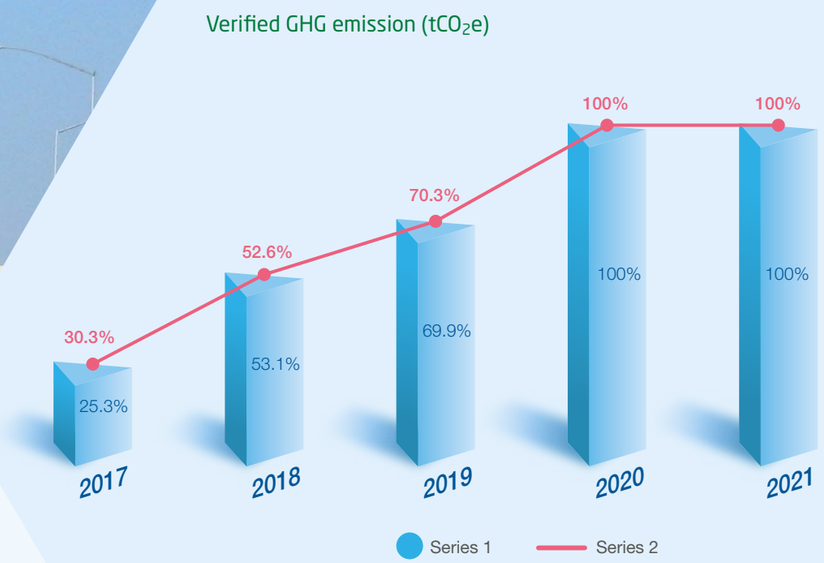
Construcción

Greenhouse Gas Emissions Report

2021

Gerald Desmond bridge (USA)



1 FCC Construcción's commitment

FCC Construcción, currently operating in 22 countries and with an experience of activity and service of more than 120 years, is the construction company within the FCC Group. Being a benchmark company, its activities cover all fields of engineering and construction in the national and international markets. The main projects are the execution of civil infrastructures and buildings, both residential and non-residential (sports, health, cultural, etc.). The Infrastructure area of FCC Group has proven experience in the development of concession projects and has a group of companies in the industrial sector including other activities related to construction (infrastructure maintenance, prefabrication, installations, etc.).

2021 has been a year marked by the end of the pandemic and its economic impacts, where the human dependence on the environment has been highlighted. Decarbonization is one of the main axes of the evolution of economies, and it's based on a responsible and an environmentally conscious behavior. This fact has encouraged FCC Construcción to go forward and broaden its already robust protocol for the quantification and elaboration of the Greenhouse Gas (GHG) emissions inventory, as well as the creation of a Climate Change Strategy.

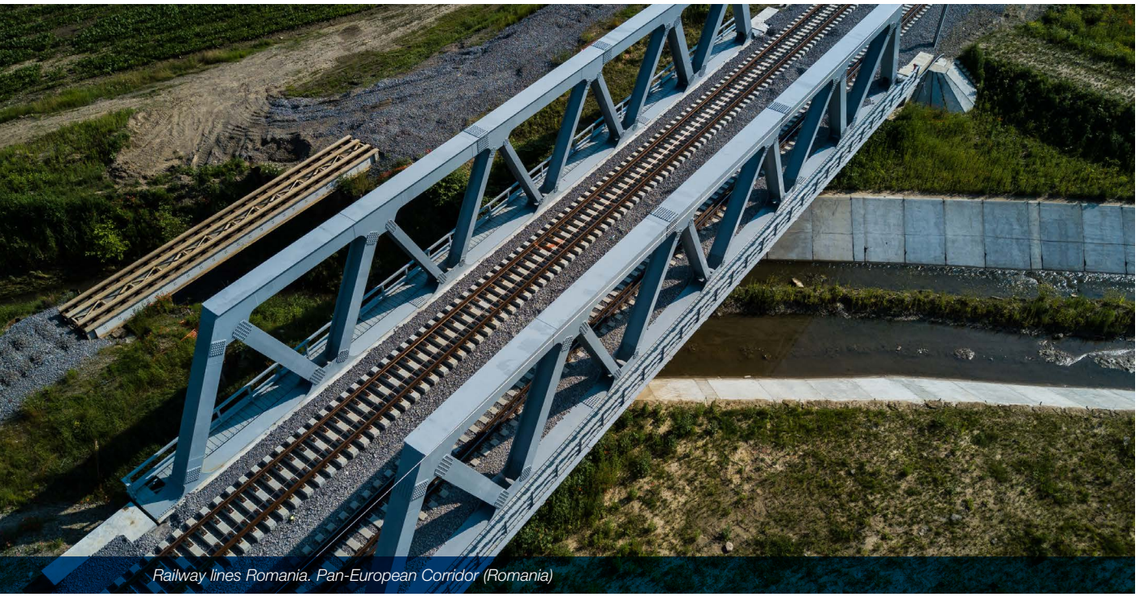
Therefore, FCC Construcción informs its interested parties about its environmental performance with regard to climate change, taking into account two main fronts. **Adaptation**, intrinsic to our business activity, where greatest efforts are being made, but also proving outstanding results; and **mitigation**, where FCC Construcción is also undertaking efforts and initiatives to obtain the best outcome that will lead us to zero emissions in 2050.

This report quantifies the company's emissions and verifies them in accordance with externally verified procedures, covering all the activities that have been considered material and the 100% of the countries in which FCC Construcción operates.

FCC Construcción is currently developing a new Climate Change Strategy that fulfils one of the objectives established by the company within the 2021-2024 **Management Objectives**, demonstrating the necessary efforts to achieve carbon neutrality in 2050. After last year verification of 100% of the activity and the preparation and implementation of its Climate Change strategy, FCC Construcción lays the groundwork to accomplish one of the main environmental challenges that society faces today and also promotes the principles of responsibility and commitment to Global Warming.

The countries accounted for in this report that quantify and verify their GHG emissions in the 2021 fiscal year 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.

In order to be able to carry out the verification of all the activity, the organization has carried out extensive communication and dissemination work about the importance of footprint calculation and the need to direct production processes towards footprint reduction. Part of the work associated with the preparation of this report are, for example, the elaboration of calculation methodologies, the collection of production data and the specific emission factors, the implementation guides or the



Railway lines Romania. Pan-European Corridor (Romania)

Santa Bárbara hospital, Soria (Spain)

OBJETIVOS DE DESARROLLO SOSTENIBLE

adaptation of the company's IT resources. On the other hand, further activities are also key to achieving FCC Construcción objectives, such as internal communication, which is needed to raise awareness, developing mitigation actions, and establishing internal controls to ensure the quality of the inventory activity data.

This achievement represents the culmination of a journey that began in 2010, when FCC Construcción integrated the concept of climate change into the organization, designing and implementing an innovative protocol for the quantification of Greenhouse Gas emissions in construction, therefore, **becoming the first Spanish company in the sector to submit its emissions to external verification by AENOR**. Since then, the company has been preparing and verifying its Greenhouse Gas emissions annually, progressively extending its scope in successive years and expanding its geographical limits, until it has been fully completed in 2021. In addition, FCC Construcción has, since 2021, AENOR's Environmental certificate "CO_2 verified", which accredits both the veracity of the Carbon Footprint calculation and the inclusion of GHG management in the organisation's system and strategy. This initiative was awarded with a prize 2012 in the "Management for sustainable development" category of the European Environment Awards, granted by the "Fundación Entorno".

But the culmination of an achievement is not so much the end of one path, as the beginning of another. As a global company, FCC Construcción is aware of the importance of tackling climate change and transitioning to a low-carbon economy, which is a process that cannot be suspended. The challenges that arise are urgent and are closely related to the achievement of the Sustainable Development Goals, so, the society's response cannot be delayed.

Likewise, in the permanent transparency exercise to which we are committed, FCC Construcción registers every year its verified emissions in the "Carbon footprint, offsetting and carbon sequestration project Register" since it was first established in 2014 by the Spanish Ministry for Ecological Transition. With this action, FCC Construcción was the first construction company to appear on this public list. For the carbon footprint from 2015 to 2020, uninterruptedly, we obtained the "Calculate and Reduce" label of the government, which, in addition to granting recognition and acknowledging the fact of being able to quantify and verify our Greenhouse Gas emissions, distinguishes the company as one of the organisations that reduce its carbon footprint effectively. The company's commitment to reducing emissions is also reflected in the "Community #ForClimate" platform, which we joined in 2016, following the Paris Agreement.

In addition, since 2017, FCC Construcción has reported information related to climate change in line with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TFCD)[1]. The TFCD report develops a framework to help companies understand and quantify the risks and opportunities related to climate change, structuring the climate change developments into four main blocks: "Governance", "Strategy", "Risk Management" and "Metrics and Targets".

Climate change is a major problem with repercussions over time, with constant effects that could last for decades, and not only on an environmental level (from a climatic perspective, 2020 was the warmest year, in Spain, along with 2016). Last year, 2021 was, once again, a year of climate disasters (droughts, floods, heat waves, tornadoes, hurricanes, forest fires, etc.). There is no ranking, but 2021 has been a year with a great variety and quantity of events, making it one of the most catastrophic years in recent decades. At FCC Construcción we are perfectly aware of the importance of the fight against climate change and, although we have come a long way, this is just the beginning. We need to go further and promote a respectful business model that increases the use of resources efficiency, reduces the energy demand, works on a circular economy model, proposes a progressive replacement of fossil fuels with alternative energies, and designs resilient infrastructures that withstand the expected effects of climate change. We are in the process of decarbonising our activity because we want and must reach carbon neutrality by 2050. In terms of adaptation, it will be essential to build infrastructures that respond to the requirements of the coming years, but it will also be necessary to adapt existing infrastructures to make them capable of withstanding the pressures that were not contemplated in their design. Although this is a challenge it is also a huge opportunity on a global scale, backed by different investment entities and

[1] Task Force on Climate Related Financial Disclosures (TFCD).

Haren Prison (Belgium)

multilateral gencies. Besides, the taxonomy exercise is a clear step forward and a major push to guide the activity of the company, the sector, and the global economy in the right direction.

Our new challenges in the short-midterm are to set ambitious reduction targets, based on the Science Based Target Initiative[2], but, above all, to work along the lines of adaptation to climate change, assessing the impacts and analysing the vulnerability and opportunities of our company in all the communities where we operate and adapting the environment to the consequences of the inevitable global warming.

This report includes the **2021** Greenhouse Gas Inventory for 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 (Area V), nor by the company Áridos de Melo. This report is the responsibility of the Director of Quality, CSR and R+D+I.

The report has been produced in accordance with the requirements of UNE-EN- ISO 14064-1:2019 *"Greenhouse gases. Specification with guidance at the of organisation level for quantification and reporting of greenhouse gas emissions and removals"* and with the guidelines of the European Network of Construction Companies for Research and Development (hereinafter, ENCORD), in its May 2012 edition: *"Construction CO_2 Measurement Protocol"*. This document has been awarded the "Built on GHG Protocol" logo, making it the sectoral GHG guideline for construction.

Compared to the previous Standard UNE-EN-ISO 14064-1, organisations must prepare and comply with a process to determine which indirect emissions are to 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, lastly, identify and document significant indirect emissions separately. FCC Construcción, with the support of a consultancy service, has carried out a materiality analysis in 2021 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).

[2] The SBTi initiative, led by CDP, UN Global Compact, World Resources Institute (WRI), WWF and We Mean Business, aims to help companies set science-based climate targets to reduce greenhouse gas emissions and limit global warming to below 2°C, taking advantage of opportunities during the transition to a low-carbon economy.

Airbus corporate headquarters, Madrid (Spain)

2 Organisational boundaries, operational boundaries and exclusions

2.1. Organisational boundaries

The calculation of FCC Construcción's Greenhouse Gas Emissions is carried out under the operational control approach, which is the most appropriate for the activities of the construction sector. For the quantification of Scope 1 and Scope 2 emissions (emissions associated with fuel and 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 2021 GHG inventory contains data of all centres 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, with centres being understood as construction sites and premises (among which we distinguish offices, warehouses and plant storage/maintenance facilities).

2.2. Operational limits

Emissions from centres within the organisational boundaries of FCC Construcción are quantified, assuming the following scopes, and categories established by the new standard 14064-1:2019:

Scope 1: Direct GHG emissions and removals (Category 1)

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 can be dissagregated into:

- Emissions associated with fuel used at projects (construction sites).
- Emissions associated with fuel consumption at premises (offices, warehouses, plant storage/ maintenance facilities).

North Runway. Dublin Airport (Ireland)

Scope 2: Indirect GHG emissions (Category 2)

Scope 2 emissions derive from the company's activity but occur at the facility where the electricity is generated. They include 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 used at premises.

Scope 3: Other indirect emissions

These emissions are consequenced of the company's activities but produced at 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 of the new ISO 14064-1:2019 standard:

- Emissions associated with employee business travel. **(category 3)**

  They include emissions associated with business travel of employees located in all the countries considered in the emissions report.

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

  They include emissions associated with employees commuting to the workplace in all countries considered in the emissions report.

- Emissions associated with the transport of consumed materials **(category 3)**

  They include emissions from the transport to the site of: concrete, asphalt agglomerate, steel, non-ferrous metals, bricks, glass, soil, aggregates and insulation.

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

  They include emissions from the manufacture of: concrete, asphalt concrete, reinforcement steel, structural steel, steel rail, non-ferrous metals, bricks, glass, insulation, earth extraction and production of aggregates.

- 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.

- Indirect emissions associated with purchased energy activities. **(category 4)**

  They include emissions associated with the production of energy consumption and emissions from losses during the transport and distribution of electricity.

- Emissions associated with the transport and management of waste and surplus materials. **(category 4)**

  They include emissions associated with the transport of surplus soil and clean rubble and emissions associated with the transport and landfill of municipal solid waste, wood waste and mixed rubble.

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

Information broadcasts:

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

- Emissions associated with the consumption of biofuels used at projects.
- Emissions associated with the consumption of biofuels used at premises.

2.3. Materiality analysis and exclusions

FCC Construcción in 2021 has carried out a materiality analysis with the support of an external consultant with the ultimate aim of improving the calculation of its Carbon Footprint and verifying it under the requirements of the UNE-EN-ISO 14064-1 Standard.

FCC Construcción was already carrying out the accounting of the main raw materials: concrete, asphalt agglomerate, soils, aggregates, steel, non-ferrous metals, bricks and glass. Based on the priority categories defined by ENCORD: Ferrous metals (i.e., structural and reinforcement steel); Non-ferrous metals (i.e., aluminium cladding); Cement (as used in concrete and concrete products); Brick (ceramics as produced by firing in a kiln); Glass; Insulation (from non-renewable materials); Gypsum based products (as used in plasterboard); Bituminous products (i.e., asphalt). Two categories are identified which have not been counted before and are considered a priority by ENCORD, these categories are insulation and gypsum.

The materiality study analyses the relative impact of these two materials in order to identify whether their contribution is significant or negligible. This is done by studying their total contribution in terms of quantity of materials and emission factors.

Following this analysis, the need to include the emissions associated with the consumption of insulation is determined to be significant for the activity.

FCC Construcción has decided to exclude from the quantification any fugitive emissions from the air conditioning equipments controlled by the company, given its low representativeness (less than 0.35%) with regard to the total emissions released by the company.

Abu Rawash Wastewater Treatment Plant (Egypt)

3 Uncertainty and maximum materiality

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

The emission factors deployed to draw up FCC Construcción Greenhouse Gas Inventory are obtained from official sources and are specific for each emission source category. These emission factors are selected aiming to reduce 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 derived from invoicing data, delivery notes, measurements, and construction project data. Based on the supplementary guidance document on uncertainty assessment *("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.

4 Quantification of emissions

This section presents the quantification of FCC Construcción's Greenhouse Gas Emissions in 2021, specifying the GHG emissions from 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.

Firstly, emissions are classified by scope, as defined in the UNE-EN-ISO 14064:2019 standard.

A-465 Wales (UK)

Emissions classified by Scope (according to UNE-ISO 14064-1:2019) (t CO_2e)

	Spain	Portugal	Bulgaria	Romania	United Kingdom	Ireland	Belgium	Norway	Netherlands	Nicaragua	Costa Rica	Panama
Scope 1, Category 1: Direct GHG emissions and removals	**7,384.75**	**1,877.04**	**3.04**	**4,374.78**	**136.61**	**0.00**	**616.73**	**11.91**	**14.35**	**76.01**	**11.27**	**1,318.27**
Emissions associated with fuel used at projects	6,969.85	1,121.63	0.00	3,979.61	107.07	0.00	616.73	11.91	14.35	0.00	0.00	64.93
Emissions associated with fuel consumption at premises	414.90	755.41	3.04	395.17	29.54	0.00	0.00	0.00	0.00	76.01	11.27	1,253.34
Scope 2, Category 2: Indirect GHG emissions from imported energy	**1,039.54**	**67.63**	**4.34**	**389.61**	**42.23**	**0.00**	**357.78**	**0.00**	**0.00**	**11.55**	**0.09**	**554.47**
Emissions associated with electricity used at projects	633.56	58.31	0.00	376.24	41.22	0.00	357.78	0.00	0.00	0.00	0.00	26.33
Emissions associated with electricity consumption at premises	405.98	9.32	4.34	13.37	1.01	0.00	0.00	0.00	0.00	11.55	0.09	528.14
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
Scope 3	**324,022.66**	**4,688.67**	**17.67**	**63,879.82**	**1,946.37**	**16.94**	**7,701.31**	**57.37**	**10,213.95**	**71.99**	**7.55**	**1,466.53**
Category 3: Indirect GHG emissions from transportation	**8,757.10**	**650.27**	**16.46**	**7,116.34**	**283.36**	**16.94**	**360.86**	**54.34**	**4,944.71**	**51.37**	**4.75**	**958.50**
Associated with employee's business travel	495.97	1.84	5.95	100.76	21.92	10.58	35.17	43.32	84.93	0.34	0.00	158.86
Associated with employees commuting to the workplace	1,814.45	204.22	10.50	1,215.93	77.99	6.36	21.44	11.02	8.99	51.03	4.75	765.83
Associated with the transport of consumed materials	6,446.68	444.21	0.01	5,799.65	183.45	0.00	304.25	0.00	4,850.79	0.00	0.00	33.81
Category 4: indirect emissions from products used by an organization	**315,265.56**	**4,038.40**	**1.21**	**56,763.48**	**1,663.01**	**0.00**	**7,340.45**	**3.03**	**5,269.24**	**20.62**	**2.80**	**508.03**
Associated with the production of consumed materials	295,043.32	3,542.39	0.43	50,764.51	1,120.33	0.00	7,046.93	0.00	4,183.11	0.00	0.00	108.97
Associated with the execution of subcontracted works units	15,772.22	58.61	0.00	3,391.26	1.58	0.00	105.37	0.00	1,039.50	0.00	0.00	0.51
Associated with purchased energy-related activities	1,862.35	428.59	0.78	965.96	541.04	0.00	151.64	3.03	3.08	20.09	2.76	362.09
Associated with the transport and management of waste and surplus materials	2,564.94	8.60	0.00	1,640.49	0.00	0.00	35.94	0.00	43.55	0.47	0.03	36.31
Associated with the consumption of water from the supply network	22.73	0.21	0.00	1.26	0.06	0.00	0.57	0.00	0.00	0.06	0.01	0.15
Total Emissions	**332,446.95**	**6,633.34**	**25.05**	**68,644.21**	**2,125.21**	**16.94**	**8,675.82**	**69.28**	**10,228.30**	**159.55**	**18.91**	**3,339.27**

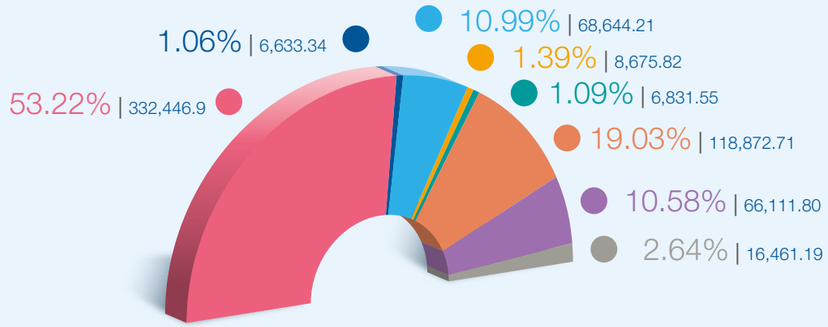
Emissions classified by Scope (according to UNE-ISO 14064-1:2019) (t CO_2e)

	El Salvador	Mexico	Colombia	Chile	Peru	USA	Canada	Qatar	Australia	Saudi Arabia	(Informe) Total
Scope 1, Category 1: Direct GHG emissions and removals	**0.00**	**7.68**	**0.41**	**364.75**	**695.71**	**0.00**	**0.00**	**0.00**	**0.00**	**25,202.29**	**42,095.60**
Emissions associated with fuel used at projects	0.00	0.00	0.00	357.74	688.56	0.00	0.00	0.00	0.00	25,202.29	39,134.67
Emissions associated with fuel consumption at premises	0.00	7.68	0.41	7.01	7.15	0.00	0.00	0.00	0.00	0.00	2,960.93
Scope 2, Category 2: Indirect GHG emissions caused by imported energy	**0.19**	**6.58**	**1.46**	**20.44**	**885.78**	**11.33**	**0.62**	**0.00**	**19.96**	**77.64**	**3,491.24**
Emissions associated with electricity used at projects	0.00	0.00	0.00	14.04	884.31	0.00	0.00	0.00	0.00	77.64	2,469.43
Emissions associated with electricity consumption at premises	0.19	6.58	1.46	6.40	1.47	11.33	0.62	0.00	19.96	0.00	1,021.81
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
Scope 3	**0.03**	**68.92**	**142.46**	**6,446.36**	**117,291.22**	**137.61**	**49.07**	**21.29**	**11.07**	**40,831.87**	**579,090.73**
Category 3: Indirect GHG emissions from transportation	**0.00**	**66.23**	**142.25**	**146.11**	**752.62**	**136.95**	**49.04**	**21.29**	**9.86**	**1,914.29**	**26,453.64**
Associated with employee's business travel	0.00	58.91	53.52	81.57	299.49	56.74	35.54	15.98	4.99	678.49	2,244.87
Associated with employees commuting to the workplace	0.00	7.32	88.73	44.82	27.99	80.21	13.50	5.31	4.87	134.22	4,599.48
Associated with the transport of consumed materials	0.00	0.00	0.00	19.72	425.14	0.00	0.00	0.00	0.00	1,101.58	19,609.29
Category 4: indirect emissions from products used by an organization	**0.03**	**2.69**	**0.21**	**6,300.25**	**116,538.60**	**0.66**	**0.03**	**0.00**	**1.21**	**38,917.58**	**552,637.09**
Associated with the production of consumed materials	0.00	0.00	0.00	6,159.48	112,776.81	0.00	0.00	0.00	0.00	31,537.69	512,283.97
Associated with the execution of subcontracted works units	0.00	0.00	0.00	58.78	1,399.56	0.00	0.00	0.00	0.00	682.20	22,509.59
Associated with purchased energy-related activities	0.02	2.69	0.21	79.56	279.92	0.65	0.03	0.00	1.03	5,699.50	10,405.02
Associated with the transport and management of waste and surplus materials	0.01	0.00	0.00	1.53	2,069.73	0.00	0.00	0.00	0.00	998.19	7,399.79
Associated with the consumption of water from the supply network	0.00	0.00	0.00	0.90	12.58	0.01	0.00	0.00	0.18	0.00	38.72
Total Emissions	**0.22**	**83.18**	**144.33**	**6,831.55**	**118,872.71**	**148.94**	**49.69**	**21.29**	**31.03**	**66,111.80**	**624,677.57**

Category 1/ Scope 1 emissions, classified by GHG type (t CO_2e)

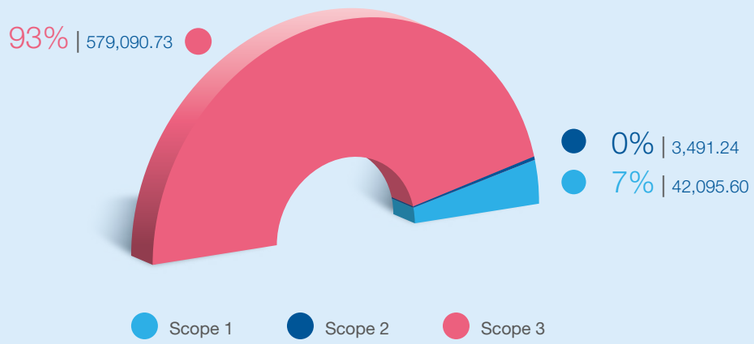
	CO_2	CH_4	N_2O	Total GHG
Spain	7,299.02	3.60	82.13	7,384.75
Portugal	1,870.96	2.09	3.99	1,877.04
Bulgaria	3.03	0.00	0.01	3.04
Romania	4,361.62	4.56	8.60	4,374.78
United Kingdom	134.86	0.12	1.64	136.62
Ireland	0.00	0.00	0.00	0.00
Belgium	614.71	0.70	1.32	616.73
Norway	11.87	0.01	0.02	11.90
Netherlands	14.31	0.01	0.03	14.35
Nicaragua	75.76	0.09	0.16	76.01
Costa Rica	11.23	0.01	0.03	11.27
Panama	1,313.94	1.50	2.82	1,318.26
El Salvador	0.00	0.00	0.00	0.00
Mexico	7.47	0.15	0.06	7.68
Colombia	0.41	0.00	0.00	0.41
Chile	363.56	0.42	0.78	364.76
Peru	693.38	0.81	1.53	695.72
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	25,119.85	28.49	53.94	25,202.28
Total	**41,895.98**	**42.56**	**157.06**	**42,095.60**

GHG emissions by geographic area (tCO_2e)

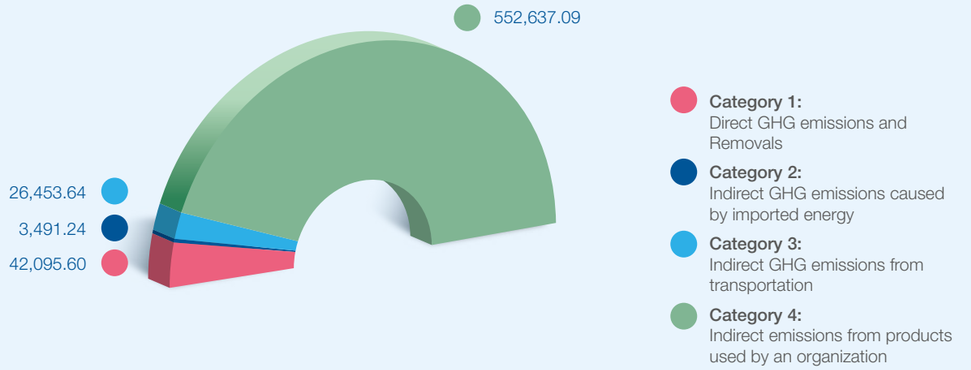


Emissions from Bulgaria, United Kingdom, Ireland, Netherlands, Norway, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Canada, United States, Australia and Qatar are included under the heading "Other".

GHG emissions by scope (tCO_2e)



GHG emissions by scope (tCO_2e)



GHG emissions by scope and FCC Construcción area (tCO_2e)

	Spain and Portugal	Europe	America	Middle East and Oceania
Scope 1	9,261.79	5,157.42	2,474.10	25,202.29
Scope 2	1,107.17	793.96	1,492.51	97.60
Scope 3	328,711.33	83,833.43	125,681.74	40,864.23

GHG emissions by category and FCC Construcción area (tCO_2e)

	Spain and Portugal	Europe	America	Middle East and Oceania
Category 1	9,261.79	5,157.42	2,474.10	25,202.29
Category 2	1,107.17	793.96	1,492.51	97.60
Category 3	9,407.37	12,793.01	2,307.82	1,945.44
Category 4	319,303.96	71,040.42	123,373.92	38,918.79

Tamega Bridge (Portugal)

In addition, emissions are also classified and reported according to the emission blocks of the ENCORD sectoral benchmark.

Emissions, Classified by Emission Blocks (according to ENCORD referential) (t CO_2e)

	1. Fuels (construction site)	2. Fuels (premises)	3. Fugitive and process emissions	4. Electricity (projects)	5. Electricity (premises)	6. Heat	7. Vehicle fuel	8. Public transport	9. Subcontractors	10. Waste	11. Materials	Total Emissions
Spain	6,969.85	414.90	0.00	633.56	405.98	0.00	1,941.32	369.10	15,772.22	2,564.94	301,490.00	**330,561.87**
Portugal	1,121.63	755.41	0.00	58.31	9.32	0.00	199.61	6.45	58.61	8.60	3,986.60	**6,204.54**
Bulgaria	0.00	3.04	0.00	0.00	4.34	0.00	10.50	5.95	0.00	0.00	0.44	**24.27**
Romania	3,979.61	395.17	0.00	376.24	13.37	0.00	1,216.41	100.22	3,391.26	1,640.49	56,564.16	**67,676.99**
United Kingdom	107.07	29.54	0.00	41.22	1.01	0.00	78.26	21.65	1.58	0.00	1,303.78	**1,584.11**
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	3.60	13.34	0.00	0.00	0.00	**16.94**
Belgium	616.73	0.00	0.00	357.78	0.00	0.00	11.65	44.95	105.37	35.94	7,351.18	**8,523.61**
Norway	11.91	0.00	0.00	0.00	0.00	0.00	11.71	42.63	0.00	0.00	0.00	**66.25**
Netherlands	14.35	0.00	0.00	0.00	0.00	0.00	1.53	92.39	1,039.50	43.55	9,033.90	**10,225.22**
Nicaragua	0.00	76.01	0.00	0.00	11.55	0.00	0.00	51.37	0.00	0.47	0.00	**139.40**
Costa Rica	0.00	11.27	0.00	0.00	0.09	0.00	4.70	0.05	0.00	0.03	0.00	**16.14**
Panama	64.93	1,253.34	0.00	26.33	528.14	0.00	766.60	158.09	0.51	36.31	142.78	**2,977.03**
El Salvador	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.01	0.00	**0.20**
Mexico	0.00	7.68	0.00	0.00	6.58	0.00	0.00	66.23	0.00	0.00	0.00	**80.49**
Colombia	0.00	0.41	0.00	0.00	1.46	0.00	0.00	142.25	0.00	0.00	0.00	**144.12**
Chile	357.74	7.01	0.00	14.04	6.40	0.00	41.14	85.24	58.78	1.53	6,179.20	**6,751.09**
Peru	688.56	7.15	0.00	884.31	1.47	0.00	23.61	303.86	1,399.56	2,069.73	113,201.95	**118,580.21**
United States	0.00	0.00	0.00	0.00	11.33	0.00	108.60	28.35	0.00	0.00	0.00	**148.28**
Canada	0.00	0.00	0.00	0.00	0.62	0.00	13.50	35.54	0.00	0.00	0.00	**49.66**
Qatar	0.00	0.00	0.00	0.00	0.00	0.00	5.30	15.99	0.00	0.00	0.00	**21.29**
Australia	0.00	0.00	0.00	0.00	19.96	0.00	4.40	5.46	0.00	0.00	0.00	**29.82**
Saudi Arabia	25,202.29	0.00	0.00	77.64	0.00	0.00	138.73	673.98	682.20	998.19	32,639.27	**60,412.30**
Total	**39,134.67**	**2,960.93**	**0.00**	**2,469.43**	**1,021.81**	**0.00**	**4,581.20**	**2,263.15**	**22,509.59**	**7,399.79**	**531,893.26**	**614,233.83**

Panama Metro Line 2 Expansion

5 Avoided emissions

This section sets out a quantification of the avoided Greenhouse Gas emissions in the 22 countries, due to the implementation of environmental good practices on site. The report details the emissions that are no longer realesed by implementing the following directed actions, according to the terminology used in the UNE-ISO 14064 standard:

Avoided Emissions (t CO_2e)

	By reusing surplus material on site and not taking it to landfill	By pH neutralisation with CO_2	By suitable maintenance of machinery operating on site	Due to vehicles speed control on site	Total Emissions
Spain	12,562.34	0.00	234.44	71.68	12,868.46
Portugal	12.96	0.00	13.26	0.03	26.25
Bulgaria	0.00	0.00	0.00		0.00
Romania	394.54	0.00	204.65	2.57	601.76
United Kingdom	0.00	0.00	0.00	0.00	0.00
Ireland	0.00	0.00	0.00	0.00	0.00
Belgium	39.30	0.00	0.00	0.21	39.51
Norway	0.00	0.00	0.00	0.00	0.00
Netherlands	397.58	0.00	0.00	0.00	397.58
Nicaragua	0.00	0.00	0.00	0.00	0.00
Costa Rica	0.00	0.00	0.00	0.00	0.00
Panama	0.00	0.00	410.71	0.00	410.71
El Salvador	0.00	0.00	0.00	0.00	0.00
Mexico	0.00	0.00	0.00	0.00	0.00
Colombia	0.00	0.00	0.00	0.00	0.00
Chile	0.00	0.00	18.83	0.09	18.92
Peru	0.00	0.00	36.24	0.00	36.24
United States	0.00	0.00	0.00	0.00	0.00
Canada	0.00	0.00	0.00	0.00	0.00
Qatar	0.00	0.00	0.00	0.00	0.00
Saudi Arabia	0.00	0.00	0.00	0.00	0.00
Australia	0.00	0.00	0.00	0.39	0.39
Total FCC Construcción	**13,406.72**	**0.00**	**918.13**	**74.97**	**14,399.82**

6 Base year

The year 2021 is established as the historical base year for GHG emissions for comparison purposes, in accordance with the UNE-ISO 14064-1:2019 standard and the ENCORD sectoral benchmark.

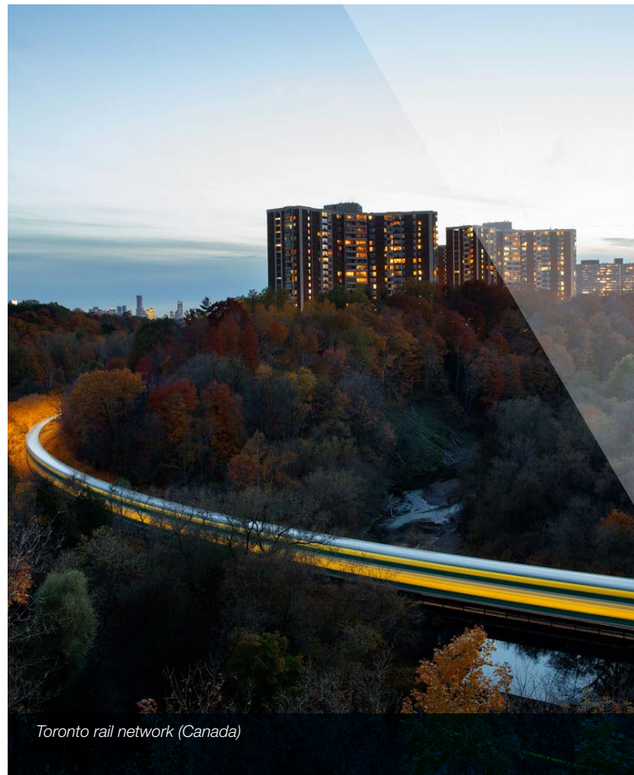
The change and establishment of the base year in 2021 is justified, firstly, by the incorporation of the works and fixed sites located in Australia.

Secondly, in 2021 an extension of Scope 3 has been carried out. Specifically, the following changes have been implemented with respect to the previous year:

- Inclusion of new subcontracted work units. Until 2020, only *earth-moving works* 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 resulting from off-site extraction and transport of earth and, finally, emissions from the manufacture and transport of aggregates 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 exhaustive 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.

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 the company's 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 data.
- Discovery of significant errors or the accumulation of a significant number of minor errors which, in aggregate figure, have relevant consequences on the total quantified GHG emissions.



Toronto rail network (Canada)

7 Quantification methodologies

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

FCC Construcción uses a centralised approach, consolidating the activity data gathered at 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 then made bellow to the quantification methodologies and GHG emission factors used to draw up this report.

Scope 1 / Category 1: Direct GHG emissions and removals

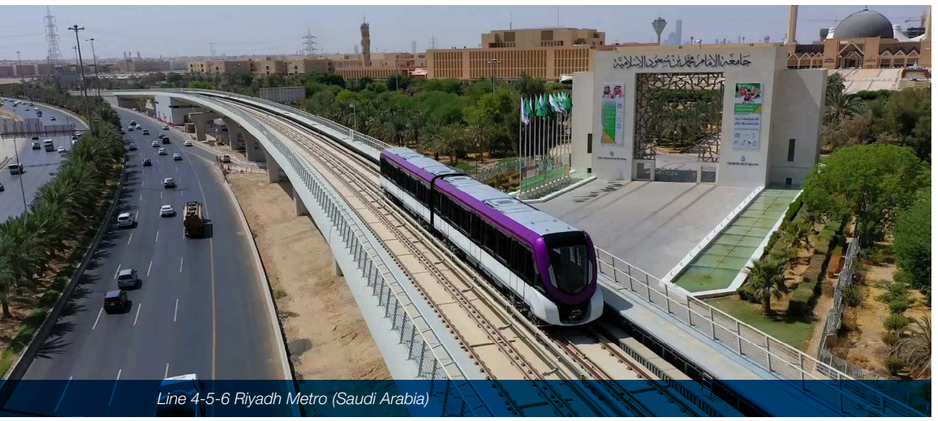
Emissions associated with fuel consumption

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

- For **Spain**, MITECO data, Emission Factors (2022 Edition) have been used. A(b) and Data from Table 2.3. of the IPCC 2006; Stationary Combustion: Manufacturing and Construction Industries and data from Table 2.3. of the *"2006 IPCC Guidelines for National Greenhouse Gas Inventories"*.

- 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 (Common Reporting Form) tables 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 2022_ 2020 CFR table (UNFCCC): Table 1.A(b) (obtained from https://unfccc.int/documents/461884). 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 *"2021 UK Government GHG Conversion Factors for Company Reporting"* and data from the CRF (Common Reporting Form) tables of the 2020 GHG inventory submitted to the UNFCCC by the United Kingdom have been used.
- For the **Netherlands** emission factor data published in *"CO_2 emissiefactoren"*, the *"list of fuels and emission factors"* of the Netherlands Enterprise Agency, data from the CRF (Common Reporting Form) tables of the GHG inventory 2021 submitted to 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, 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 **Costa Rica**, data from the publication *"Factores Emisión GEI, décima edición/2021"* of the Instituto Meteorológico Nacional and 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 para el cálculo de emisiones de gases o compuestos de efecto invernadero"* and the *"Lista de combustibles 2021"* published by the Registro Nacional de Emisiones (RENE) of SEMARNAT have been used.

Salamanca University Hospital (Spain)


Line 4-5-6 Riyadh Metro (Saudi Arabia)


Line 5 Metro Bucharest (Romania)

- 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.
- For **Chile** data from Table 2.3. of the *"2006 IPCC Guidelines for National Greenhouse Gas Inventories"* have been used.
- 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 April 2022 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 2021"* and densities from *"Australian national Greenhouse Accounts 2021"*, Table 2.3 IPPC 2006 have been used. The 2019 Refinement 2006 IPCC Guidelines (Volume 2 file 19R_V2_2_2_ch02_Stationary_Combustion) have been reviewed, there are no changes from the previous version, and from the UK Department of Environment (DEFRA) report *"2021 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 (at construction sites or at permises), according to FCC Construcción billing, is multiplied by the emission factor of the of the corresponding country's energy-mix.

Emission factors for Portugal, Bulgaria, Romania, Ireland, Belgium, Netherlands, Norway, Nicaragua, Costa Rica, Panama, El Salvador, Colombia, Peru, United States, Canada, Qatar and Saudi Arabia are taken from the report *"Statistics – Emissions Factors (2020 Edition)"* of the International Energy Agency. 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 spreadsheet *"Huella de Carbono de organización - Alcance 1+2 para organizaciones (2011- 2020)"* of the Ministerio para la Transición Ecológica (MITECO), version 20 (2/05/2022).
- For the **UK**, the emission factor has been obtained from the UK Department of Environment (DEFRA) report *"2021 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 2021"* 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 2021" 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 company staff 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 *"2021 UK Government GHG Conversion Factors for Company Reporting"*. Emission factors associated with transporting employees by train in Spain are obtained from the *"Guia Pràctica 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 company staff 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 organisation's employees. Based on the answers to the survey the kilometres travelled in each country and for each type of vehicle used are calculated. The data collected was the number of employees per country without a company vehicle and the travel days of the reporting period.

The emission factors associated with the different means of transport are taken from the Annexes of the UK Department of Environment (DEFRA) report *"2021 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.

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 *"2021 UK 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 "CO_2 emissiefactoren" are used for rail, air and maritime transport types.

- For the **United States**, the factors from the US Environmental Protection Agency (EPA) document *"Emission Factors for Greenhouse Gas Inventories"*, version 01/04/2020, are used.

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 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 earth-moving works, concrete pouring, steel rail laying, asphalt concrete spreading and metal structure placement, an emission factor calculated on the basis of a study by FCC Construcción's Machinery Directorate is used, which determines the amount 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 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 (2021 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 *"2021 UK Government GHG Conversion Factors for Company Reporting"*. The emission factor for fuel production is taken from UK (DEFRA) *"2021 UK Government GHG Conversion Factors for Company Reporting"*.

Emissions associated with the transport and management of waste and surplus materials

Emissions associated with the transport and management of waste and surplus materials are calculated by considering as activity data both the volumes of surplus soil and rubble and the weights of municipal solid waste, wood waste and mixed rubble generated, as well as the distances 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 *"2021 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 the consumption of water from the supply network.

These emissions are obtained as a product of the water consumption of the supply network multiplied by an emission factor which is taken from UK (DEFRA) *"2021 UK Government GHG Conversion Factors for Company Reporting" - "Water supply" -cubic metres - water supply*.

Report completion date:
23 June 2022

AENOR

Declaration in accordance of AENOR

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AENOR Verification Statement for

FCC CONSTRUCCIÓN, S.A.

for the Inventory of greenhouse gas emissions for 2021

FILE: 1994/0112/GEN/01

Introduction

FCC CONSTRUCCIÓN, S.A. (hereinafter the company) has engaged AENOR INTERNACIONAL, S.A.U. (AENOR) to perform a limited review of the Greenhouse Gas Emissions Inventory (GHG) for 2021 of its activities included in the GHG report dated 22 June 2022, which is part of this Statement.

AENOR is accredited by the Mexican Accreditation Body, with OVVGHG number 004/14 (valid from 31/10/2014; revision date 27/11/2018), pursuant to standard ISO 14065: 2013, to verify greenhouse gas emissions in accordance with the requirements established in the ISO 14064-3: 2006 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:

Director of Quality and CSR at 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

Objective

The objective of the verification is to provide interested parties with a professional and independent opinion on the information and data contained in the aforementioned FCC CONSTRUCTION, S.A. GHG Report.

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Scope of the Verification

The scope of the verification is for the activities provided by the company at its facilities in ***Spain, Portugal, Bulgaria, Romania, United Kingdom, Ireland, Belgium, Norway, Netherlands, Nicaragua, Costa Rica, Panama, El Salvador, Mexico, Colombia, Chile, Peru, United States, Canada, Qatar, Saudi Arabia and Australia.***

Facilities are defined as fixed works and centres, which include offices, warehouses and machinery depots.

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

During the verification process, the information was analysed in accordance with the operational control approach established by the UNE-EN ISO 14064-1:2019 standard. In other words, the company reports all the GHG emissions that are attributable to the operations it controls.

Direct and indirect activities and verification exclusions

The activities subject to verification are studied under three scopes (following ISO 14064-1 guidelines), which are:

Category 1: Direct GHG emissions:

These are the emissions from sources that are 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 consumption on site.
- Emissions associated with fuel consumption at fixed centres.

Category 2: Indirect GHG emissions from the generation of energy

These emissions are caused by the organisation's activity, but they occur at the plant where electricity is generated. They include the emissions generated by the electricity purchased by FCC Construcción.

They are broken down into:

- Emissions associated with the consumption of electricity on site.
- Emissions associated with the consumption of electricity at fixed centres.

Category 3 : Indirect GHG emissions from transport

- Emissions associated with the transport of materials consumed upstream: the transport to work of concrete, asphalt agglomerate, earth, gravel, steel, non-ferrous metals, bricks, glass, cement and of the insulator.
- Emissions associated with employee business travel
- Emissions associated with company staff commuting to the workplace.

Category 4 : Indirect GHG emissions for products used by the organization

- Emissions associated with the production of used materials. Emissions from the manufacture of concrete, asphalt agglomerate, steel, non-ferrous metals, bricks, glass, cement, extraction of land and manufacture of gravel are considered.
- Emissions associated with the performance of subcontracted work units. Considered to be earthmoving works, the placement of concrete, roads, metal structures and asphalt mix.
- Emissions associated with the transport and management of waste and surplus materials (included emissions associated with the transport of leftlover land, leftover clean rubble and transport and landfill of MSW, wood and mixed construction and demolition waste.
- Emissions associated with energy acquisition activities.
- Emissions associated with the consumption of water from the supply network.

Exclusions

FCC Construcción has decided to exclude emissions from its air conditioning equipment, as these have low representativity (<1%) with respect to total emissions.

Targeted actions

The company has presented the quantification of greenhouse gas emissions avoided in 2021 due to the implementation of good practices on site.

The actions that have been considered are as follows:

- reusing materials on site and not taking them to landfill
- neutralising pH with CO2
- proper maintenance of machinery used on site
- controlling the speed of vehicles on site

Base year

The organisation's base year is **2021**.

Relative importance

The verification process considered as material discrepancies any omissions, distortions or errors that can be quantified and that result in a difference of more than 7% with respect to the total declared emissions.

Criteria

The criteria and information taken into account to perform the verification were:

1) The UNE-ISO 14064-1:2019 standard: Specification with guidance, at organisational level, for the quantification and reporting of greenhouse gas emissions and removals.
2) The UNE-ISO 14064-3:2012 standard: Specification with guidance for the validation and verification of greenhouse gas statements
3) ENCORD - European Network of Construction Companies for Research and Development directives.
4) Basic guide for quantifying greenhouse gas emissions, version 8.
5) Guide for calculating greenhouse gas emissions in fcc construction, version 19.

Finally, the Emission Report prepared by the organisation and dated June 2022 was verified. AENOR is expressly held harmless from any responsibility with respect to investment decisions or other decisions based on this statement.

Conclusion

There is no evidence to suggest that the information on emissions reported in the Greenhouse Gas Report 2021 of FCC CONSTRUCCIÓN, S.A., is not a faithful representation of the emissions of its activities.

In accordance with this Statement, the data on emissions/removals finally verified are listed below.

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TOTAL FCC CONSTRUCCIÓN VERIFIED DATA

Emisiones TOTAL FCC CONSTRUCCIÓN	t CO2e
CATEGORY 1 Direct GHG emissions and removals	**42.095,60**
Emissions associated with fuel consumption on site	39.134,67
Emissions associated with fuel consumption at fixed centres	2.960,93
CATEGORY 2 Indirect GHG emissions from the generation of energy	**3.491,24**
Emissions associated with the consumption of electricity on site	2.469,43
Emissions associated with the consumption of electricity at fixed centres	1.021,81
Emissions associated with the consumption of electricity for vehicles	0
CATEGORY 3 Indirect GHG emissions for transport	**26.453,64**
Emissions associated with the transport of materials consumed upstream	19.609,29
Emissions associated with company staff commuting to the workplace	4.599,48
Emissions associated with employee business travel	2.244,87
CATEGORY 4 Indirect GHG emissions for products used by the organization	**552.637,09**
Emissions associated with the production of used materials	512.283,97
Emissions associated with the performance of subcontracted work units	22.509,59
Emissions associated with the transport and management of waste and surplus materials	7.399,79
Emissions associated with energy acquisition activities	10.405,02
Emissions associated with the consumption of water from the supply network	38,72
Total Emissions	**624.677,57**

TOTAL FCC CONSTRUCCIÓN	t CO2e
Construction	
1. Fuel (site)	39.134,67
2. Fuel (fixed centres)	2.960,93
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	2.469,43
5. Electrical energy (fixed centres)	1.021,81
6. Heat	0.00
7. Vehicle fuel	4.581,20
8. Travel undertaken by company personnel	2.263,15
9. Subcontractors	22.509,59
10. Waste	7.399,79
11. Materials	531.893,26
Total Emissions	**614.233,83**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN	t CO2e
reusing materials on site and not taking them to landfill	13.406,72
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	918,13
controlling the speed of vehicles on site	74,97
Total Emissions	**14.399,82**

AENOR Confía

FCC CONSTRUCCIÓN SPAIN VERIFIED DATA

TOTAL FCC CONSTRUCCIÓN SPAIN	t CO_2e
CATEGORY 1 Direct GHG emissions and removals	**7.384,75**
Emissions associated with fuel consumption on site	6.969,85
Emissions associated with fuel consumption at fixed centres	414,9
CATEGORY 2 Indirect GHG emissions from the generation of energy	**1.039,54**
Emissions associated with the consumption of electricity on site	633,56
Emissions associated with the consumption of electricity at fixed centres	405,98
Emissions associated with the consumption of electricity for vehicles	0
CATEGORY 3 Indirect GHG emissions for transport	**8.757,10**
Emissions associated with the transport of materials consumed upstream	6.446,68
Emissions associated with company staff commuting to the workplace	1.814,45
Emissions associated with employee business travel	495,97
CATEGORY 4 Indirect GHG emissions for products used by the organization	**315.265,56**
Emissions associated with the production of used materials	295.043,32
Emissions associated with the performance of subcontracted work units	15.772,22
Emissions associated with the transport and management of waste and surplus materials	2.564,94
Emissions associated with energy acquisition activities	1.862,35
Emissions associated with the consumption of water from the supply network	22,73
Total Emissions	**332.446,95**

TOTAL FCC CONSTRUCCIÓN SPAIN	t CO2e
Construction	
1. Fuel (site)	6.969,85
2. Fuel (fixed centres)	414,9
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	633,56
5. Electrical energy (fixed centres)	405,98
6. Heat	0,00
7. Vehicle fuel	1941,32
8. Travel undertaken by company personnel	369,096
9. Subcontractors	15.772,22
10. Waste	2.564,94
11. Materials	301.490
Total Emissions	**330.561,87**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN SPAIN	t CO2e
reusing materials on site and not taking them to landfill	12.562,34
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	234,44
controlling the speed of vehicles on site	71,68
Total Emissions	**12.868,46**

AENOR Confía

FCC CONSTRUCCIÓN PORTUGAL VERIFIED DATA

(RAMALHO ROSA COBETAR, SOCIEDADE DE CONSTRUÇÕES, S.A.)

FCC CONSTRUCCIÓN PORTUGAL (RAMALHO ROSA COBETAR, SOCIEDADE DE CONSTRUÇÕES, S.A.)	t CO_2e
CATEGORY 1 Direct GHG emissions and removals	**1.877,04**
Emissions associated with fuel consumption on site	1.121,63
Emissions associated with fuel consumption at fixed centres	755,41
CATEGORY 2 Indirect GHG emissions from the generation of energy	**67,63**
Emissions associated with the consumption of electricity on site	58,31
Emissions associated with the consumption of electricity at fixed centres	9,32
CATEGORY 3 Indirect GHG emissions for transport	**650,27**
Emissions associated with the transport of materials consumed upstream	444,21
Emissions associated with company staff commuting to the workplace	204,22
Emissions associated with employee business travel	1,84
CATEGORY 4 Indirect GHG emissions for products used by the organization	**4.038,40**
Emissions associated with the production of used materials	3.542,39
Emissions associated with the performance of subcontracted work units	58,61
Emissions associated with the transport and management of waste and surplus materials	8,6
Emissions associated with energy acquisition activities	428,59
Emissions associated with the consumption of water from the supply network	0,21
Total Emissions	**6.633,34**

FCC CONSTRUCCIÓN PORTUGAL (RAMALHO ROSA COBETAR, SOCIEDADE DE CONSTRUÇÕES, S.A.)	t CO_2e
Construction	
1. Fuel (site)	1121,63
2. Fuel (fixed centres)	755,41
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	58,31
5. Electrical energy (fixed centres)	9,32
6. Heat	0,00
7. Vehicle fuel	199,61
8. Travel undertaken by company personnel	6,45
9. Subcontractors	58,61
10. Waste	8,6
11. Materials	3.986,6
Total Emissions	**6.204,54**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

FCC CONSTRUCCIÓN PORTUGAL (RAMALHO ROSA COBETAR, SOCIEDADE DE CONSTRUÇÕES, S.A.)	t CO2e
reusing materials on site and not taking them to landfill	12,96
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	13,26
controlling the speed of vehicles on site	0,03
Total Emissions	**26,25**

AENOR Confía

FCC CONSTRUCCIÓN BULGARIA VERIFIED DATA

FCC CONSTRUCCIÓN BULGARIA	t CO_2e
Category 1: Direct GHG emissions	**3,04**
associated with on-site fuel consumption	0.00
associated fuel consumption at fixed centres	3,04
Category 2: Indirect GHG emissions	**4,34**
associated with on-site electricity consumption	0.00
associated electricity consumption at fixed centres	4,34
CATEGORY 3 Indirect GHG emissions for transport	**16,46**
Emissions associated with the transport of materials consumed upstream	0,01
Emissions associated with company staff commuting to the workplace	10,50
Emissions associated with employee business travel	5,95
CATEGORY 4 Indirect GHG emissions for products used by the organization	**1,21**
Emissions associated with the production of used materials	0,43
Emissions associated with the performance of subcontracted work units	0
Emissions associated with the transport and management of waste and surplus materials	0
Emissions associated with energy acquisition activities	0,78
Emissions associated with the consumption of water from the supply network	0
Total Emissions	**25,05**

TOTAL FCC CONSTRUCCIÓN BULGARIA	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	3,04
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	4,34
6. Heat	0,00
7. Vehicle fuel	10,50
8. Travel undertaken by company personnel	5,95
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0.44
Total Emissions	**24,27**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN BULGARIA	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	0,00
controlling the speed of vehicles on site	0,00
Total Emissions	**0,00**

AENOR Confía

FCC CONSTRUCCIÓN ROMANIA VERIFIED DATA

FCC CONSTRUCCIÓN ROMANIA	t CO_2e
Category 1: Direct GHG emissions	**4.374,78**
associated with on-site fuel consumption	3.979,61
associated fuel consumption at fixed centres	395,17
Category 2: Indirect GHG emissions	**389,61**
associated with on-site electricity consumption	376,24
associated electricity consumption at fixed centres	13,37
CATEGORY 3 Indirect GHG emissions for transport	**7.116,34**
Emissions associated with the transport of materials consumed upstream	5.799,65
Emissions associated with company staff commuting to the workplace	1.215,93
Emissions associated with employee business travel	100,76
CATEGORY 4 Indirect GHG emissions for products used by the organization	**56.763,48**
Emissions associated with the production of used materials	50.764,51
Emissions associated with the performance of subcontracted work units	3.391,26
Emissions associated with the transport and management of waste and surplus materials	1.640,49
Emissions associated with energy acquisition activities	965,96
Emissions associated with the consumption of water from the supply network	1,26
Total Emissions	**68.644,21**

TOTAL FCC CONSTRUCCIÓN ROMANIA	t CO2e
Construction	
1. Fuel (site)	3.979,61
2. Fuel (fixed centres)	395,17
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	376,24
5. Electrical energy (fixed centres)	13,37
6. Heat	0,00
7. Vehicle fuel	1.216,41
8. Travel undertaken by company personnel	100,22
9. Subcontractors	3.391,26
10. Waste	1.640,49
11. Materials	56.564,16
Total Emissions	**67.676,99**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN ROMANIA	t CO2e
reusing materials on site and not taking them to landfill	394,54
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	204,65
controlling the speed of vehicles on site	2,57
Total Emissions	**601,76**

AENOR Confía

FCC CONSTRUCCIÓN UNITED KINGDOM VERIFIED DATA

FCC CONSTRUCCIÓN UNITED KINGDOM	t CO_2e
Category 1: Direct GHG emissions	**136,61**
associated with on-site fuel consumption	107,07
associated fuel consumption at fixed centres	29,54
Category 2: Indirect GHG emissions	**42,23**
associated with on-site electricity consumption	41,22
associated electricity consumption at fixed centres	1,01
CATEGORY 3 Indirect GHG emissions for transport	**283,36**
Emissions associated with the transport of materials consumed upstream	183,45
Emissions associated with company staff commuting to the workplace	77,99
Emissions associated with employee business travel	21,92
CATEGORY 4 Indirect GHG emissions for products used by the organization	**1.663,01**
Emissions associated with the production of used materials	1.120,33
Emissions associated with the performance of subcontracted work units	1,58
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	541,04
Emissions associated with the consumption of water from the supply network	0,06
Total Emissions	**2.125,21**

TOTAL FCC CONSTRUCCIÓN UNITED KINGDOM	t CO2e
Construction	
1. Fuel (site)	107,07
2. Fuel (fixed centres)	29,54
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	41,22
5. Electrical energy (fixed centres)	1,01
6. Heat	0,00
7. Vehicle fuel	78,26
8. Travel undertaken by company personnel	21,648
9. Subcontractors	1,58
10. Waste	0,00
11. Materials	1.303,78
Total Emissions	**1.584,11**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN UNITED KINGDOM	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

AENOR Confía

FCC CONSTRUCCIÓN IRELAND VERIFIED DATA

FCC CONSTRUCCIÓN IRELAND	t CO_2e
Category 1: Direct GHG emissions	**0,00**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	0,00
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	**16,94**
CATEGORY 3 Indirect GHG emissions for transport	0,00
Emissions associated with the transport of materials consumed upstream	6,36
Emissions associated with company staff commuting to the workplace	10,58
Emissions associated with employee business travel	0,00
CATEGORY 4 Indirect GHG emissions for products used by the organization	**0,00**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0.00
Emissions associated with energy acquisition activities	0,00
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**16,94**

TOTAL FCC CONSTRUCCIÓN IRELAND	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,00
6. Heat	0,00
7. Vehicle fuel	3,6
8. Travel undertaken by company personnel	13,34
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**16,94**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN IRELAND	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

AENOR Confía

FCC CONSTRUCCIÓN BELGIUM VERIFIED DATA

FCC CONSTRUCCIÓN BELGIUM	t CO_2e
Category 1: Direct GHG emissions	**616,73**
associated with on-site fuel consumption	616,73
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**357,78**
associated with on-site electricity consumption	357,78
associated electricity consumption at fixed centres	0,00
CATEGORY 3 Indirect GHG emissions for transport	**360,86**
Emissions associated with the transport of materials consumed upstream	304,25
Emissions associated with company staff commuting to the workplace	21,44
Emissions associated with employee business travel	35,17
CATEGORY 4 Indirect GHG emissions for products used by the organization	**7.340,45**
Emissions associated with the production of used materials	7.046,93
Emissions associated with the performance of subcontracted work units	105,37
Emissions associated with the transport and management of waste and surplus materials	35,94
Emissions associated with energy acquisition activities	151,64
Emissions associated with the consumption of water from the supply network	0,57
Total Emissions	**8.675,82**

TOTAL FCC CONSTRUCCIÓN BELGIUM	t CO2e
Construction	
1. Fuel (site)	616,73
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	357,78
5. Electrical energy (fixed centres)	0,00
6. Heat	0,00
7. Vehicle fuel	11,65
8. Travel undertaken by company personnel	44,95
9. Subcontractors	105,37
10. Waste	35,94
11. Materials	7.351,18
Total Emissions	**8.523,61**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN BELGIUM	t CO2e
reusing materials on site and not taking them to landfill	39,30
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	0,00
controlling the speed of vehicles on site	0,21
Total Emissions	**39,51**

AENOR Confía

FCC CONSTRUCCIÓN NORWAY VERIFIED DATA

FCC CONSTRUCCIÓN NORWAY	t CO_2e
Category 1: Direct GHG emissions	**11,91**
associated with on-site fuel consumption	11,91
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**0,00**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	0,00
CATEGORY 3 Indirect GHG emissions for transport	**54,34**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	11,02
Emissions associated with employee business travel	43,32
CATEGORY 4 Indirect GHG emissions for products used by the organization	**3,03**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	3,03
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**69,28**

TOTAL FCC CONSTRUCCIÓN NORWAY	t CO2e
Construction	
1. Fuel (site)	11,91
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,00
6. Heat	0,00
7. Vehicle fuel	11,71
8. Travel undertaken by company personnel	42,625
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**66,25**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN NORWAY	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

AENOR Confía

FCC CONSTRUCCIÓN NETHERLANDS VERIFIED DATA

FCC CONSTRUCCIÓN NETHERLANDS	t CO_2e
Category 1: Direct GHG emissions	**14,35**
associated with on-site fuel consumption	14,35
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**0,00**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	0,00
CATEGORY 3 Indirect GHG emissions for transport	**4.944,71**
Emissions associated with the transport of materials consumed upstream	4850,79
Emissions associated with company staff commuting to the workplace	8,99
Emissions associated with employee business travel	84,93
CATEGORY 4 Indirect GHG emissions for products used by the organization	**5.269,24**
Emissions associated with the production of used materials	3,96
Emissions associated with the performance of subcontracted work units	4.183,11
Emissions associated with the transport and management of waste and surplus materials	1.039,50
Emissions associated with energy acquisition activities	43,55
Emissions associated with the consumption of water from the supply network	3,08
Total Emissions	
	10.228,30

TOTAL FCC CONSTRUCCIÓN NETHERLANDS	t CO2e
Construction	
1. Fuel (site)	14,35
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,00
6. Heat	0,00
7. Vehicle fuel	1,53
8. Travel undertaken by company personnel	92,39
9. Subcontractors	1039,5
10. Waste	43,55
11. Materials	9.033,9
Total Emissions	**10.225,22**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN NETHERLANDS	t CO2e
reusing materials on site and not taking them to landfill	397,58
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	0,00
controlling the speed of vehicles on site	0,00
Total Emissions	**397,58**

AENOR Confía

FCC CONSTRUCCIÓN NICARAGUA VERIFIED DATA

FCC CONSTRUCCIÓN NICARAGUA	t CO_2e
Category 1: Direct GHG emissions	**76,01**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	76,01
Category 2: Indirect GHG emissions	**11,55**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	11,55
CATEGORY 3 Indirect GHG emissions for transport	**51,37**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	51,03
Emissions associated with employee business travel	0,34
CATEGORY 4 Indirect GHG emissions for products used by the organization	**20,62**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,47
Emissions associated with energy acquisition activities	20,09
Emissions associated with the consumption of water from the supply network	0,06
Total Emissions	**159,55**

TOTAL FCC CONSTRUCCIÓN NICARAGUA	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	76,01
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	11,51
6. Heat	0,00
7. Vehicle fuel	0,00
8. Travel undertaken by company personnel	51,37
9. Subcontractors	0,00
10. Waste	0,47
11. Materials	0,00
Total Emissions	**139,4**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN NICARAGUA	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

AENOR Confía

FCC CONSTRUCCIÓN COSTA RICA VERIFIED DATA

FCC CONSTRUCCIÓN COSTA RICA	t CO_2e
Category 1: Direct GHG emissions	**11,27**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	11,27
Category 2: Indirect GHG emissions	**0,09**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	0,09
CATEGORY 3 Indirect GHG emissions for transport	**4,75**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	4,75
Emissions associated with employee business travel	0,00
CATEGORY 4 Indirect GHG emissions for products used by the organization	**2,80**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,03
Emissions associated with energy acquisition activities	2,76
Emissions associated with the consumption of water from the supply network	0,01
Total Emissions	**18,91**

UNIDOTOTAL FCC CONSTRUCCIÓN COSTA RICA	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	11,27
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,09
6. Heat	0,00
7. Vehicle fuel	4,7
8. Travel undertaken by company personnel	0,05
9. Subcontractors	0,00
10. Waste	0,03
11. Materials	0,00
Total Emissions	**16,14**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN COSTA RICA	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

AENOR Confía

FCC CONSTRUCCIÓN PANAMA VERIFIED DATA

FCC CONSTRUCCIÓN PANAMA	t CO_2e
Category 1: Direct GHG emissions	**1.318,27**
associated with on-site fuel consumption	64,93
associated fuel consumption at fixed centres	1.253,34
Category 2: Indirect GHG emissions	**554,47**
associated with on-site electricity consumption	26,33
associated electricity consumption at fixed centres	528,14
CATEGORY 3 Indirect GHG emissions for transport	**958,50**
Emissions associated with the transport of materials consumed upstream	33,81
Emissions associated with company staff commuting to the workplace	765,83
Emissions associated with employee business travel	158,86
CATEGORY 4 Indirect GHG emissions for products used by the organization	54.46
Emissions associated with the production of used materials	**508,03**
Emissions associated with the performance of subcontracted work units	108,97
Emissions associated with the transport and management of waste and surplus materials	0,51
Emissions associated with energy acquisition activities	36,31
Emissions associated with the consumption of water from the supply network	362,09
	0,15
Total Emissions	**3.339,27**

TOTAL FCC CONSTRUCCIÓN PANAMA	t CO2e
Construction	
1. Fuel (site)	64,93
2. Fuel (fixed centres)	1.253,34
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	26,33
5. Electrical energy (fixed centres)	528,14
6. Heat	0,00
7. Vehicle fuel	766,6
8. Travel undertaken by company personnel	158,09
9. Subcontractors	0,51
10. Waste	36,31
11. Materials	142,78
Total Emissions	**2.977,03**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN PANAMA	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	410,71
controlling the speed of vehicles on site	0,00
Total Emissions	**410,71**

AENOR Confía

FCC CONSTRUCCIÓN EL SALVADOR VERIFIED DATA

FCC CONSTRUCCIÓN EL SALVADOR	t CO_2e
Category 1: Direct GHG emissions	**0,00**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**0,19**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	0,19
CATEGORY 3 Indirect GHG emissions for transport	**0,00**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	0,00
Emissions associated with employee business travel	0,00
CATEGORY 4 Indirect GHG emissions for products used by the organization	**0,03**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,01
Emissions associated with energy acquisition activities	0,02
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**0,22**

UNIDO TOTAL FCC CONSTRUCCIÓN EL SALVADOR	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,19
6. Heat	0,00
7. Vehicle fuel	0,00
8. Travel undertaken by company personnel	0,00
9. Subcontractors	0,00
10. Waste	0,01
11. Materials	0,00
Total Emissions	**0,20**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN EL SALVADOR	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	0,00
controlling the speed of vehicles on site	0,00
Total Emissions	**0,00**

AENOR Confía

FCC CONSTRUCCIÓN MEXICO VERIFIED DATA

FCC CONSTRUCCIÓN MEXICO	t CO_2e
Category 1: Direct GHG emissions	**7,68**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	7,68
Category 2: Indirect GHG emissions	**6,58**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	6,58
CATEGORY 3 Indirect GHG emissions for transport	**66,23**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	7,32
Emissions associated with employee business travel	58,91
CATEGORY 4 Indirect GHG emissions for products used by the organization	**2,69**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	2,69
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**83,18**

TOTAL FCC CONSTRUCCIÓN MEXICO	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	7,68
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	6,58
6. Heat	0,00
7. Vehicle fuel	0,00
8. Travel undertaken by company personnel	66,23
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**80,49**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN MEXICO	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

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FCC CONSTRUCCIÓN COLOMBIA VERIFIED DATA

FCC CONSTRUCCIÓN COLOMBIA	t CO_2e
Category 1: Direct GHG emissions	**0,41**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,41
Category 2: Indirect GHG emissions	**1,46**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	1,46
CATEGORY 3 Indirect GHG emissions for transport	**142,25**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	88,73
Emissions associated with employee business travel	53,52
CATEGORY 4 Indirect GHG emissions for products used by the organization	**0,21**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	0,21
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**144,33**

TOTAL FCC CONSTRUCCIÓN COLOMBIA	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,41
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	1,46
6. Heat	0,00
7. Vehicle fuel	0,00
8. Travel undertaken by company personnel	142,25
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**144,12**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN COLOMBIA	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

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FCC CONSTRUCCIÓN CHILE VERIFIED DATA

FCC CONSTRUCCIÓN CHILE	t CO_2e
Category 1: Direct GHG emissions	**364,75**
associated with on-site fuel consumption	357,74
associated fuel consumption at fixed centres	7,01
Category 2: Indirect GHG emissions	**20,44**
associated with on-site electricity consumption	14,04
associated electricity consumption at fixed centres	6,40
CATEGORY 3 Indirect GHG emissions for transport	**146,11**
Emissions associated with the transport of materials consumed upstream	19,72
Emissions associated with company staff commuting to the workplace	44,82
Emissions associated with employee business travel	81,57
CATEGORY 4 Indirect GHG emissions for products used by the organization	**6.300,25**
Emissions associated with the production of used materials	6.159,48
Emissions associated with the performance of subcontracted work units	58,78
Emissions associated with the transport and management of waste and surplus materials	1,53
Emissions associated with energy acquisition activities	79,56
Emissions associated with the consumption of water from the supply network	0,90
Total Emissions	**6.831,55**

UNIDO TOTAL FCC CONSTRUCCIÓN CHILE	t CO2e
Construction	
1. Fuel (site)	357,74
2. Fuel (fixed centres)	7,01
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	14,04
5. Electrical energy (fixed centres)	6,4
6. Heat	0,00
7. Vehicle fuel	41,14
8. Travel undertaken by company personnel	85,24
9. Subcontractors	58,78
10. Waste	1,53
11. Materials	6.179,2
Total Emissions	**6.751,09**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN CHILE	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	18,83
controlling the speed of vehicles on site	0,09
Total Emissions	**18,92**

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FCC CONSTRUCCIÓN PERU VERIFIED DATA

FCC CONSTRUCCIÓN PERU	t CO_2e
Category 1: Direct GHG emissions	**695,71**
associated with on-site fuel consumption	688,56
associated fuel consumption at fixed centres	7,15
Category 2: Indirect GHG emissions	**885,78**
associated with on-site electricity consumption	884,31
associated electricity consumption at fixed centres	1,47
CATEGORY 3 Indirect GHG emissions for transport	**752,62**
Emissions associated with the transport of materials consumed upstream	425,14
Emissions associated with company staff commuting to the workplace	27,99
Emissions associated with employee business travel	299,49
CATEGORY 4 Indirect GHG emissions for products used by the organization	**116.538,60**
Emissions associated with the production of used materials	112.776,81
Emissions associated with the performance of subcontracted work units	1.399,56
Emissions associated with the transport and management of waste and surplus materials	2.069,73
Emissions associated with energy acquisition activities	279,92
Emissions associated with the consumption of water from the supply network	12,58
Total Emissions	**118.872,71**

TOTAL FCC CONSTRUCCIÓN PERU	t CO2e
Construction	
1. Fuel (site)	688,56
2. Fuel (fixed centres)	7,15
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	884,31
5. Electrical energy (fixed centres)	1,47
6. Heat	0,00
7. Vehicle fuel	23,61
8. Travel undertaken by company personnel	303,86
9. Subcontractors	1.399,56
10. Waste	2.069,73
11. Materials	113.201,95
Total Emissions	**118.580,21**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN PERU	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	36,24
controlling the speed of vehicles on site	0,00
Total Emissions	**36,24**

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FCC CONSTRUCCIÓN UNITED STATES VERIFIED DATA

FCC CONSTRUCCIÓN UNITED STATES	t CO_2e
Category 1: Direct GHG emissions	**0,00**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**11,33**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	11,33
CATEGORY 3 Indirect GHG emissions for transport	**136,95**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	80,21
Emissions associated with employee business travel	56,74
CATEGORY 4 Indirect GHG emissions for products used by the organization	**0,66**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	0,65
Emissions associated with the consumption of water from the supply network	0,01
Total Emissions	**148,94**

TOTAL FCC CONSTRUCCIÓN UNITED STATES	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	11,33
6. Heat	0,00
7. Vehicle fuel	108,6
8. Travel undertaken by company personnel	28,35
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**148,28**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN UNITED STATES	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

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FCC CONSTRUCCIÓN CANADA VERIFIED DATA

FCC CONSTRUCCIÓN CANADA	t CO_2e
Category 1: Direct GHG emissions	**0,00**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**0,62**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	0,62
CATEGORY 3 Indirect GHG emissions for transport	**49,04**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	13,50
Emissions associated with employee business travel	35,54
CATEGORY 4 Indirect GHG emissions for products used by the organization	**0,03**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	0,03
Emissions associated with the consumption of water from the supply network	0,03
Total Emissions	**49,69**

TOTAL FCC CONSTRUCCIÓN CANADA	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,62
6. Heat	0,00
7. Vehicle fuel	13,5
8. Travel undertaken by company personnel	35,54
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**49,66**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN CANADA	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

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FCC CONSTRUCCIÓN QATAR VERIFIED DATA

FCC CONSTRUCCIÓN QATAR	t CO_2e
Category 1: Direct GHG emissions	**0,00**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**0,00**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	0,00
CATEGORY 3 Indirect GHG emissions for transport	**21,29**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	5,31
Emissions associated with employee business travel	15,98
CATEGORY 4 Indirect GHG emissions for products used by the organization	**0,00**
Emissions associated with the production of used materials	0,003,96
Emissions associated with the performance of subcontracted work units	0,00135,99
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	0,00
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**21,29**

TOTAL FCC CONSTRUCCIÓN QATAR	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	0,00
6. Heat	0,00
7. Vehicle fuel	5,3
8. Travel undertaken by company personnel	15,99
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**21,29**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN QATAR	t CO2e
reusing materials on site and not taking them to landfill	0.00
neutralising pH with CO2	0.00
proper maintenance of machinery used on site	0.00
controlling the speed of vehicles on site	0.00
Total Emissions	**0.00**

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FCC CONSTRUCCIÓN SAUDI ARABIA VERIFIED DATA

FCC CONSTRUCCIÓN SAUDI ARABIA	t CO_2e
Category 1: Direct GHG emissions	**25.202,29**
associated with on-site fuel consumption	25.202,29
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**77,64**
associated with on-site electricity consumption	77,64
associated electricity consumption at fixed centres	0,00
CATEGORY 3 Indirect GHG emissions for transport	**1914,29**
Emissions associated with the transport of materials consumed upstream	1.101,58
Emissions associated with company staff commuting to the workplace	134,22
Emissions associated with employee business travel	678,49
CATEGORY 4 Indirect GHG emissions for products used by the organization	**38.917,58**
Emissions associated with the production of used materials	31.537,69
Emissions associated with the performance of subcontracted work units	682,20
Emissions associated with the transport and management of waste and surplus materials	998,19
Emissions associated with energy acquisition activities	5.699,50
Emissions associated with the consumption of water from the supply network	0,00
Total Emissions	**66.111,80**

TOTAL FCC CONSTRUCCIÓN SAUDI ARABIA	t CO2e
Construction	
1. Fuel (site)	25.202,29
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	77,64
5. Electrical energy (fixed centres)	0,00
6. Heat	0,00
7. Vehicle fuel	138,73
8. Travel undertaken by company personnel	673,98
9. Subcontractors	682,2
10. Waste	998,19
11. Materials	32.639,27
Total Emissions	**60.412,3**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN SAUDI ARABIA	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	0,00
controlling the speed of vehicles on site	0,00
Total Emissions	**0,00**

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FCC CONSTRUCCIÓN AUSTRALIA VERIFIED DATA

FCC CONSTRUCCIÓN AUSTRALIA	t CO_2e
Category 1: Direct GHG emissions	**0,00**
associated with on-site fuel consumption	0,00
associated fuel consumption at fixed centres	0,00
Category 2: Indirect GHG emissions	**19,96**
associated with on-site electricity consumption	0,00
associated electricity consumption at fixed centres	19,96
CATEGORY 3 Indirect GHG emissions for transport	**9,86**
Emissions associated with the transport of materials consumed upstream	0,00
Emissions associated with company staff commuting to the workplace	4,87
Emissions associated with employee business travel	4,99
CATEGORY 4 Indirect GHG emissions for products used by the organization	**1,21**
Emissions associated with the production of used materials	0,00
Emissions associated with the performance of subcontracted work units	0,00
Emissions associated with the transport and management of waste and surplus materials	0,00
Emissions associated with energy acquisition activities	1,03
Emissions associated with the consumption of water from the supply network	0,18
Total Emissions	**31,03**

TOTAL FCC CONSTRUCCIÓN AUSTRALIA	t CO2e
Construction	
1. Fuel (site)	0,00
2. Fuel (fixed centres)	0,00
3. Fugitive and process emissions (excluded emissions)	0,00
4. Electrical energy (site)	0,00
5. Electrical energy (fixed centres)	19,96
6. Heat	0,00
7. Vehicle fuel	4,4
8. Travel undertaken by company personnel	5,46
9. Subcontractors	0,00
10. Waste	0,00
11. Materials	0,00
Total Emissions	**29,82**

AVOIDED EMISSIONS (TARGETED ACTIONS AND QUANTIFIED EMISSIONS)

TOTAL FCC CONSTRUCCIÓN AUSTRALIA	t CO2e
reusing materials on site and not taking them to landfill	0,00
neutralising pH with CO2	0,00
proper maintenance of machinery used on site	0,00
controlling the speed of vehicles on site	0,39
Total Emissions	**0,39**

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Chief verifier: MARGARITA ABELAIRA

Technical reviewer:

Place and date, Madrid, 19 July 2022