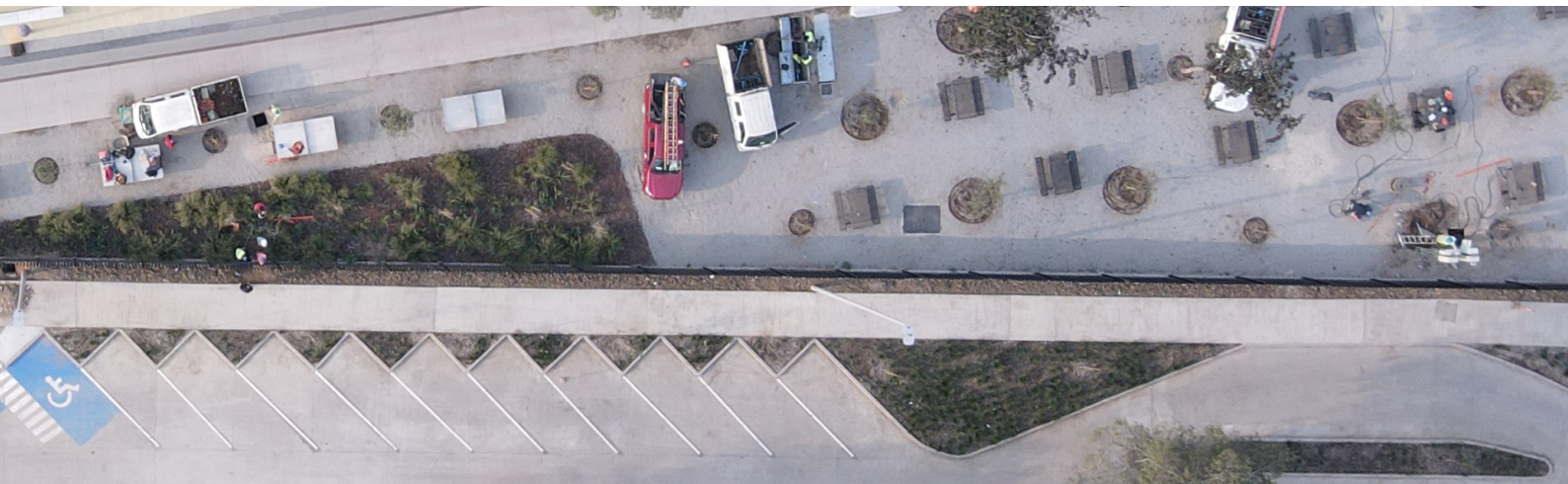
Digital District in the Port of Alicante, Spain

Emissions classified by categories according to ENCORD referential	1. Fuels (project)	2. Fuels (premises)	3. Process and Fugitive	4. Electricity (project)	5. Electricity (premises)	6. Imported heat
Spain	7,992.11	499.64	0.00	677.56	373.93	0.00
Portugal	733.17	83.82	0.00	16.64	5.33	0.00
Bulgaria	0.00	0.00	0.00	0.00	1,97	0.00
Romania	2,621.99	357.95	0.00	231.01	26.61	0.00
United Kingdom	331.50	12.45	0.00	58.54	8.76	0.00
Ireland	0.00	0.00	0.00	0.00	0.00	0.00
Belgium	660.48	0.00	0.00	533.63	0.00	0.00
Norway	0.00	0.00	0.00	1.10	0.00	0.00
The Netherlands	110.37	0.00	0.00	122.51	0.00	0.00
Nicaragua	0.00	74.04	0.00	0.00	6.58	0.00
Costa Rica	0.00	8.84	0.00	0.00	0.17	0.00
Panama	0.00	268.32	0.00	0.00	166.19	0.00
El Salvador	0.00	0.00	0.00	0.00	0.06	0.00
Mexico	0.00	6.52	0.00	0.00	5.42	0.00
Colombia	0.00	2.07	0.00	0.00	1.75	0.00
Chile	1,206.72	12.10	0.00	51.01	6.79	0.00
Peru	2,662.45	15.03	0.00	959.12	1.74	0.00
USA	0.00	0.00	0.00	0.00	0.60	0.00
Canada	0.00	0.00	0.00	0.00	0.00	0.00
Catar	0.00	0.00	0.00	0.00	17.78	0.00
Australia	0.00	0.00	0.00	67.23	0.00	0.00
Saudi Arabia	19,712.28	0.00	0.00	67.23	0.00	0.00
TOTAL	36,031.07	1,340.78	0.00	2,718.35	634.79	0.00



4. QUANTIFICATION OF EMISSIONS

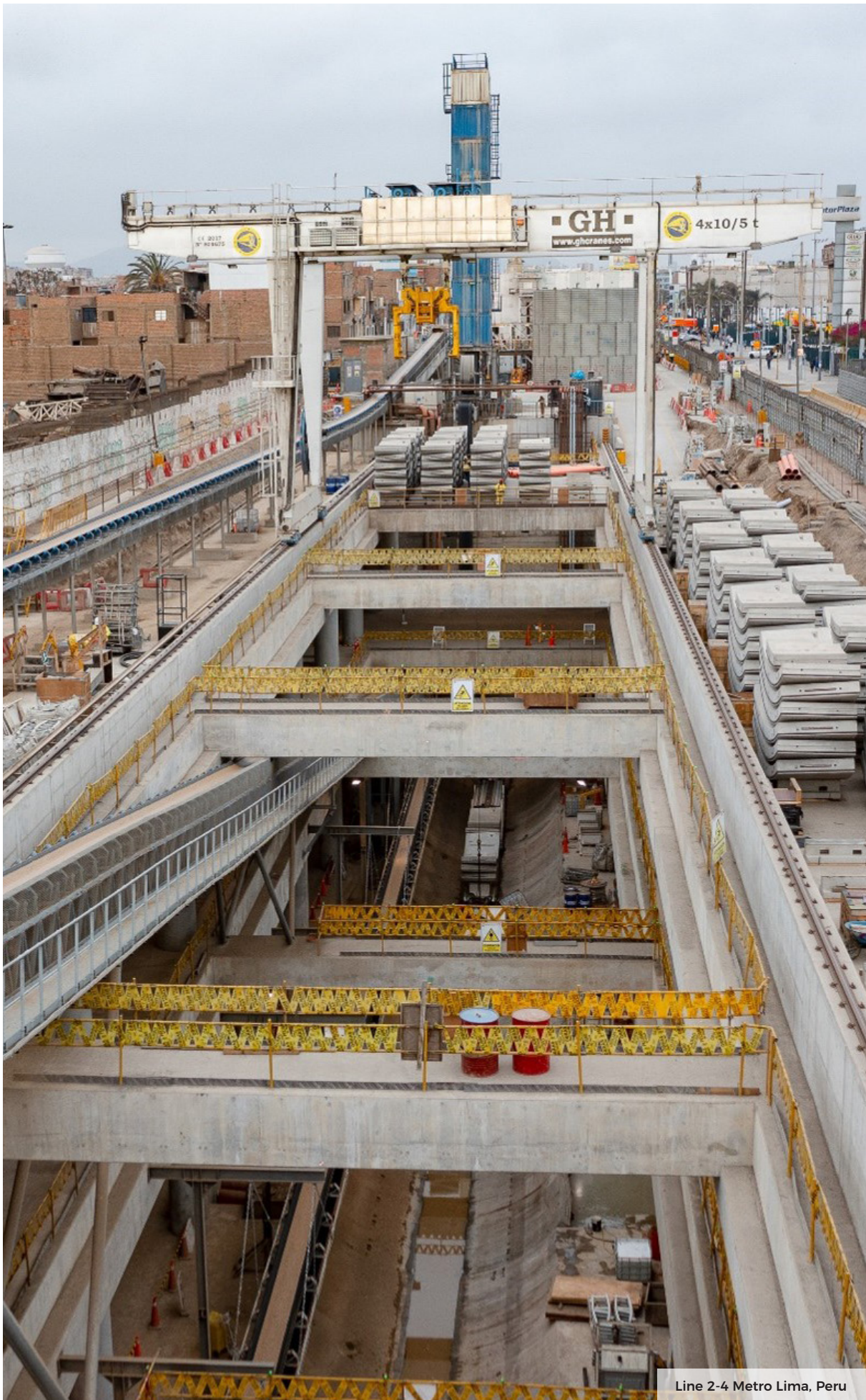
7. Vehicle fuel	8. Public transport	9. Sub-Contractors	10. Waste	11. Materials	Total Emissions
2,281.46	699.63	13,313.08	12,626.08	253,736.21	292,199.70
282.91	4.31	49.68	3.44	5,450.31	6,629.61
0.00	0.00	0.00	0.00	0.43	2.40
418.21	85.49	1,633.71	1,052.46	66,822.48	73,249.91
436.00	81.22	744.15	180.54	17,550.10	19,403.26
6.50	27.45	0.00	0.00	0.00	33.95
5.00	44.88	10.97	42.58	124.13	1,421.67
0.42	91.58	0.00	0.00	0.00	93.10
8.34	91.98	3,080.76	120.90	28,954.09	32,488.95
30.50	-0.04	0.00	1.57	0.00	112.65
4.27	0.00	0.00	0.00	0.00	13.28
53.59	122.57	0.00	12.66	0.00	623.33
2.13	0.00	0.00	0.00	0.00	2.19
30.00	72.74	0.00	0.00	0.00	114.68
51.80	36.68	0.00	0.00	0.00	92.30
71.50	274.73	666.41	1,001.89	59,865.32	63,156.47
9.02	330.82	1,452.17	1,196.28	62,286.44	68,913.07
71.69	268.14	0.00	0.00	0.00	340.43
8.87	19.03	0.00	0.00	0.00	27.90
5.83	100.30	0.00	0.00	0.00	123.91
199.88	918.05	44.34	5.11	4,548.59	25,495.48
199.88	918.05	44.34	5.11	4,548.59	25,495.48
3,977.91	3,355.95	20,995.27	16,243.51	499,338.10	584,635.73



AVOIDED EMISSIONS:

This section presents the quantification of the Greenhouse Gas emissions avoided in the 22 countries, due to the implementation of good practices on site. It details the emissions that are no longer emitted by carrying out the following targeted actions, according to the terminology used in the UNE-EN ISO 14064-1:2019 standard:

Avoided Emissions	t CO ₂ eq 2022						TOTAL EMISSIONS
	For reusing the material on site and not taking it to a landfill site	By pH neutralisation with CO ₂	For proper maintenance of machinery operating on site	For speed control of vehicles on construction sites	For self-produced electricity from renewable sources		
Spain	10,023.22	0.00	322.13	58.07	5.59	10,409.01	
Portugal	18.12	0.00	13.04	0.11	0.00	31.27	
Bulgaria	0.00	0.00	0.00	0.00	0.00	0.00	
Romania	193.15	0.00	132.90	1.21	0.00	327.26	
United Kingdom	634.45	0.00	0.00	3.36	0.00	637.81	
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	
Belgium	11.18	0.00	0.00	0.06	0.00	11.24	
Norway	0.00	0.00	0.00	0.00	0.00	0.00	
The Netherlands	1,121.15	0.00	5.81	5.93	0.00	1,132.89	
Nicaragua	0.00	0.00	3.90	0.00	0.00	3.90	
Costa Rica	0.00	0.00	0.00	0.00	0.00	0.00	
Panama	0.00	0.00	9.04	0.00	0.00	9.04	
El Salvador	0.00	0.00	0.00	0.00	0.00	0.00	
Mexico	0.00	0.00	0.00	0.00	0.00	0.00	
Colombia	0.00	0.00	0.00	0.00	0.00	0.00	
Chile	7.85	0.00	63.51	2.54	0.00	73.90	
Peru	0.00	0.00	140.13	0.00	0.00	140.13	
USA	0.00	0.00	0.00	0.00	0.00	0.00	
Canada	0.00	0.00	0.00	0.00	0.00	0.00	
Catar	0.00	0.00	0.00	0.00	0.00	0.00	
Saudi Arabia	0.00	0.00	0.00	0.00	0.00	0.00	
Australia	0.00	0.00	0.00	0.01	0.00	0.01	
TOTAL EMISSIONS	12,009.12	0.00	690.46	71.29	5.59	12,776.46	



Line 2-4 Metro Lima, Peru

5



BASE YEAR

In 2022, the year 2021 was established as the historical base year for GHG emissions for comparison purposes, in accordance with UNE-EN ISO 14064-1:2019 and the ENCORD sectoral benchmark. The change and establishment of the base year in 2021 was motivated, firstly, by the incorporation of the works and premises located in Australia.

Secondly, in 2021, the extension of Scope 3 was implemented. Specifically, compared to the previous year, the following changes were introduced:

- ▷ Inclusion of new subcontracted work units. Until 2020, only *earthworks* were considered as subcontracted units. In 2021, the calculation of emissions associated with the work units *concrete pouring, steel rail laying, asphalt concrete spreading and metal structure placement* have been included.
- ▷ Inclusion of new materials. This year, emissions resulting from the production and transport of insulation, emissions from off-site extraction and transport of earth and, lastly, emissions from the manufacture and transport of aggregate have been added to the calculation of the footprint. Until 2020, only emissions resulting from earthmoving operations were considered in the calculation, but emissions from off-site extraction were not taken into account.
- ▷ Selection of more comprehensive emission factors in the upstream life cycle of materials.
- ▷ Inclusion of the calculation of emissions associated with the consumption of water supply.
- ▷ Inclusion of emissions associated with activities related to energy purchased from fossil fuels.



Pan-European Rail Corridor, Romania

No change has been made this year compared to the previous year, so the base year remains unchanged in 2021.

FCC Construcción has established that the recalculation of the inventory of the base year will be carried out when any of the following cases occur:

- ▶ Changes in operational boundaries leading to significant changes in GHG emissions.
 - ▶ Structural changes at FCC Construcción that have a significant impact on base year GHG emissions.
 - ▶ Changes in GHG quantification methodologies and/or improvement in the accuracy of emission factors leading to significant changes in quantified GHG emissions.
- ▶ Discovery of significant errors or the accumulation of a significant number of minor errors that, in aggregate, have relevant consequences on the total quantified GHG emissions.



QUANTIFICATION METHODOLOGIES

FCC Construcción determines its Greenhouse Gas emissions using a calculation approach, multiplying the activity data collected at each site or premise by the documented GHG emission factors, which are selected and periodically updated at corporate level.

FCC Construcción uses a centralised approach, consolidating the activity data received from each of the sites and premises and quantifying GHG emissions at corporate level, although the information can be disaggregated by site, management, region, country, type of client, type of site, etc.

References are made under the quantification methodologies and GHG emission factors used in the preparation of this report.

SCOPE 1 / CATEGORY 1:

DIRECT GHG EMISSIONS

Emissions associated with fuel consumption.

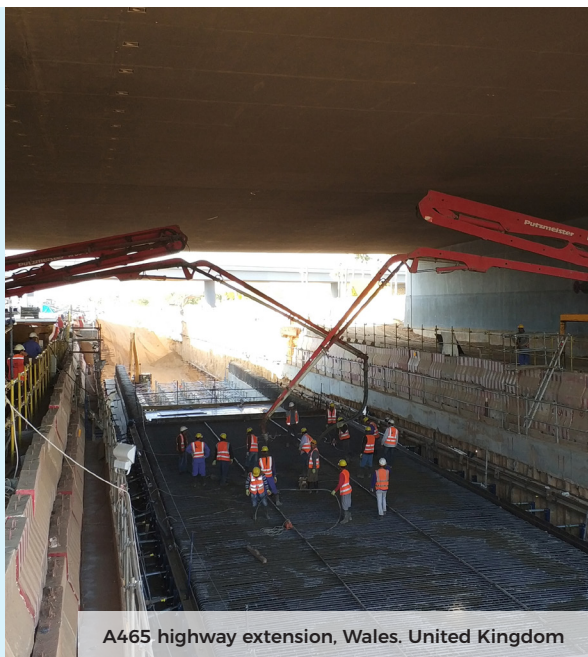
To calculate these emissions, fuel consumption (on site or at the premise), as invoiced to FCC Construcción, is multiplied by the emission factors, which have been calculated based on specific official sources for these fuels and countries. Specifically:

- ▶ For Spain the MITERD Emission Factors (Edition 23, June 2023), the data Emission Factors 2023_ table CFR 2021 (UNFCCC): Table 1.A(b) and Table 2.3. data from IPCC 2006; and data from “Stationary Combustion: Manufacturing and Construction Industries” and Table 2.3. data from the “2006 IPCC Guidelines for National Greenhouse Gas Inventories” have been used.



Line 4-5-6 Metro Riyadh, Saudi Arabia

- ▶ For Portugal data from the Tables of Lower Calorific Value, “*Fator de Emissao e Fator de Oxidacao e Valores de densidade*”, and “*Tabela de densidades combustiveis 2013*” of the Portuguese Environment Agency, data from the CRF 2023 tables (common reporting form) of the GHG inventory 2021 submitted to UNFCCC by Portugal and data from Table 2.3. of the “*2006 IPCC Guidelines for National Greenhouse Gas Inventories*” have been used.
- ▶ For Bulgaria, Romania, Ireland, Belgium, Norway and Canada the data Emission factors 2023_table CFR 2021(UNFCCC): Table 1. These emission factors are in PCI (VCN), and data from Table 2.3. of the “*2006 IPCC Guidelines for National Greenhouse Gas Inventories*”.
- ▶ For the United Kingdom, data from the UK Department for Environment (DEFRA) report “*2022 UK Government GHG Conversion Factors for Company Reporting*” and data from the CRF (Common Reporting Form) tables of the 2021 GHG inventory submitted to the UNFCCC by the United Kingdom have been used.
- ▶ For the Netherlands emission factor data published in “*CO₂ emissiefactoren*”, the “*list of fuels and emission factors*” of the Netherlands Enterprise Agency, data from the CRF tables of the GHG inventory 2021 submitted to the UNFCCC by the Netherlands and data from Table 2.3. of the “*2006 IPCC Guidelines for National Greenhouse Gas Inventories*” have been used.
- ▶ For Nicaragua, Costa Rica, Panama, El Salvador, Qatar and Saudi Arabia, data from Table 2.3. of the “*2006 IPCC Guidelines for National Greenhouse Gas Inventories*” have been used.
- ▶ For Mexico, data from the “*Acuerdo DOF 03/09/2015, que establece las particularidades técnicas y las fórmulas para la aplicación de metodologías*”



A465 highway extension, Wales. United Kingdom



A465 highway extension, Wales. United Kingdom

para el cálculo de emisiones de gases o compuestos de efecto invernadero” and the “Lista de combustibles 2022” published by the Registro Nacional de Emisiones (RENE) of SEMARNAT have been used.

- ▷ For Colombia, data from the carbon calculator of the Ministry of Environment and Sustainable Development of the Republic of Colombia and data from Table 2.3. of the “2006 IPCC Guidelines for National Greenhouse Gas Inventories” have been used.
- ▷ Data from Table 2.3. of the “2006 IPCC Guidelines for National Greenhouse Gas Inventories” have been used for Chile.
- ▷ For Peru, data from the spreadsheet “Infocarbon”, developed by the Peruvian Ministry of Environment, based on the 2006 IPCC Guidelines, have been used.
- ▷ For the United States, data from the document “Emission Factors for Greenhouse Gas Inventories” of the US Environmental Protection Agency (EPA) in its March 2023 version, data from the CRF (Common Reporting Form) tables of the 2021 GHG inventory submitted to the UNFCCC by the United States and data from Table 2.3. of the “2006 IPCC Guidelines for National Greenhouse Gas Inventories” have been used.
- ▷ For Australia, PCI data from “Guide to the Australian Energy Statistics 2022” and densities from “Australian national Greenhouse Accounts 2021”, Table 2.3 IPCC

2006 have been used. Revised 2019 Refinement 2006 IPCC Guidelines (Volume 2 file 19R_V2_2_2_ch02_Stationary_Combustion), no changes from previous version, and from the UK Department of Environment (DEFRA) report “2022 UK Government GHG Conversion Factors for Company Reporting”.

SCOPE 2 / CATEGORY 2:

INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY

Emissions associated with electricity consumption.

To calculate these emissions, the consumption of electrical energy (on site or at the premises), as invoiced to FCC Construcción, is multiplied by the emission factor of the energy generation mix of the corresponding country.

Emission factors for Portugal, Bulgaria, Romania, Ireland, Belgium, the Netherlands, Norway, Nicaragua, Costa Rica, Panama, El Salvador, Colombia, Peru, USA, Canada, Qatar, Australia and Saudi Arabia are taken from the International Energy Agency’s “Statistics - Emissions Factors (2022 Edition)” report. For the remaining countries, specific emission factors from the following local sources have been used:

- ▷ For Spain, the emission factor has been obtained from the “Huella de Carbono de organización – Alcance 1+2 para organizaciones (2011-

2020)” spreadsheet of the *Ministerio para la Transición Ecológica y el Reto Demográfico* (MITERD), version 23 (June 2023).

- ▷ For the UK, the emission factor has been obtained from the UK Department of Environment (DEFRA) report “*2022 UK Government GHG Conversion Factors for Company Reporting*”.
- ▷ For Mexico, the emission factor has been obtained from the publication “*Factor de Emisión del Sistema Eléctrico Nacional 2022*” of the *Registro Nacional de Emisiones (RENE)* of the Government of Mexico.
- ▷ For Chile, the emission factor is taken from the “*Anuario Estadístico de Energía 2022*” of the Ministry of Energy of the Government of Chile.

SCOPE 3:

OTHER INDIRECT EMISSIONS

CATEGORY 3: INDIRECT GHG EMISSIONS FROM TRANSPORTATION

Emissions associated with the transport of consumed materials.

The quantification methodology is based on activity data (consumption data for the different building materials, the distance they travel from the production site to the construction site and the type of transport used) and the emission factors associated with the transport of these materials.

The emission factors associated with transport have been obtained from the Annexes of the UK Department of the Environment (DEFRA) report “*2022UK Government GHG Conversion Factors for Company Reporting*”, except for the Netherlands and the United States, for which specific emission factors from the following local sources have been used:

- ▷ For the Netherlands, the emission factors published in “*CO₂ emissiefactoren*” are used for rail, air and maritime transport types.
- ▷ For the United States, the factors of the US Environmental Protection Agency (EPA) document “*Emission Factors for Greenhouse Gas Inventories*”, version 2023, are used.

Emissions associated with company employees travelling on business trips.

The activity data necessary to calculate these emissions, i.e. the kilometres travelled

by FCC Construcción employees on business trips, are supplied from Corporate, when the tickets are obtained through the company’s corporate platform, or from the Administration Departments in the different countries, when the purchase is made locally. This data is in turn obtained from reports supplied by the different suppliers.

The emission factors associated with the different means of transport (car, coach, local train and plane) are taken from the Annexes of the UK Department of the Environment (DEFRA) report “*2022 UK Government GHG Conversion Factors for Company Reporting*”. Emission factors associated with the transport of employees by train in Spain are obtained from the “*Guia Práctica per al càlcul d'emissions de gasos amb efecte d'hivernacle (geh)*” of the Catalan Office for Climate Change. In the case of the Netherlands and the United States, specific emission factors have been used for the local sources previously detailed in the section on transport of consumed materials.

Emissions associated with employees commuting to the workplace.

The activity data necessary to calculate these emissions, i.e. the kilometres travelled by FCC Construcción employees to get from their homes to the work centre, have been obtained by extrapolating the results of a mobility survey of all the organization’s employees. Based on the answers to the survey, the number of employees per country without a company vehicle and the days of travel in the reporting period, the kilometres travelled in each country and for each type of vehicle used are calculated.

The emission factors associated with the different modes of transport are taken from the Annexes of the UK Department of Environment (DEFRA) report “*2022 UK Government GHG Conversion Factors for Company Reporting*”. In the case of the Netherlands and the United States, specific emission factors have been used for the local sources previously detailed in the section on transport of consumed materials.

CATEGORY 4: INDIRECT EMISSIONS FROM PRODUCTS USED BY AN ORGANIZATION

Emissions associated with the production of materials consumed.

The quantification methodology is based on activity data (consumption data for the different building materials in the reporting period) and emission factors associated with the production of these materials.

The emission factor for the production of materials is extracted from the Ecoinvent 3.8 database using the SimaPro software, developed by PRé Sustainability, and Defra for soils, wood and insulation..

Emissions associated with the execution of subcontracted work units.

To calculate the emissions associated with earthmoving, concrete structure laying, track laying, metal structure laying and asphalt agglomerate laying, an emission factor calculated on the basis of a study by FCC Construcción's Machinery Department is used, which determines the quantity and type of fuel required to carry out a unit of measurement of the different activities, and using the emission factors for fuels from specific official sources for each country, as indicated above (see Scope 1).

Emissions associated with the transport and management of waste and leftover materials.

Emissions associated with the transport and management of waste and leftover materials are calculated by considering as activity data both the volumes of leftover soil and rubble and the weights of municipal solid waste, wood waste and mixed rubble generated, as well as the distances of the same from the construction site or premise to their final destination.

The emission factors associated with transport and landfill have been obtained from the Annexes of the UK Department of the Environment (DEFRA) report "2022 UK Government GHG Conversion Factors for Company Reporting", except for the United States, where specific emission factors from the local sources detailed previously in the section on transport of consumed materials have been used.

Emissions associated with purchased energy-related activities.

These emissions are obtained as the product of electricity and fuel consumption by an electricity distribution loss factor and by an emission factor associated with the production of fuels, respectively. The energy emission factor is taken from the International Energy Agency's "Statistics - Emissions Factors (2022 Edition)" report for energy losses, except for the UK, where the factor is taken from the "Transmission and distribution" sheet of the UK Department of Environment (DEFRA) report "2022 UK Government GHG Conversion Factors for Company Reporting". The emission factor for fuel production is taken from UK (DEFRA) "2022 UK Government GHG Conversion Factors for Company Reporting".

Emissions associated with the consumption of water from the supply network.

These emissions are obtained as a product of the water consumption of the supply network and by an emission factor which is taken from UK (DEFRA) "2022 UK Government GHG Conversion Factors for Company Reporting" - "Water supply" - cubic meters - water supply.

DECLARATION IN ACCORDANCE OF AENOR





**AENOR Verification Statement for
FCC CONSTRUCCIÓN, S.A.
of the Greenhouse Gas Emission Inventory
for 2022**

FILE: 1994/0112/HCO/01

Introduction

FCC CONSTRUCCIÓN, S.A. (hereinafter the company) has commissioned AENOR INTERNACIONAL, S.A.U. (AENOR) to carry out a limited review of the Greenhouse Gas (GHG) Emissions Inventory for 2022 of its activities included in the GHG report dated on 14 July 2023, which is part of this Declaration.

AENOR is accredited by the Mexican Accreditation Entity, with number OVVG EI 004/14 (in force as of 31/10/2014; update date 19/04/2023), in accordance with the ISO 14065:2020 standard, for the verification of greenhouse gas emissions in accordance with the requirements established in the ISO 14064-3:2019 standard for the energy and waste sectors.

Inventory of GHG emissions issued by the Organisation: FCC CONSTRUCCIÓN S.A., with registered office at AV CAMINO DE SANTIAGO, 40. 28050 - MADRID.

Representatives of the Organisation: Quality and CSR Manager of FCC CONSTRUCCIÓN S.A.

FCC CONSTRUCCIÓN S.A. was responsible for reporting its GHG emissions in accordance with the reference standard UNE-EN ISO 14064-1:2019.

Target

The objective of the verification is to provide interested parties with a professional and independent judgement of the information and data contained in the FCC CONSTRUCCIÓN, S.A. GHG Report mentioned before.

Scope of Verification

The scope of the verification is established for the activities provided by the company in **Spain, Peru, Panama, Portugal, Bulgaria, Romania, Nicaragua, Costa Rica, El Salvador, Mexico, Colombia, Chile, the United Kingdom, Ireland, the Netherlands, Belgium, Norway, the United States, Canada, Qatar, Saudi Arabia** and **Australia** at its facilities. Facilities are understood to be works and premises, including offices, warehouses and machinery parks.

All greenhouse gases emitted by the organisation have been considered. The FCC Construcción emissions inventory includes emissions of CO₂, CH₄ and N₂O

During the verification, the information was analysed according to the operational control approach established in the UNE-EN ISO 14064-1:2019 standard. In other words, the company reports all GHG emissions attributable to the operations over which it exercises control.

Direct activities, indirect activities and exclusions from verification

The activities subject to verification are set out in 6 categories (following the guidelines of ISO 14064-1), which are:

- **Category 1: Direct GHG emissions and removals.**
Emissions associated with fuel consumption at projects.
Emissions associated with fuel consumption at premises.

- **Category 2: Indirect GHG emissions from imported energy**
They include emissions from the generation of electricity purchased by FCC Construcción. They are broken down into:

Emissions associated with electricity consumption at projects.
Emissions associated with electricity consumption at premises.

- **Category 3: Indirect GHG emissions from transport**
Emissions associated with the transport of materials consumed upstream: This includes the transport to the site of concrete, asphalt agglomerate, soils, aggregates, steel, non-ferrous metals, bricks, glass and cement.

Emissions associated with employee's business trips.
Emissions associated with employee's commuting to the workplace.

- **Category 4: Indirect GHG emissions from products used by the organisation**
Emissions associated with the production of consumed materials: Emissions from the manufacture of concrete, asphalt agglomerate, soils, steel, non-ferrous metals, bricks, glass, cement and insulation are considered.

Emissions associated with the execution of subcontracted work units: earth-moving works, concrete pouring, steel rail laying, asphalt concrete spreading and metal structure placement.

Emissions associated with the transport and management of waste and leftover materials: Emissions associated with the transport of surplus soil and clean surplus rubble and emissions associated with the transport and landfill of municipal solid waste, wood waste and mixed rubble are considered

Emissions from losses during the transport and distribution of electricity.
Emissions associated with the consumption of water from the supply network

- **Category 5: Indirect GHG emissions associated with the organisation's use of products**
The organisation has not identified any emissions associated with this category.



- **Category 6: Indirect GHG emissions from other sources**

The organisation has not identified any emissions associated with this category.

Exclusions

FCC Construcción has decided to exclude from the quantification the fugitive emissions from the air conditioning equipment over which it has control, as these have a low representativeness (<1%) with respect to total emissions.

Targeted actions

The company has presented the quantification of the Greenhouse Gas emissions avoided in 2022 due to the implementation of good practices on site. These actions that have been considered are as follows:

- for reusing the material on site and not taking it to a landfill site
- by pH neutralisation with CO₂
- for proper maintenance of machinery operating on site
- for speed control of vehicles on construction sites
- for self-produced electricity from renewable sources for self-consumption

Base year

The organisation has set 2021 as the base year.

Relative importance

For the verification it was agreed to consider as material discrepancies those omissions, distortions or errors that can be quantified and result in a difference of more than 7% with respect to the total declared emissions.

Criteria

The criteria and information taken into account for the verification were as follows:

- 1) ISO 14064-1:2018: Specification with guidance, at the organisation level, for the quantification and reporting of greenhouse gas emissions and removals.
- 2) ISO 14064-3:2019: Specification with guidance for the validation and verification of greenhouse gas declarations
- 3) Guidelines of the ENCORD - European Network of Construction Companies for Research and Development.
- 4) Basic guide for the quantification of greenhouse gas emissions, version 9.
- 5) Guidance for the calculation of greenhouse gas emissions in fcc construcción, version 21

Finally, the Emissions Report prepared by the organisation dated 14 July 2023 was verified. AENOR expressly disclaims any liability for decisions, investment or otherwise, based on this statement.

Conclusion



There is no evidence to suggest that the information on emissions reported in the FCC CONSTRUCCIÓN, S.A. Greenhouse Gas Report 2022 is not a faithful representation of the emissions from its activities.

In accordance with this Declaration, the data on emissions and reductions finally verified, for FCC Construcción in total and for each of the countries, are listed below.

TOTAL DATA FCC CONSTRUCTION

Emissions TOTAL FCC CONSTRUCTION	t CO2e
CATEGORY 1 Direct GHG emissions and removals	37.371,85
Direct emissions associated with fuel consumption at projects	36.031,07
Direct emissions associated with fuel consumption at premises	1.340,78
CATEGORY 2 Indirect GHG emissions from imported energy	3.353,14
Indirect GHG emissions from imported electricity associated with on-site electricity consumption	2.718,35
Indirect GHG emissions from imported electricity associated with electricity consumption at premises	634,79
Emissions associated with the consumption of electrical energy for vehicles	0
CATEGORY 3 Indirect GHG emissions from transport	29.934,00
Emissions caused by transport of upstream materials	22.600,14
Emissions caused by employees commuting to the workplace	4.043,44
Emissions caused by employee's business travel	3.290,42
CATEGORY 4 Indirect GHG emissions by products used by the organisation	523.944,36
Emissions associated with the production of consumed materials	476.737,96
Emissions associated with the execution of subcontracted work units	20.995,27
Emissions from transport and management of waste and leftover materials	16.243,51
Emissions associated with purchased energy-related activities	9.927,21
Emissions associated with the consumption of water from the supply network	40,41
Total Emissions:	594.603,35



TOTAL FCC CONSTRUCTION (according to ENCORD reference frame)		t CO2e
Construction		
1. Fuels (construction site)		36.031,07
2. Fuels (fixed sites)		1.340,78
3. Fugitive and process emissions (excluded emissions)		0,00
4. Electrical energy (construction site)		2.718,35
5. Electric power (fixed sites)		634,79
6. Heat		0,00
7. Vehicle fuels		3.977,91
8. Displacement of company staff		3.355,95
9. Subcontractors		20.995,27
10. Waste		16.243,51
11. Materials		499.338,10
Total Emissions		584.635,73

AVOIDED EMISSIONS (MITIGATION ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCTION		t CO2e
for reusing the material on site and not taking it to a landfill site		12.009,12
by pH neutralisation with CO2		0,00
for proper maintenance of machinery operating on site		690,46
for speed control of vehicles on construction sites		71,29
for self-produced electricity from renewable sources		5,59
Total Emissions		12.776,46

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Emissions, classified by categories and scopes (according to UNE-ISO 14064-1:2019)	t CO2e - 2022 SPAIN	t CO2e - 2022 PORTUGAL	t CO2e - 2022 BULGARIA	t CO2e - 2022 ROMANIA	t CO2e - 2022 UNITED KINGDOM	t CO2e - 2022 IRELAND	t CO2e - 2022 BELGIUM	t CO2e - 2022 NORWAY	t CO2e - 2022 NETHERLANDS
Scope 1 / Category 1: Direct GHG emissions and removals	8.491,75	816,99	0,00	2.979,94	343,95	0,00	660,48	0,00	110,37
emissions associated with fuel used at projects	7.992,11	733,17	0,00	2.621,99	331,50	0,00	660,48	0,00	110,37
emissions associated with fuel consumption at premises	499,64	83,82	0,00	357,95	12,45	0,00	0,00	0,00	0,00
Scope 2 /Category 2: Indirect GHG emissions caused by imported energy	1.051,49	21,97	1,97	257,62	67,30	0,00	533,63	1,10	122,51
emissions associated with electricity used at projects	677,56	16,64	0,00	231,01	58,54	0,00	533,63	1,10	122,51
emissions associated with electricity consumption at premises	373,93	5,33	1,97	26,61	8,76	0,00	0,00	0,00	0,00
associated with the consumption of electrical energy for vehicles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Scope 3	284.784,39	6.001,69	0,56	70.724,69	20.140,30	33,95	365,56	92,83	32.279,88
Category 3: Indirect GHG emissions from transportation	7.842,51	475,13	0,01	13.253,76	1.723,34	33,95	82,39	92,00	2.356,08
associated with employee's business travel	781,35	0,74	0,00	85,75	61,96	27,44	44,92	85,17	100,32
associated with employees commuting to the workplace	2.199,74	286,48	0,00	417,95	455,26	6,51	4,96	6,83	0,00
associated with the transport of consumed materials	4.861,42	187,91	0,01	12.750,06	1.206,12	0,00	32,51	0,00	2.255,76
Category 4: indirect emissions from products used by the organisation	276.941,88	5.526,56	0,55	57.470,93	18.416,96	0,00	283,17	0,83	29.923,80
associated with the production of consumed materials	248.874,79	5.262,40	0,42	54.072,42	16.343,98	0,00	91,62	0,00	26.698,33
associated with the execution of subcontracted works units	13.313,08	49,68	0,00	1.633,71	744,15	0,00	10,97	0,00	3.080,76
associated with acquired energy-related activities	2.107,49	210,48	0,13	711,74	1.147,94	0,00	138,00	0,73	23,81
associated with the transport and management of waste and surplus materials	12.626,08	3,44	0,00	1.052,46	180,54	0,00	42,58	0,00	120,90
Associated with the consumption of water from the supply network	20,44	0,56	0,00	0,60	0,35	0,00	0,00	0,10	0,00
Total Emissions	294.327,63	6.840,65	2,53	73.962,25	20.551,55	33,95	1.559,67	93,93	32.512,76

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Emissions, classified by categories and scopes (according to UNE-ISO 14064-1:2019)	t CO2e - 2022 NICARAGUA	t CO2e - 2022 COSTA RICA	t CO2e - 2022 PANAMA	t CO2e - 2022 EL SALVADOR	t CO2e - 2022 MEXICO	t CO2e - 2022 COLOMBIA	t CO2e - 2022 CHILE	t CO2e - 2022 PERU	t CO2e - 2022 USA	t CO2e - 2022 CANADA	t CO2e - 2022 CATAR	t CO2e - 2022 AUSTRALIA	t CO2e - 2022 SAUDI ARABIA	t CO2e - 2022 (Report) TOTAL
Scope 1 / Category 1: Direct GHG emissions and removals	74,04	8,84	268,32	0,00	6,52	2,07	1.218,82	2.677,48	0,00	0,00	0,00	0,00	19.712,28	37.371,85
emissions associated with fuel used at projects	0,00	0,00	0,00	0,00	0,00	0,00	1.206,72	2.662,45	0,00	0,00	0,00	0,00	19.712,28	36.031,07
emissions associated with fuel consumption at premises	74,04	8,84	268,32	0,00	6,52	2,07	12,10	15,03	0,00	0,00	0,00	0,00	0,00	1.340,78
Scope 2 / Category 2: Indirect GHG emissions caused by imported energy	6,58	0,17	166,19	0,06	5,42	1,75	57,80	960,86	11,11	0,60	0,00	17,78	67,23	3.353,14
emissions associated with electricity used at projects	0,00	0,00	0,00	0,00	0,00	0,00	51,01	959,12	0,00	0,00	0,00	0,00	67,23	2.718,35
emissions associated with electricity consumption at premises	6,58	0,17	166,19	0,06	5,42	1,75	6,79	1,74	11,11	0,60	0,00	17,78	0,00	634,79
associated with the consumption of electrical energy for vehicles	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Scope 3	50,66	6,44	269,18	2,14	104,88	89,14	62.160,20	66.020,67	86,92	339,86	27,90	106,95	10.189,57	553.878,36
Category 3: Indirect GHG emissions from transportation	30,46	4,27	176,16	2,13	102,74	88,48	934,31	637,44	86,38	339,83	27,90	106,13	1.538,60	29.934,00
associated with employee's business travel	0,00	0,00	123,19	0,00	70,58	36,66	258,66	328,75	86,38	259,98	19,03	98,63	820,91	3.290,42
associated with employees commuting to the workplace	30,46	4,27	52,97	2,13	32,16	51,82	87,57	11,09	0,00	79,85	8,87	7,50	297,02	4.043,44
associated with the transport of consumed materials	0,00	0,00	0,00	0,00	0,00	0,00	588,08	297,60	0,00	0,00	0,00	0,00	420,67	22.600,14
Category 4: Indirect emissions from products used by the organisation	20,20	2,17	93,02	0,01	2,14	0,66	61.225,89	65.383,23	0,54	0,03	0,00	0,82	8.650,97	523.944,36
associated with the production of consumed materials	0,00	0,00	0,00	0,00	0,00	0,00	59.277,24	61.988,84	0,00	0,00	0,00	0,00	4.127,92	476.737,96
associated with the execution of subcontracted works units	0,00	0,00	0,00	0,00	0,00	0,00	666,41	1.452,17	0,00	0,00	0,00	0,00	44,34	20.995,27
associated with acquired energy-related activities	18,63	2,17	80,28	0,01	2,14	0,66	279,27	728,79	0,52	0,03	0,00	0,79	4.473,60	9.927,21
associated with the transport and management of waste and surplus materials	1,57	0,00	12,66	0,00	0,00	0,00	1.001,89	1.196,28	0,00	0,00	0,00	0,00	5,11	16.243,51
Associated with the consumption of water from the supply network	0,00	0,00	0,08	0,00	0,00	0,00	1,08	17,15	0,02	0,00	0,00	0,03	0,00	40,41
Total Emissions	131,28	15,45	703,69	2,20	116,82	92,96	63.436,82	69.659,01	98,03	340,46	27,90	124,73	29.969,08	594.603,35

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Emissions , Classified by Emission Blocks (according to ENCORD referential)	1. Fuels (construction site)	2. Fuels (fixed sites)	3. Fugitive and process emissions	4. Electrical energy (construction site)	5. Electric power (fixed sites)	6. Heat	7. Vehicle fuels	8. Public transport	9. Subcontractors	10. Waste	11. Materials	Total Emissions
Spain	7.992,11	499,64	0,00	677,56	373,93	0,00	2.281,46	699,63	13.313,08	12.626,08	253.736,21	292.199,70
Portugal	733,17	83,82	0,00	16,64	5,33	0,00	282,91	4,31	49,68	3,44	5.450,31	6.629,61
Bulgaria	0,00	0,00	0,00	0,00	1,97	0,00	0,00	0,00	0,00	0,00	0,43	2,40
Romania	2.621,99	357,95	0,00	231,01	26,61	0,00	418,21	85,49	1.633,71	1.052,46	66.822,48	73.249,91
United Kingdom	331,50	12,45	0,00	58,54	8,76	0,00	436,00	81,22	744,15	180,54	17.550,10	19.403,26
Ireland	0,00	0,00	0,00	0,00	0,00	0,00	6,50	27,45	0,00	0,00	0,00	33,95
Belgium	660,48	0,00	0,00	533,63	0,00	0,00	5,00	44,88	10,97	42,58	124,13	1.421,67
Norway	0,00	0,00	0,00	1,10	0,00	0,00	0,42	91,58	0,00	0,00	0,00	93,10
The Netherlands	110,37	0,00	0,00	122,51	0,00	0,00	8,34	91,98	3.080,76	120,90	28.954,09	32.488,95
Nicaragua	0,00	74,04	0,00	0,00	6,58	0,00	30,50	-0,04	0,00	1,57	0,00	112,65
Costa Rica	0,00	8,84	0,00	0,00	0,17	0,00	4,27	0,00	0,00	0,00	0,00	13,28
Panama	0,00	268,32	0,00	0,00	166,19	0,00	53,59	122,57	0,00	12,66	0,00	623,33
El Salvador	0,00	0,00	0,00	0,00	0,06	0,00	2,13	0,00	0,00	0,00	0,00	2,19
Mexico	0,00	6,52	0,00	0,00	5,42	0,00	30,00	72,74	0,00	0,00	0,00	114,68
Colombia	0,00	2,07	0,00	0,00	1,75	0,00	51,80	36,68	0,00	0,00	0,00	92,30
Chile	1.206,72	12,10	0,00	51,01	6,79	0,00	71,50	274,73	666,41	1.001,89	59.865,32	63.156,47
Peru	2.662,45	15,03	0,00	959,12	1,74	0,00	9,02	330,82	1.452,17	1.196,28	62.286,44	68.913,07
United States	0,00	0,00	0,00	0,00	11,11	0,00	0,00	86,38	0,00	0,00	0,00	97,49
Canada	0,00	0,00	0,00	0,00	0,60	0,00	71,69	268,14	0,00	0,00	0,00	340,43
Qatar	0,00	0,00	0,00	0,00	0,00	0,00	8,87	19,03	0,00	0,00	0,00	27,90
Australia	0,00	0,00	0,00	0,00	17,78	0,00	5,83	100,30	0,00	0,00	0,00	123,91
Saudi Arabia	19.712,28	0,00	0,00	67,23	0,00	0,00	199,88	918,05	44,34	5,11	4.548,59	25.495,48
TOTAL	36.031,07	1.340,78	0,00	2.718,35	634,79	0,00	3.977,91	3.355,95	20.995,27	16.243,51	499.338,10	584.635,73



AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

Avoided Emissions	t CO ₂ e 2022					TOTAL EMISSIONS
	for reusing the material on site and not taking it to a landfill site	by pH neutralisation with CO ₂	for proper maintenance of machinery operating on site	for speed control of vehicles on construction sites	for self-produced electricity from renewable sources	
Spain	10.023,22	0,00	322,13	58,07	5,59	10.409,01
Portugal	18,12	0,00	13,04	0,11	0,00	31,27
Bulgaria	0,00	0,00	0,00	0,00	0,00	0,00
Romania	193,15	0,00	132,90	1,21	0,00	327,26
United Kingdom	634,45	0,00	0,00	3,36	0,00	637,81
Ireland	0,00	0,00	0,00	0,00	0,00	0,00
Belgium	11,18	0,00	0,00	0,06	0,00	11,24
Norway	0,00	0,00	0,00	0,00	0,00	0,00
The Netherlands	1.121,15	0,00	5,81	5,93	0,00	1.132,89
Nicaragua	0,00	0,00	3,90	0,00	0,00	3,90
Costa Rica	0,00	0,00	0,00	0,00	0,00	0,00
Panama	0,00	0,00	9,04	0,00	0,00	9,04
El Salvador	0,00	0,00	0,00	0,00	0,00	0,00
Mexico	0,00	0,00	0,00	0,00	0,00	0,00
Colombia	0,00	0,00	0,00	0,00	0,00	0,00
Chile	7,85	0,00	63,51	2,54	0,00	73,90
Peru	0,00	0,00	140,13	0,00	0,00	140,13
United States	0,00	0,00	0,00	0,00	0,00	0,00
Canada	0,00	0,00	0,00	0,00	0,00	0,00
Qatar	0,00	0,00	0,00	0,00	0,00	0,00
Saudi Arabia	0,00	0,00	0,00	0,00	0,00	0,00
Australia	0,00	0,00	0,00	0,01	0,00	0,01
Total FCC Construcción	12.009,12	0,00	690,46	71,29	5,59	12.776,46

Madrid, 21 July 2023

D. Rafael García Meiro
CEO