

Carbon Footprint Report 2023

Focusing on more of what matters.



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Acronyms & Abbreviations



Acronyms & Abbreviations

BY	Base year
CFP	Carbon Footprint
САТ	Category
CO ₂	Carbon Dioxide
DEFRA	Department for Environment, Food & Rural Affairs
EF	Emission Factor
EGP	Egyptian Pounds
Egypt ERA	Egyptian Electric Utility and Consumer Protection Regulatory Agency
GHG	Greenhouse Gases
GWP	Global Warming Potential
HQ	Headquarters
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standard Organization

kg	Kilogram
km	Kilometer
kWh	Kilowatt Hour
M.EGP	Million Egyptian Pounds
MWh	Megawatt Hour
m²	Square Meter
m ³	Cubic Meter
mtCO ₂ e	Metric tons of carbon dioxide equivalent
p.km	Passenger-kilometer
PV	Photovoltaic
T&D	Transmission & Distribution
woc	Walk of Cairo
WTT	Well-to-Tank

02/

Executive Summary



← 2 / Executive Summary

Introducing our third consecutive greenhouse gas (GHG) emissions report, we are proud to present our ongoing commitment to transparency and sustainability at SODIC. As part of our continued efforts to monitor and mitigate our environmental impact, we are pleased to share the latest findings regarding our GHG emissions. This report reflects our dedication to accountability and our journey towards a greener future in the real estate industry. During the reporting period from **January 1st, 2023, to December 31st, 2023**, we assessed our greenhouse gas emissions, encompassing Scope 1, 2, and key activities contributing to Scope 3 emissions. Recognizing the importance for enhanced data accuracy, a notable adjustment in this reporting cycle involved the recalculation of figures from our 2022 base year. Furthermore, we incorporated the calculation of Transmission and Distribution losses to ensure a comprehensive evaluation of our environmental impact.

The analysis and calculations of this assessment followed protocols & standards specially developed for accounting and reporting carbon footprint including the Greenhouse Gas Protocol Guidelines, the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for Greenhouse Gas Inventories (with 201 Refinements) and the ISO 14064-1:2018 Standards. To maintain methodological consistency and ensure the reliability of our results, we have adhered to the same methodology utilized in last year's reporting process. This approach enables us to accurately track changes, assess progress, and make informed decisions regarding our environmental impact mitigation strategies.







The total emissions for SODIC for the year 2023 are

324,960 mtCO₂e.



SCOPF 1

Direct Emissions 5,126 mtCO₂e

Primarily from sports facilities: **2,035 mtCO₂e**, constituting **40%** of the total Scope 1 emissions.

SCOPE 2

32,712 mtCO₂e

Mainly attributed to purchased electricity, accounting for the entire Scope 2 emissions. Residential developments contribute significantly, totaling 19,191 mtCO₂e and representing 59% of the Scope 2 emissions.

SCOPE 3

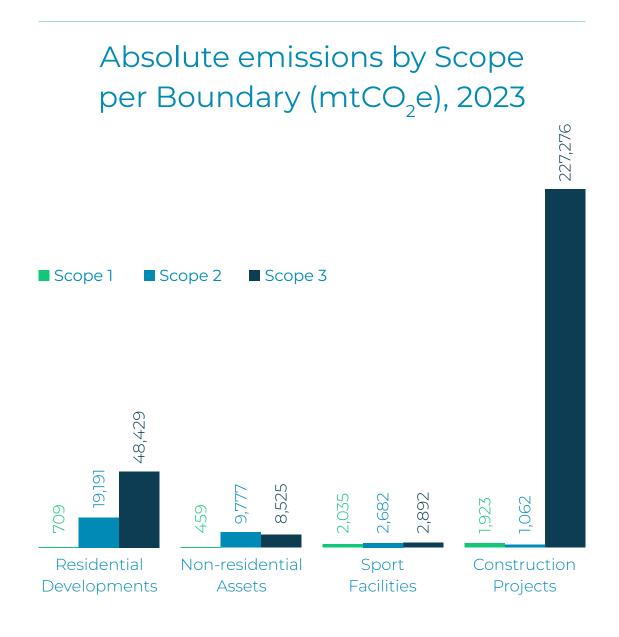
1ndirect Emissions 287,122 mtCO₂e

Predominantly from construction projects, contributing 222,276 mtCO₂e and forming 79% of the overall Scope 3 emissions.





← 2 / Executive Summary



Carbon Intensity

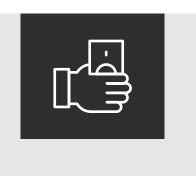






Sports Facilities

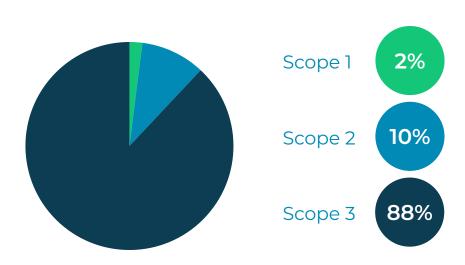
10.09 kgCO₂e/sqm



Revenue

3.66 kgCO₂e/M.EGP





In this reporting period, SODIC has achieved an emissions intensity of **3.66 mtCO₂e/Million EGP** in terms of revenue for Scope 1 and 2. This metric provides a valuable measure of SODIC's environmental efficiency, acting as a benchmark to evaluate the company's progress towards sustainable and low-carbon operations. This emissions intensity per revenue has decreased by **0.27%** compared to the 2022 base year. Our assessment extends to include the measurement of carbon intensity across organizational boundaries, with a specific focus on residential developments, non-residential facilities, and sports clubs, measured against their respective gross land area (in square meters).

Residential developments stand out with the lowest carbon intensity, boasting an impressive **7.09 kgCO₂e/sqm**. This marks a remarkable decrease of **14.2%** from the previous year, showcasing a significant improvement in environmental efficiency within this sector and reflecting positive sustainability practices. Following closely are sports facilities, with a carbon intensity of **10.09 kgCO₂e/sqm**, representing a **4.27%** decrease compared to the 2022 baseline. This demonstrates continued progress towards our sustainability goals within the organization. However, non-residential assets exhibit the highest carbon intensity at **33.05 kgCO₂e/sqm**, signaling a notable increase of **126%** compared to 2022.

Total 324,960 mtCO₂e.

SODIC in Action

In our second year of reporting on GHG emissions, we have enacted a comprehensive decarbonization strategy divided into three main areas: water, energy, and materials. This underscores our dedication to sustainability, environmental stewardship, and efficient energy utilization. The following initiatives are reported for the year 2023, highlighting significant achievements. Future initiatives, marked in yellow, are set to be realized in the upcoming period. SODIC's unwavering commitment to sustainability and responsible resource management solidifies its position as a leader in environmentally responsible practices within the real estate industry.

Water



Modified Irrigation System

Irrigation system schedule was altered to operate for two hours per day instead of the previous six-hour duration.

Decrease in Water Usage Westown Hub

18%

Decrease in Water Usage Westown Strip Mall

Retrofitting Existing Water Tanks and Improving Infrastructure

35,383

Cubic Meters

Decrease in Water Usage Annually

Energy



Solar Energy

Photovoltaic technology is currently included in 15% of all SODIC projects.

Solar Collaboration at VYE

SODIC partnered with Electro-Mechanical for Energy (EME) 400 rooftop solar panels around 2MWp capacity at VYE. The solar panels can save 3.5GWh per year, reducing 1,600 tons CO₂.





Transition to Natural Gas and Solar Energy

Edara initiated the transition of three cars to natural gas, reducing monthly operational costs by 60%, with minimal capital costs. Pilot solar energy solutions were implemented, including a solar water heater at the Edara HQ1 building and solar-powered cameras in Allegria.

Materials



Digital Transformation

Near Field Communication (NFC) technology to replace traditional paper business cards. This initiative significantly reduced paper usage and instilled an environmentally conscious culture among employees.

Waste Reduction

Reduction in waste generation

Encouraging mall tenants to prioritize the use of recyclable and sustainable packaging materials and the production of long-lasting, recyclable items.

Waste Segregation

New recycling bins in Westown Hub with three compartments

Easier for guests and tenants to dispose of waste and support our environmental objectives by facilitating appro- priate waste segregation.

Updating Guest Facilities at Westown Hub

50%

of our retail projects' guest toilets replaced traditional tissue with recycled.

03/

Inventory Boundaries

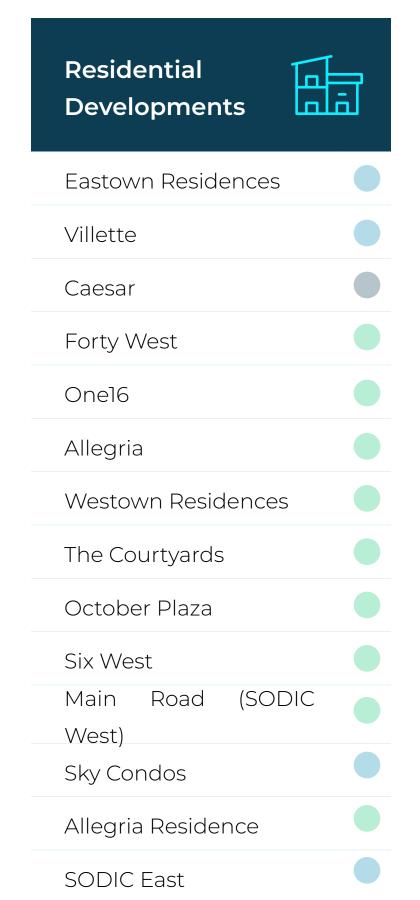


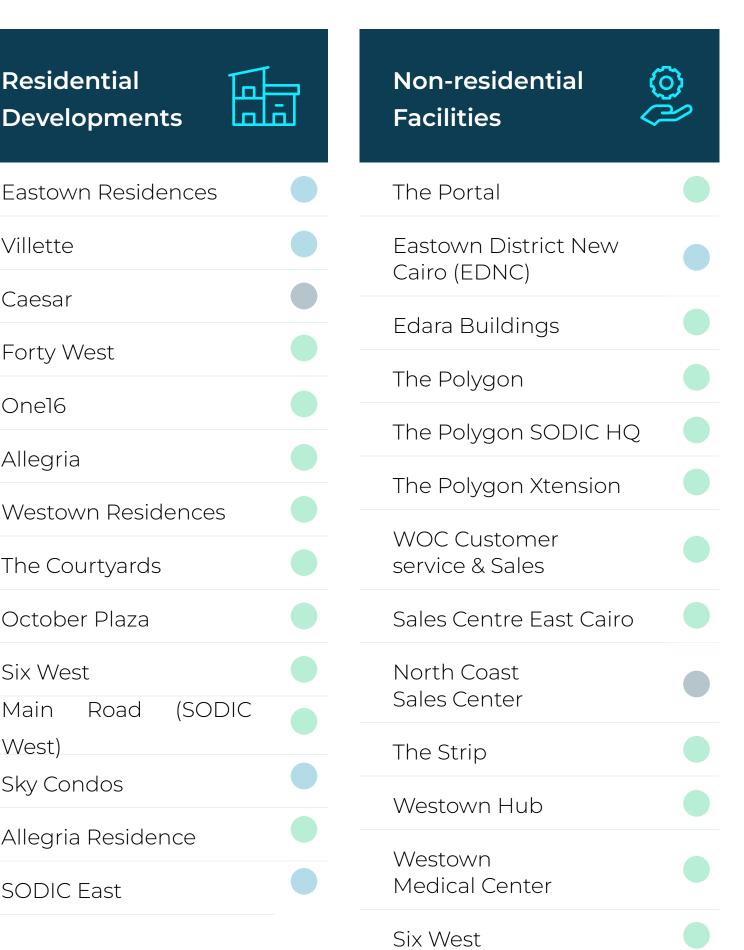
The Control Approach, which involves reporting emissions from operations under their direct financial or operational control, and

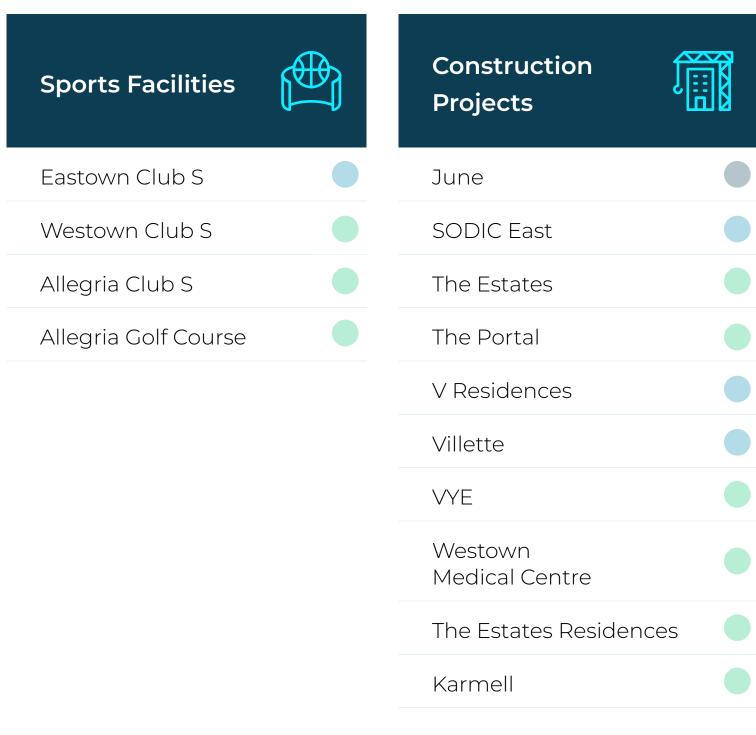
The Equity Share approach, which reports emissions based on their ownership stake in the operations.

In our case, we have selected the operational control approach.

SODIC's wide-ranging and diverse portfolio extends across three main locations in Egypt: 'West Cairo' (6th October), 'East Cairo' (New Cairo), and Egypt's 'North Coast' comprises four primary categories: residential, non -residential, sports, and construction projects, demonstrating a strategic distribution of assets throughout the region.







WEST CAIRO

EAST CAIRO

NORTH CAIRO

Operational **Boundaries**

Operational boundaries define the scope of direct and indirect emissions for operations that fall within SODIC'S established organizational boundary and choosing the scope of accounting and reporting for indirect emissions.

SCOPE 1

Direct emissions from sources that are owned or controlled by SODIC (i.e., any owned or controlled activities that release emissions straight into the atmosphere).

Stationary Combustion

On site fuel burning



Mobile Combustion

Mobile fuel burning



Fugitive Emissions

Refrigerants leakage



Agricultural Emissions

Fertilizers



SCOPE 2

Indirect emissions associated with the consumption of purchased electricity from a source that is not owned or controlled by SODIC.

Purchased Energy

Purchased electricity



SCOPE 3

Emissions resulting from other activities that are not covered in Scope 1 and 2. These indirect emissions are a result of SODIC's operations but are not directly owned or controlled by it.

The data received does not distinguish between the purchased electricity from leased units and sold units within the diverse facilities. Due to this limitation in data specifics, it was necessary to combine both categories — Category 11: Use of sold products and Category 13: Downstream leased assets.



CATEGORY 1

Purchased Goods and Services

- Water use
- · Raw materials
- Contractors
- · Monetary goods & services



CATEGORY 2 CAPITAL GOODS

· Capital goods



CATEGORY 3

Fuel and Energy-related Actives (Not Included in Scope 1 and 2)

- · Transmission & Distribution losses
- Well-to-Tank (WTT)



CATEGORY 5

Waste Generated in Operations

- Solid waste disposal
- Wastewater treatment



CATEGORY 6

Business Travel

- Air travel + (WTT)
- · Land travel + (WTT)
- Hotel stays



CATEGORY 7 Employee Commuting

Employee commuting + (WTT)



CATEGORY 11 & 13

Use of Sold Products

& Downstream Leased Assets

Purchased energy& Stationary combustion

04/

Reporting Period



The reporting period is from the 1st of January 2023 to the 31st of December 2023.



A significant adjustment in this reporting period involved revisions made to Scope 1, 2 and 3 emissions, as well as the addition of newly reported emissions.

01

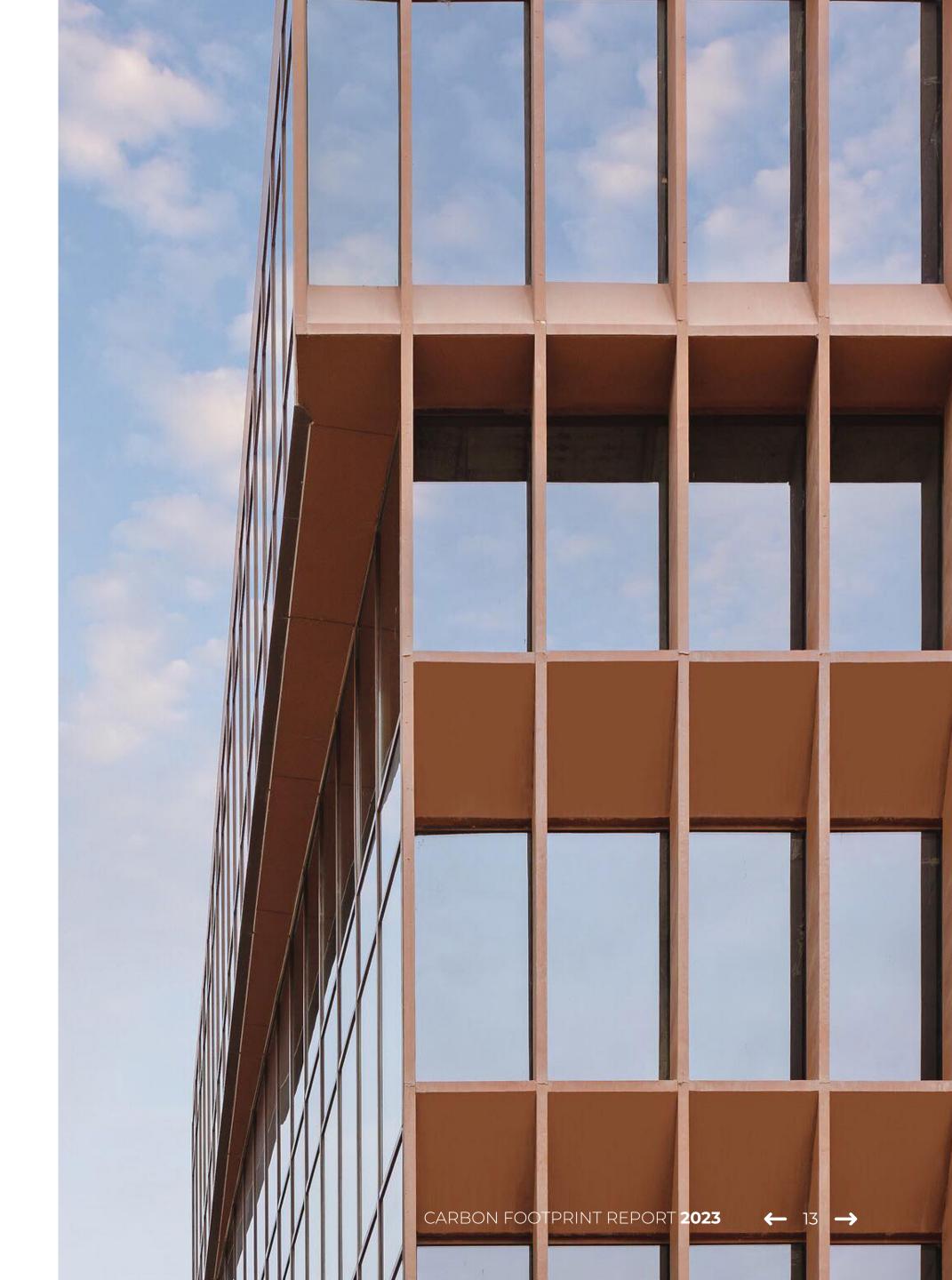
Natural gas consumption underwent recalculation in the 2022 base year due to inaccuracies in previously collected data.

02

Electricity consumption figures for The Polygon SODIC HQ were re-evaluated due to a prior data collection error, resulting in a correction to its Scope 2 emissions. Consequently, the total Scope 2 figure was increased. Additionally, there was a decrease in purchased energy within Categories 11 and 13 in Scope 3, as this consumption was initially attributed to Main Road SODIC West but should have been allocated to Polygon SODIC HQ within Scope 2.

03

Transmission and Distribution (T&D) losses (Category 3: Fuel and energy-related activities) were calculated, to account for the lifecycle emissions of consumed electricity in a T&D system. This reflects SODIC's efforts to expand its reporting boundaries according to the GHG protocol. We will continue to account for T&D losses in future years to ensure consistency in reporting.



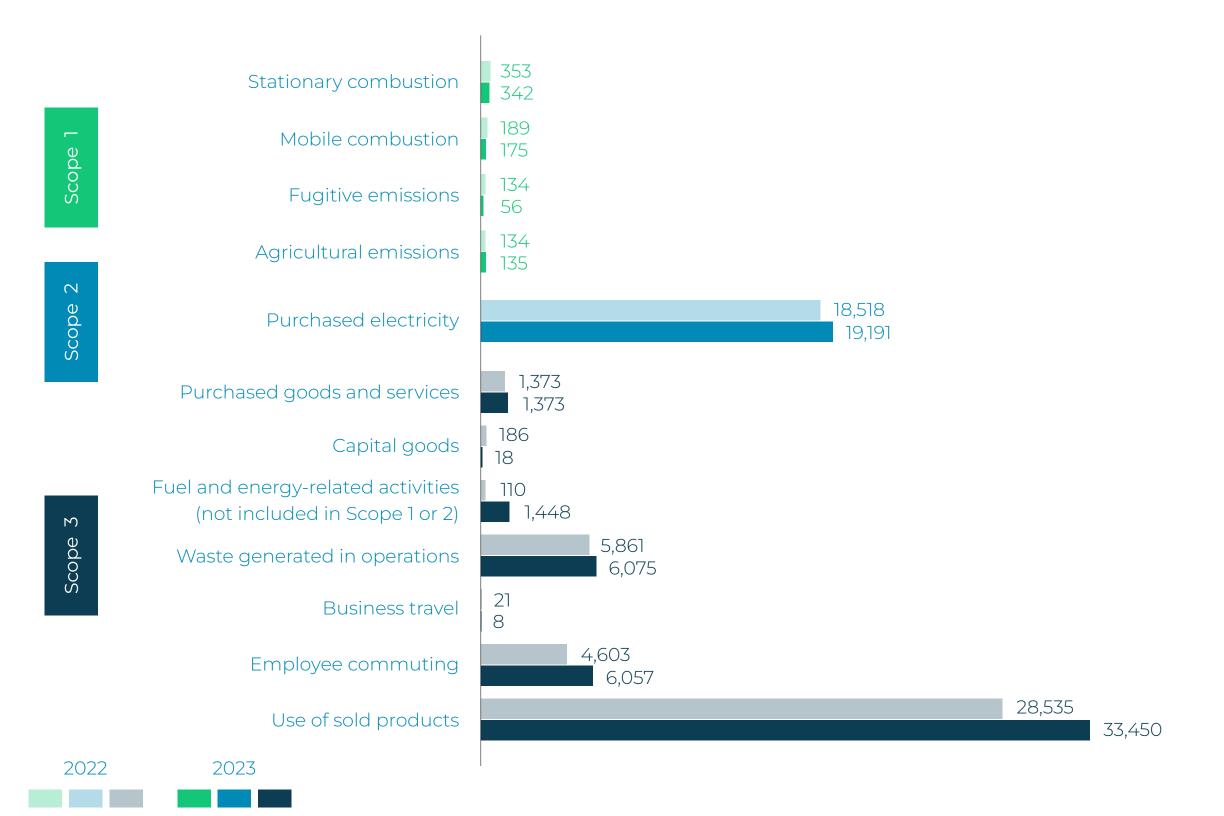
05/

Carbon
Footprint Results



68,329 mtCO₂e





Total emissions from residential developments amount to **68,329 mtCO₂e,** accounting for **21%** of SODIC's overall emissions. In residential developments, Scope 1 emissions represent **27%** of SODIC's total emissions Scope 2 emissions constitute **74%,** and Scope 3 emissions make up **29%**. Within residential developments, Scope 3 emissions are the largest, totaling **48,429 mtCO₂e (70.9%)**. Scope 2 emissions, resulting from electricity consumption, contribute **19,191 mtCO₂e (28.1%)**. Scope 1 emissions are the lowest at **709 mtCO₂e (1%)**.

Detailed data for SODIC's residential developments indicates that in Scope 1, the primary source of emissions is stationary combustion from generator usage, followed by mobile combustion from owned vehicles. In Scope 3, the dominant contributor is the energy consumption associated with sold and leased residential units, constituting 83% of the total SODIC Scope 3 emissions.

Emissions Overview Across 2022 and 2023

In 2022, emissions total amounted **59,823 mtCO₂e**. By 2023, this figure had increased by 14.2%. This increase was partly due to the first-time inclusion of T&D losses in Category 3: Fuel and energy-related activities under Scope 3 emissions. This factor had not been accounted for in previous years. Going forward, we will compare this category to the 2023 data to ensure consistency in our reporting. Additionally, there was a 17% increase in the consumption of purchased energy in Categories 11 and 13: Use of sold products and downstream leased assets. This rise is largely attributed to a **30%** increase in the number of reported residential developments, which led to higher overall energy consumption.



Stationary Combustion

 $342\,\mathrm{mtCO_2e}$

Diesel Generators Fuel Burning

 $87_{\text{mtCO}_2\text{e}}$



During the reporting period, diesel generators consumed a total of **32,566 liters** of fuel, resulting in direct emissions of approximately **87 mtCO₂e**. The highest fuel consumption was recorded at Caesar, with **17,500 liters** of diesel used, leading to approximately **47 mtCO₂e** in direct emissions, accounting for **54%** of the emissions in this category. In contrast, Six West reported the lowest consumption, using **163 liters** of diesel, which contributed to **0.5%** of the emissions.

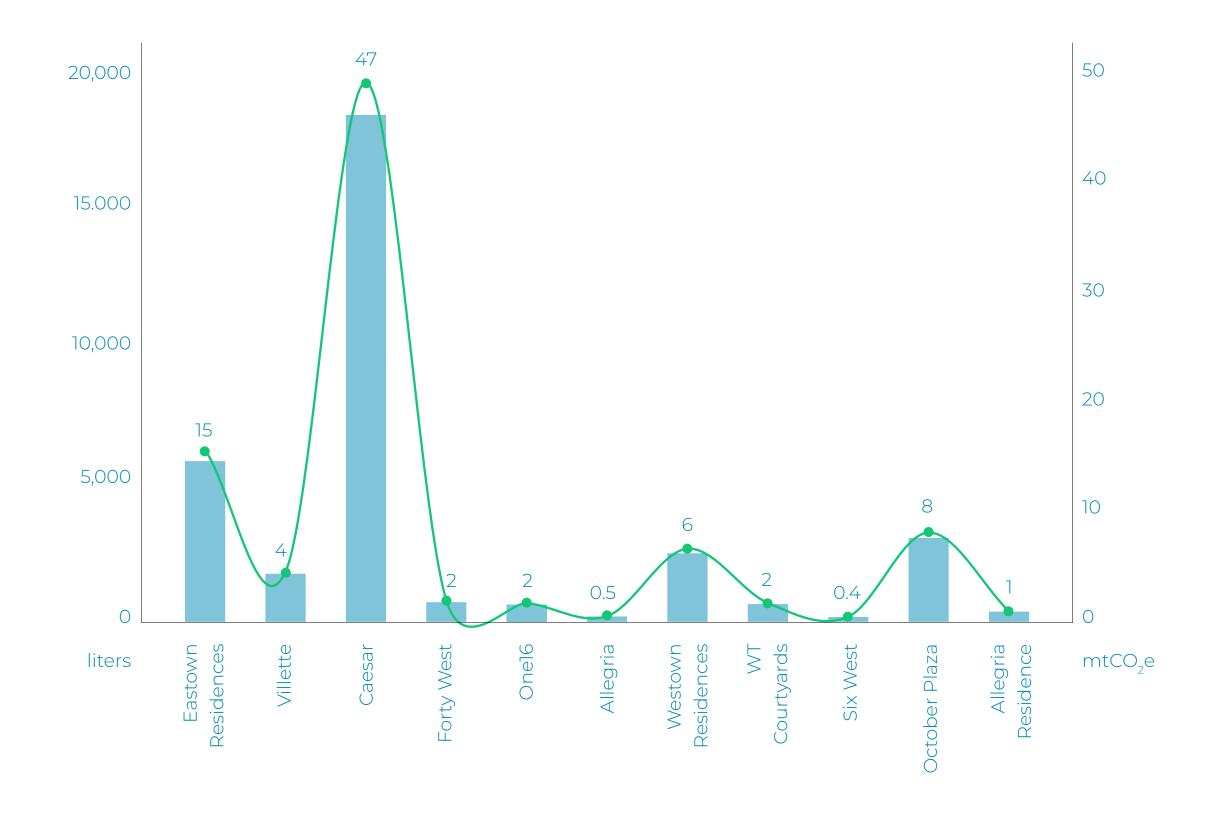
Natural Gas

256 mtCO₂e



Natural gas usage was confined to Forty West, where the consumption of **124,460 m³** resulted in direct emissions of **256 mtCO₂e**.

Generators' Fuel Burning and Emissions in Residential Developments, 2023

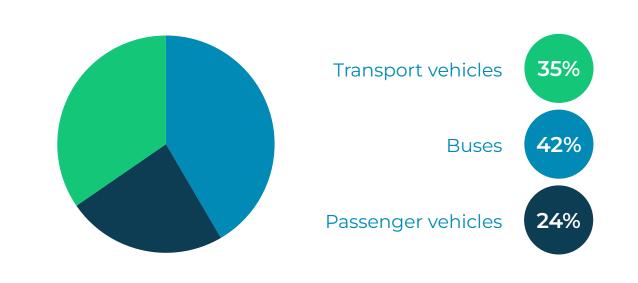


Mobile Combustion

$175_{\,mtCO_2e}$

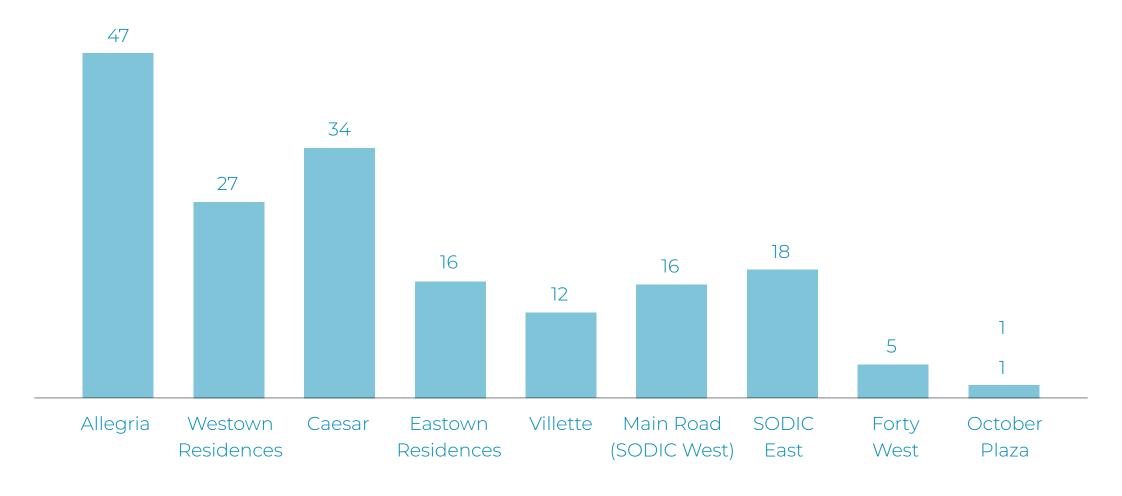
Emissions from the direct fuel consumption of SODIC's owned vehicles are included in this category. This encompasses buses, passenger vehicles, and transport vehicles, with buses having the highest emissions at 73 mtCO₂e, representing 42% of the total. Fuel combustion in Allegria accounted for 27% of the emissions in this category, totaling 47 mtCO₂e, the highest among all sites. In contrast, October Plaza recorded the lowest emissions, contributing just 1% to the total.

Share of Mobile Fuel Emissions in Residential Developments, 2023



Total 175 mtCO₂e.

Mobile Fuel Combustion Emissions in Residential Developments (Mtco₂e), 2023





Fugitive Emissions

$56_{\,\text{mtCO}_2\text{e}}$

Within our operations, refrigerants leakage occurred only at Forty West, where the "R22" refrigerant was recharged, resulting in approximately **56 mtCO₂e** in direct emissions.



Agricultural Emissions

$135\,\mathrm{mtCO_2e}$

During the reporting period, 169,796 kg of organic and synthetic fertilizers were used across 13 residential developments, resulting in direct emissions of approximately 135 mtCO₂e. Emissions were distributed as follows: East Cairo contributed 50 mtCO₂e (37%), West Cairo 66 mtCO₂e (49%), and North Cairo 19 mtCO₂e (14%).



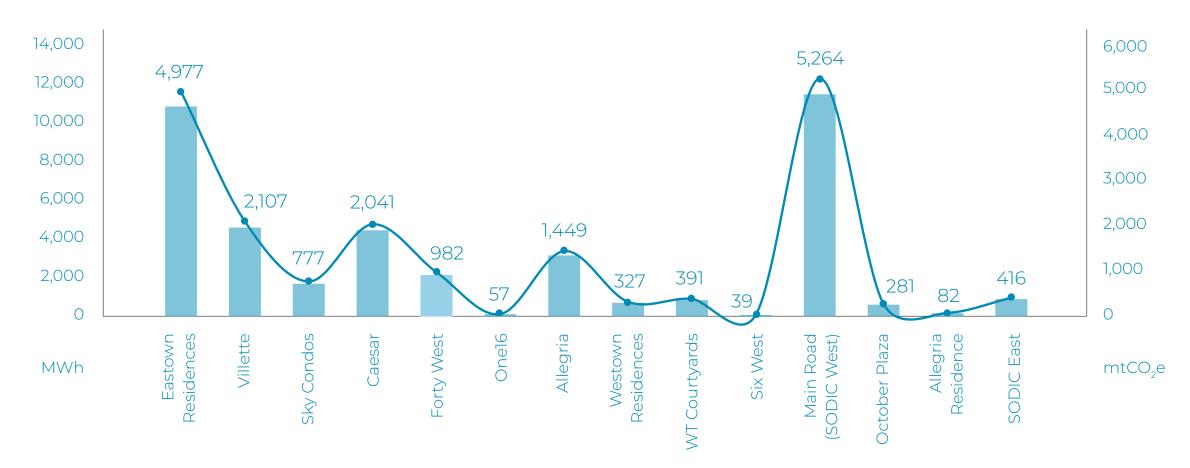
Purchased Electricity

 $19,191\,\mathrm{mtCO_2e}$

For the 2023 reporting period, the cumulative electricity consumption within residential developments amounted to 41,838 MWh, resulting in indirect emissions of 19,191 mtCO₂e. The residential development with the highest electricity consumption was Main Road (SODIC West) with an electricity consumption of 11,477 MWh, resulting in emissions of 5,264 mtCO₂e. Followed by, Eastown Residences, with an electricity consumption of 10,850 MWh, contributing to emissions of 4,977 mtCO₂e. This represents 26% of the total electricity emissions. Conversely, Six West had the least electricity consumption at 84 MWh, resulting in emissions of 39 mtCO₂e, representing a mere 0.2% of the total electricity emissions within our residential developments.

Peak electricity consumption and associated emissions within all residential developments occurred in August and October. During these months, consumption reached **4,852 MWh** and **4,591 MWh**, resulting in emissions of **2,618 mtCO₂e** and **2,482 mtCO₂e**, respectively. The lowest electricity consumption was recorded in January and April, with consumption at **2,669 MWh** and **2,764 MWh**, leading to emissions of **1,442 mtCO₂e** and **1,559 mtCO₂e**, respectively.

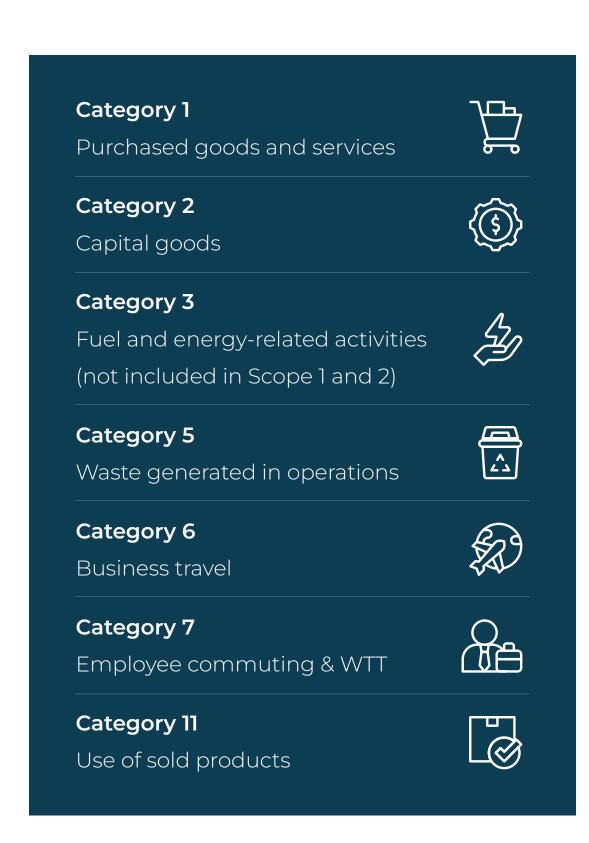
Total Electricity Consumption and Emissions Per Residential Development, 2023



Monhtly Electricity Consumption and Emissions in Residential Developments, 2023



The Scope 3 emissions calculations for the residential developments encompassed the following categories:





Category 1

Purchased Goods & Services

1,373 mtCO₂e

Monetary Purchased Goods & Services



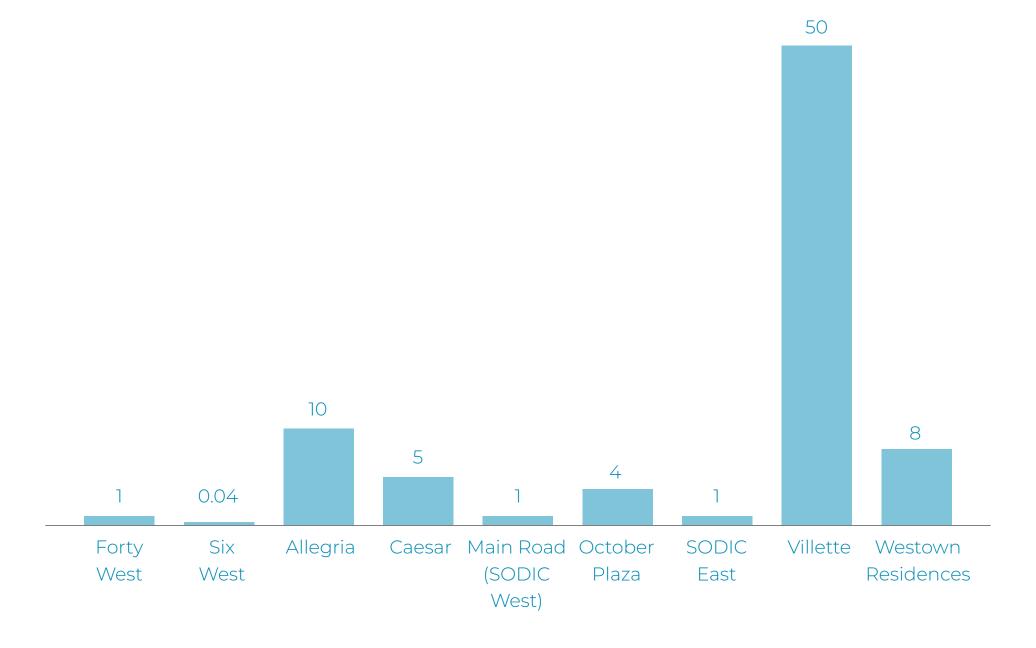
81 mtCO₂e

Emissions from purchased goods and services have been reported for nine residential developments. Villette accounts for the highest emissions at **50 mtCO₂e**, representing 62% of the total. Allegria follows with **10 mtCO₂e** (12%), while Six West has the lowest emissions at **0.04 mtCO₂e**, representing just **0.005**% of the total.

Purchased goods are not necessarily accounted for in every facility, since it depends on the purchasing cycle for each facility, which may occur every couple of years rather than annually.



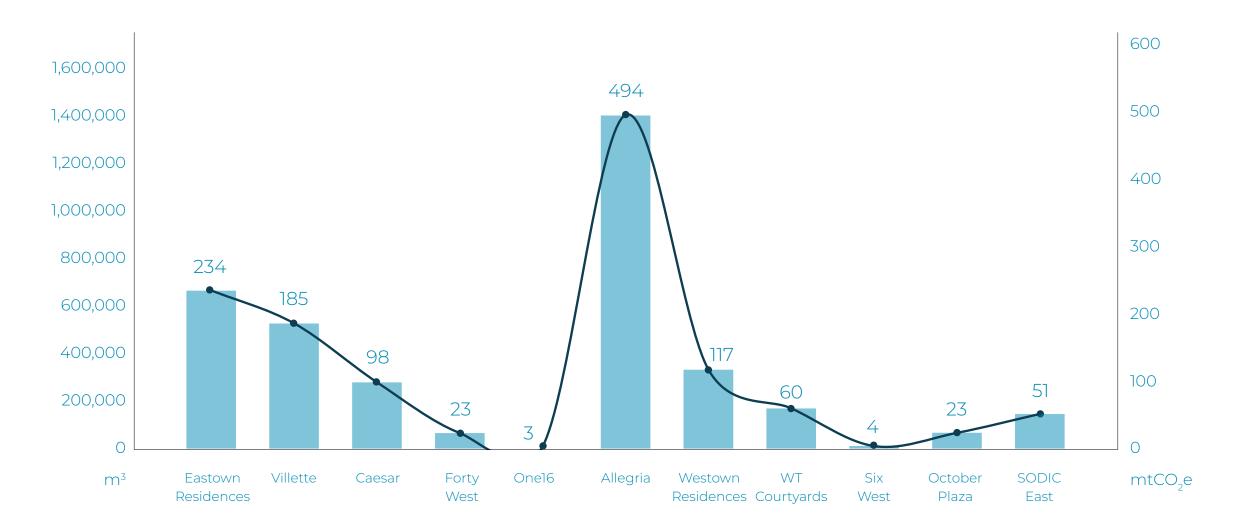






Allegria stands out for its significant water consumption, accounting for **38%** of the total water emissions in residential developments. In contrast, One16 has the lowest resulting emissions, totaling **3 mtCO₂e (0.3%)**.

Total Water Use and Emissions in Residential Developments, 2023



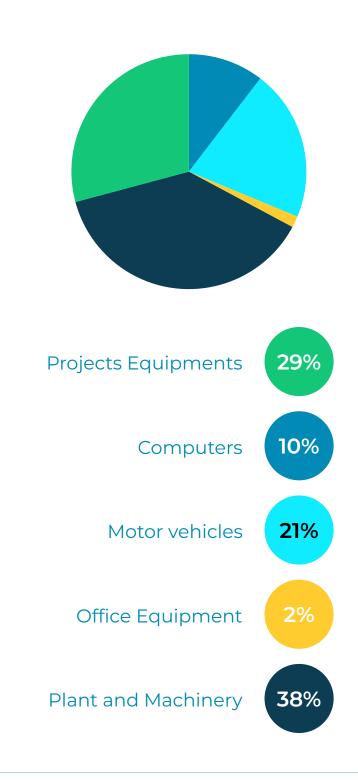


Category 2 Capital Goods

 $18_{\,mtCO_2e}$

Emissions from capital goods have been reported across 14 residential developments, totaling 18 mtCO₂e. Villette leads with the highest emissions at 4.7 mtCO₂e, comprising 26% of the total. SODIC East follows closely with **3.5 mtCO₂e (19%)**. Conversely, Allegria Residence, Main Road (SOD-IC West), October Plaza, One 16, and Westown Courtyards each exhibit emissions of **0.2 mtCO₂e**, individually representing 1% of emissions in this category. In terms of the type of goods, plant and machinery contribute the highest emissions, representing 38% of the total emissions at 7 mtCO₂e. Following closely behind are project equipment at 6 mtCO₂e, accounting for 29% of emissions. Office equipment contributes the least, emitting **0.3 mtCO₂e**, which represents **2%** of the total emissions.

Share of Capital Goods Emissions in Residential Compounds, 2023



Total 18 mtCO₂e.

Category 3

Fuel and Energy-related Activities (Not Included in Scope 1 And 2)

1,448 mtCO₂e

To comprehensively assess the climate impacts associated with fuel-burning activities, SODIC accountedforwell-to-tank (WTT) emissions and emissions from T&D losses. These Scope 3 emissions encompass the full enviro mental consequences of fuel consumption. In the reporting period of 2023, WTT emissions from SODIC-owned vehicles amounted to 43 mtCO₂e. Additionally, diesel usage in generators produced around 20 mtCO₂e, while natural gas usage in water heaters resulted in 42 mtCO₂e of emissions. Emissions from transmission and distribution (T&D) losses totaled 1,343 mtCO₂e.



Category 5

Waste Generated in Operations

6,075 mtCO₂e

Solid Waste Disposal

 $3,952\,\mathrm{mtCO_2e}$



In total, residential developments generated **6,112 tons** of waste, resulting in **3,952 mtCO₂e** of indirect emissions. This represents **77%** of the total solid waste emissions from SODIC facilities. Allegria was the largest contributor, responsible for **45%** of these emissions **(1,778 mtCO₂e)**, followed by Eastown Residences, which accounted for **27%** with **1,048 mtCO₂e** in indirect emissions.

Wastewater Treatment

2,123 mtCO₂e



During the reporting period of 2023, residential developments were responsible for approximately **3,290,346 m³** of water that drained into the sewage system for treatment. The wastewater treatment process resulted in emissions totaling approximately **2,123 mtCO**,**e**.



Category 6

Business Travel



Air Travel





During the reporting period, employees collectively traveled **31,620 km** on international and local flights. This travel resulted in around **6 mtCO₂e** of indirect emissions and **1 mtCO₂e** of WTT emissions.

Hotel Stay

1 mtCO₂e



In 2023, employees spent **19 nights** in hotels, generating approximately **1 mtCO₂e** in emissions from these stays.



Category 7

Employee Commuting & WTT

6,057 mtCO₂e

Employee commuting results in indirect emissions totaling 4,861 mtCO,e, with an additional **1,196 mtCO₂e** attributed to Well-to-Tank (WTT) emissions



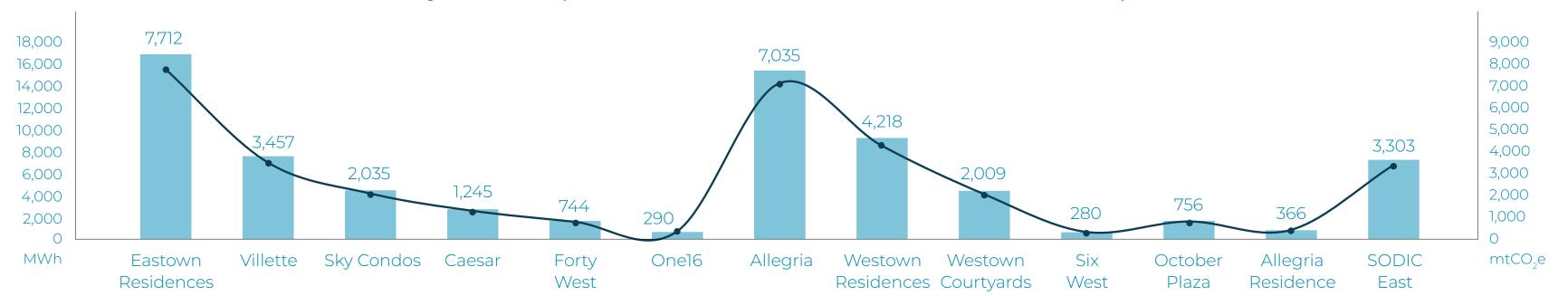
Category 11

Use of Sold Products

33,450 mtCO₂e

This includes energy of sold/leased residential units based on estimations on square meter. For the 2023 reporting period, the cumulative electricity consumption within sold/leased residential units amounted to 72,925 MWh, resulting in direct emissions of 33,450 mtCO₂e. The residential compound with the highest electricity consumption was Eastown Residences in East Cairo, with an electricity consumption of 16,813 **MWh**, contributing to emissions of **7,712 mtCO₂e**. This represents **24%** of the total electricity emissions of sold/ leased residential units. Following closely is Allegria in West Cairo, with an electricity consumption of **15,336** MWh, contributing to emissions of 7,035 mtCO₂e. This represents 22% of the total electricity emissions. Conversely, Six West in West Cairo had the least electricity consumption at **611 MWh**, resulting in emissions of 280 mtCO,e, representing a mere 0.9% of the total electricity emissions of sold/leased residential units.

Total Electricity Consumption and Emissions PER Residential Compound, 2023





Reduced Emissions

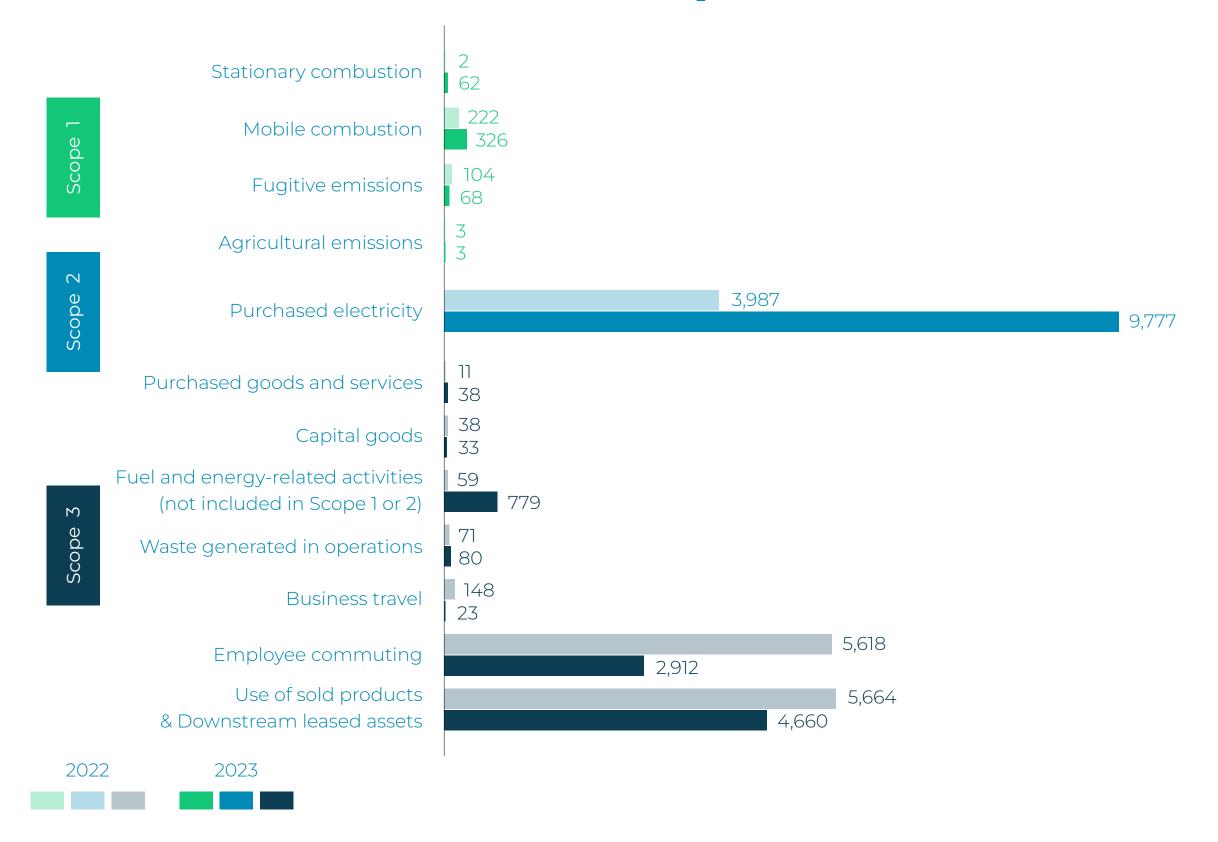
Renewable Energy

0.42 mtCO,e

In 2023, Allegria took steps towards emission reduction, achieving a total reduction of **0.42 mtCO₂e**. This modest yet meaningful accomplishment was made possible by generating 922 kWh of clean energy, through the installation of an off-grid CCTV system. This system includes 20 cameras powered entirely by solar energy, with a total power capacity of 106 watts. The cameras operate continuously, 24 hours a day, 365 days a year, ensuring robust security while maintaining a commitment to sustainability. This initiative not only enhances security but also demonstrates Allegria's dedication to reducing its carbon footprint through innovative use of renewable energy sources.

18,761 mtCO₂e

Non-Residential Assets Absolute emissions by Scope per activity (mtCO₂e), 2022 & 2023



Non-residential assets were categorized into four key groups: administrative offices, office buildings, retail and healthcare facilities. Total emissions from non-residential assets amount to accounting mtCO₂e, SODIC's emissions. overall non-residential Scope emissions assets, 459 mtCO,e represent 9% of SODIC's total emissions, Scope 2 emissions constitute **30%**, and Scope 3 emissions make up 3%. Within non-residential assets, Scope 2 emissions are the largest, totaling 9,777 mtCO₂e (52.1%). Scope 3 emissions, contribute **8,525mtCO₂e (45.4%)**. Scope lemissions are the lowest at **459 mtCO₂e (1%)**.

Emissions Overview Across 2022 and 2023

In 2022, total emissions stood at **15,927 mtCO₂e**. However, in 2023, this figure had increased by **17.8%**. This rise was primarily driven by a significant **145%** increase in Scope 2 emissions. This can be attributed to a **67%** increase in the number of reported non-residential assets, which led to higher overall energy consumption. Furthermore, the reporting of T&D losses in Categories 11 and 13 contributed an additional **684 mtCO₂e** to the emissions count for the year.



SCOPE 1

459 mtCO₂e



Stationary Combustion

 $62\,\mathrm{mtCO_2e}$

Diesel Generators Fuel Burning

 $20_{\text{mtCO}_2\text{e}}$



During the reporting period, diesel generators consumed a total of **7,579 liters** of fuel, resulting in direct emissions of approximately **20 mtCO₂e**. The highest fuel consumption was recorded at The Portal, with **2,400 liters** of diesel used, leading to approximately **6 mtCO₂e** in direct emissions, accounting for **30%** of the emissions in this category. In contrast, Six West reported the lowest consumption, which contributed to merely **1%** of the emissions.

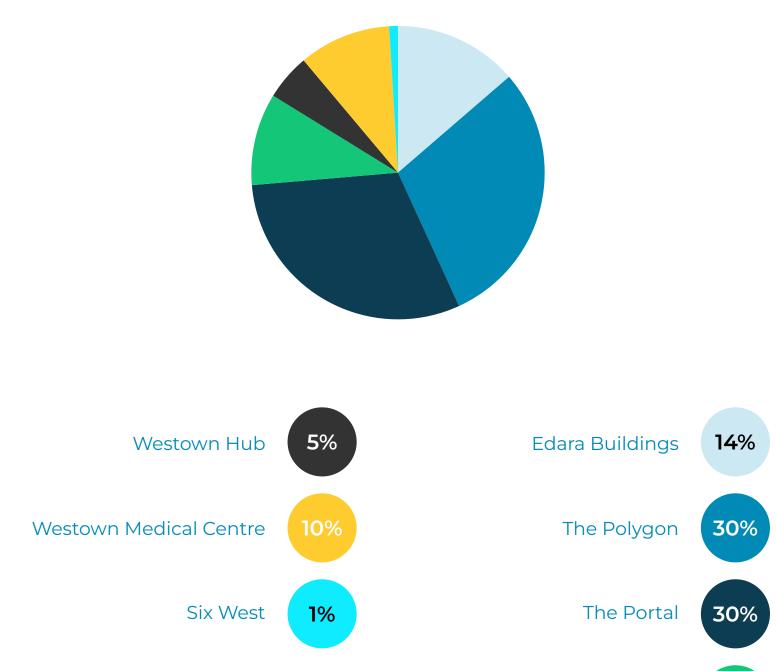
Natural Gas

41 mtCO₂e

Natural gas usage was confined to both The Polygon SOD-IC (HQ) and Eastown District New Cairo (EDNC), Forty West, where the collective consumption of **19,953** m³ resulted in direct emissions of **41 mtCO**₂e.



Share of Emissions from Diesel Generators in Non-residential Assets, 2023



Total $\frac{20}{\text{mtCO}_{2}}$ e

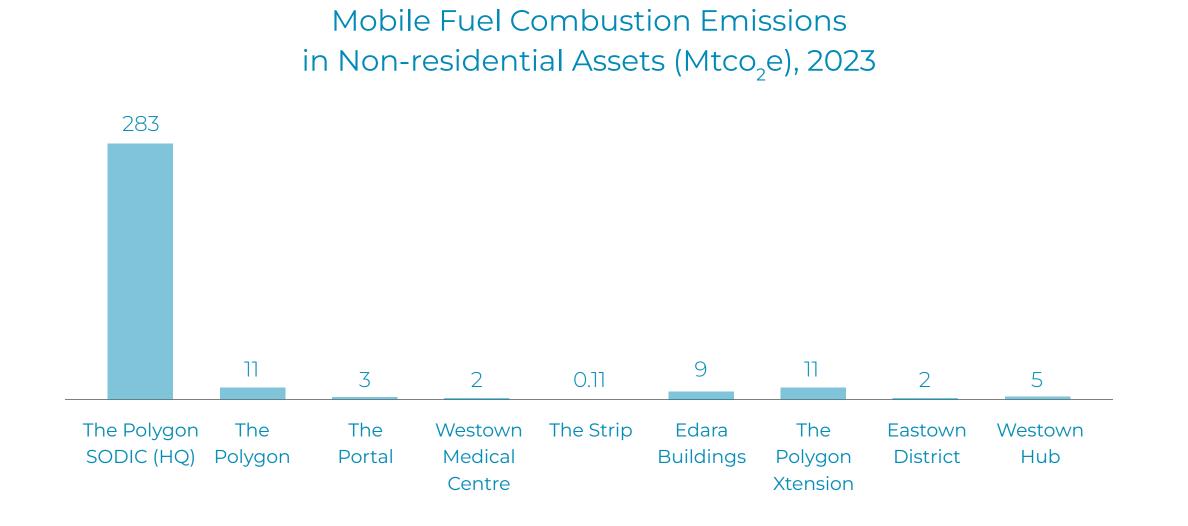
EDNC



Mobile Combustion

 $326_{\,mtCO_2e}$

Emissions from the direct fuel consumption of SODIC's owned vehicles are included in this category. Fuel combustion in The Polygon SODIC HQ accounted for **87%** of the emissions in this category, totaling **283 mtCO₂e**, the highest among all sites. In contrast, The Strip recorded the lowest emissions, contributing just **0.03%** to the total. It's important to note that this accounts only for facilities where SODIC owns cars and operates in that facility.





Fugitive Emissions

68 mtCO₂e

Within our operations, the "R22" refrigerant was used at Edara Buildings (23% of refrigerant emissions), Westown Hub (72%), and The Portal (5%), leading to approximately 68 mtCO₂e in direct emissions.



Agricultural Emissions

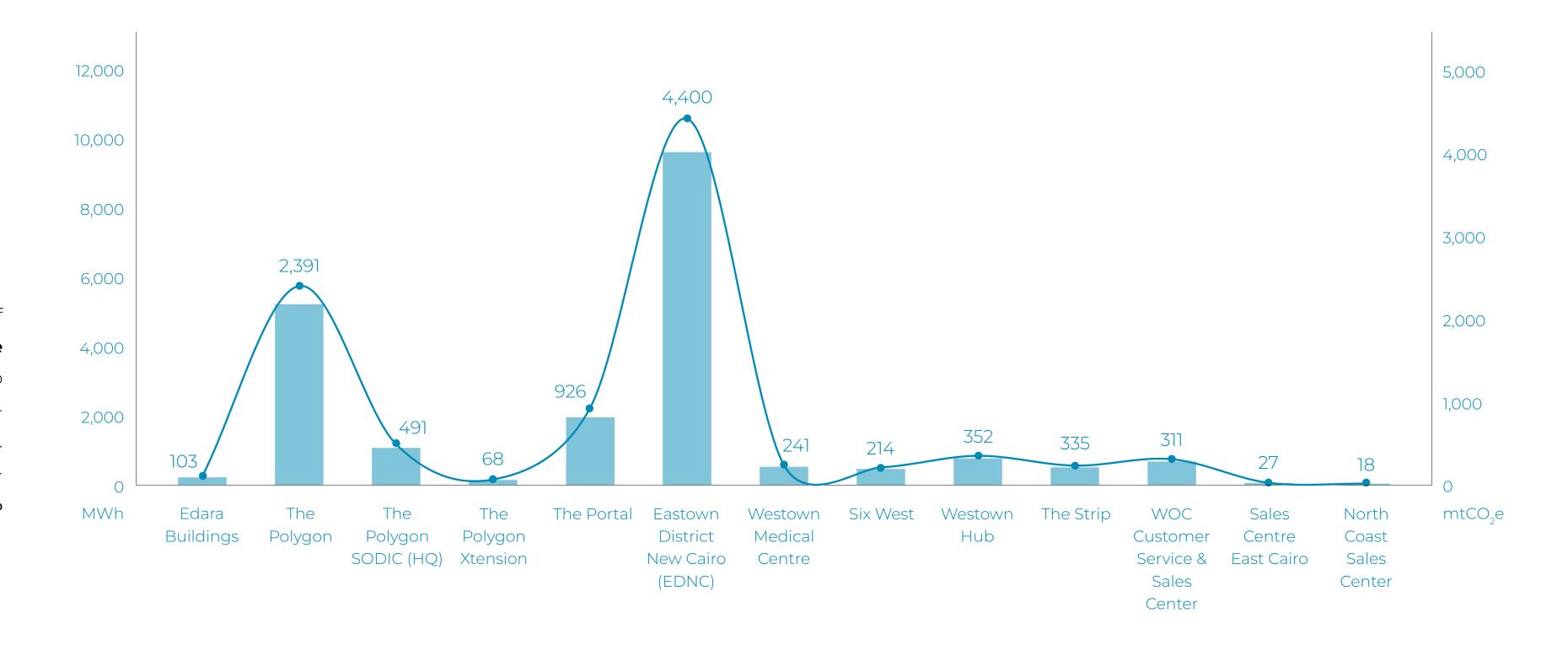
 3_{mtCO_2e}

During the reporting period, **8,072 kg** of organic and synthetic fertilizers were used across 7 non-residential assets, resulting in direct emissions of approximately **3 mtCO₂e**.

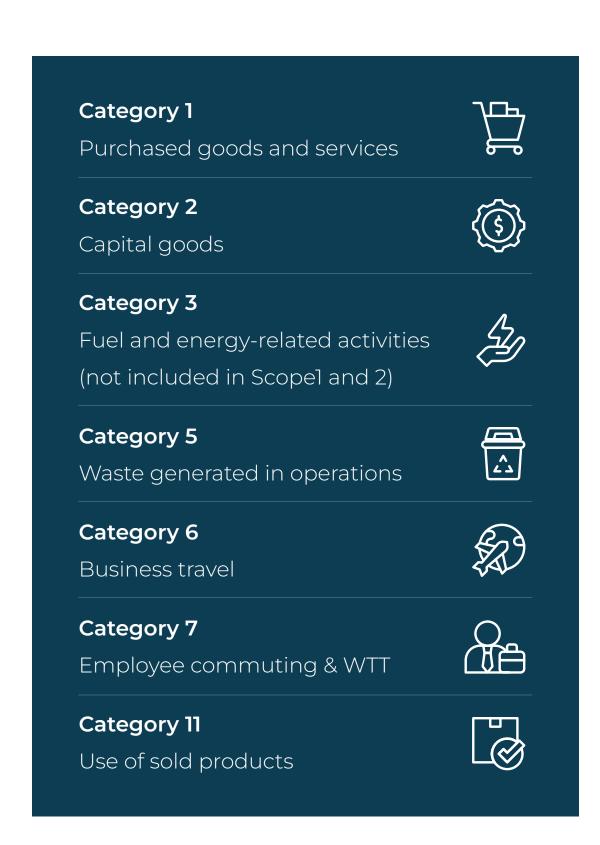




In 2023, non-residential assets consumed a total of **21,315 MWh** of electricity, generating **9,777 mtCO₂e** in indirect emissions. Eastown District New Cairo (EDNC) led in consumption with **9,592 MWh**, producing **4,400 mtCO₂e**, or **45%** of total emissions. In contrast, the North Coast Sales Center had the lowest usage at **40 MWh**, resulting in **18 mtCO₂e** (**0.2%** of total emissions).



The Scope 3 emissions calculations for the non-residential assets encompassed the following categories:





Category 1

Purchased Goods & Services

 $38_{\text{mtCO}_2\text{e}}$

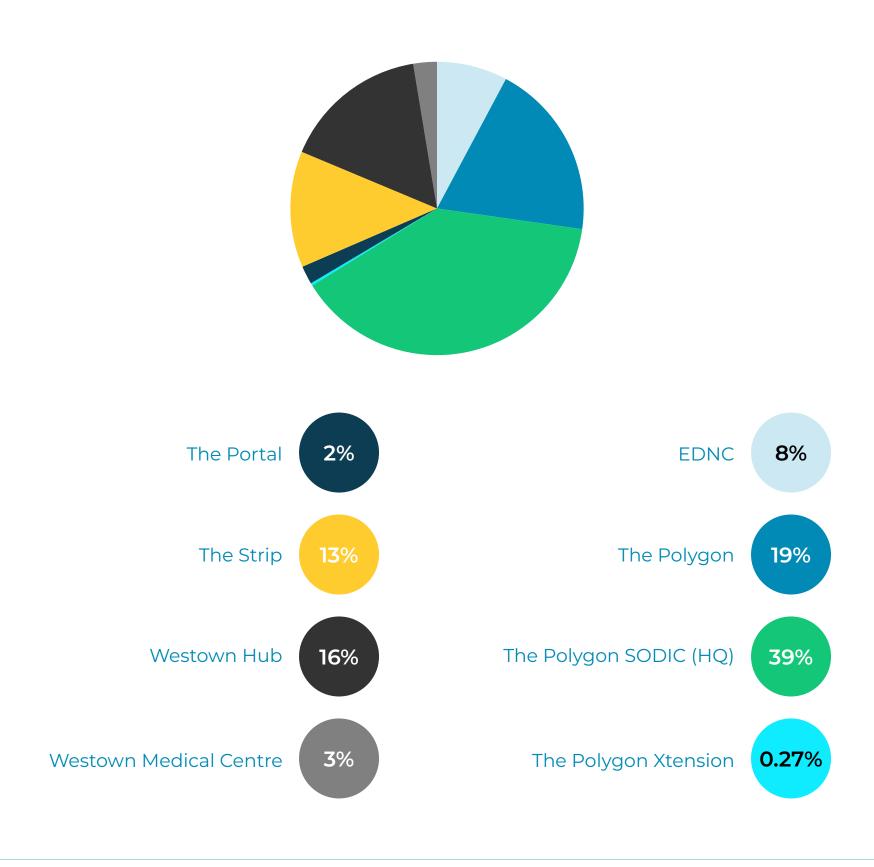
Monetary Purchased Goods & Services



 $25\,\mathrm{mtCO_2e}$

Emissions from monetary purchased goods and services have been reported for eight non-residential assets. The highest emissions come from The Polygon SODIC HQ, accounting for **39%** of the total at **10 mtCO₂e**. The lowest emissions are from The Polygon Xtension, at **0.07 mtCO₂e**, representing just **0.27%** of the total.

Share of Emissions from Monetary Purchased Goods & Serrvices in Non-residential Assets, 2023

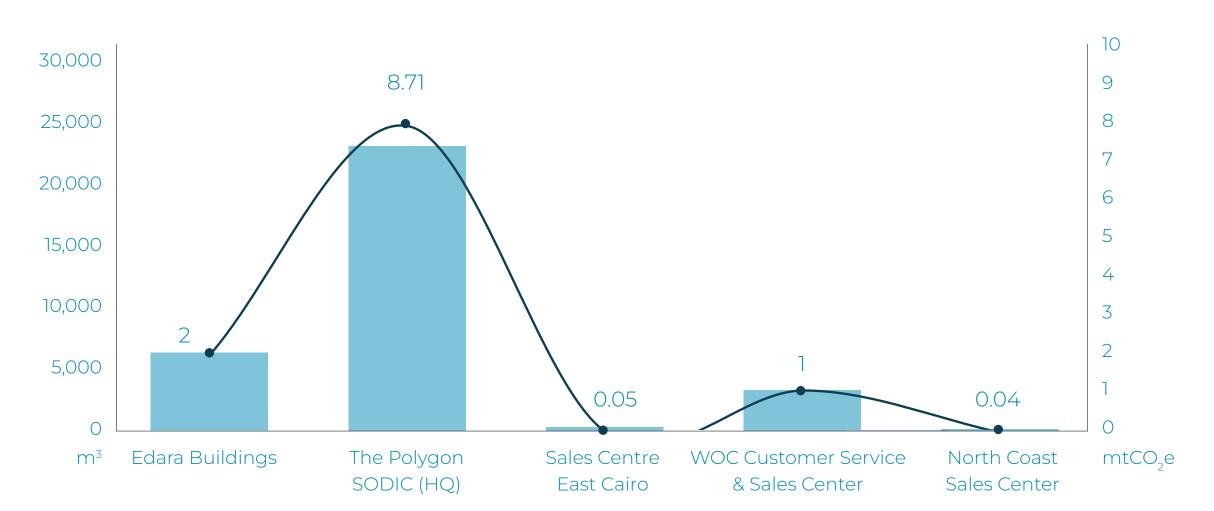


Total $25 \text{ mtCO}_2\text{e}$



This category only accounts for water use under SODIC's operation. The Polygon SODIC HQ stands out for its significant water consumption, accounting for **71%** of the total water emissions in non-residential assets at **9 mtCO₂e**. In contrast, the North Coast Sales Center has the lowest resulting emissions, totaling **0.04 mtCO₂e**, which represents just **0.3%** of the total. As specific data for The Polygon SODIC (HQ) was unavailable, we extrapolated its water consumption based on the total water use of The Polygon, which amounted to 24,646 m³, utilizing area ratio analysis.

Total Water Use and Emissions in Non-residential Assets, 2023





Category 2 Capital Goods

33 mtCO₂e

Emissions from capital goods have been reported across five non-residential assets , totaling 33 mtCO₂e. The types of goods included IT equipment, computers, plant and machinery, and furniture. The Polygon SODIC HQ leads with the highest emissions at 32 mtCO₂e, representing 96% of the total emissions. The Portal has the least emissions at 0.11 mtCO₂e, comprising 0.3% of the total.

Capital goods are not necessarily accounted for in every facility, since it depends on the purchasing cycle for each facility, which may occur every couple of years rather than annually.



Category 3

Fuel and Energy-related Activities (Not Included in Scope 1 And 2)

 $779_{\,mtCO_2e}$

To comprehensively assess the climate impacts associated with fuel-burning activities, SODIC accounted for WTT emissions and emissions from T&D losses. In the reporting period of 2023, WTT emissions from SODIC-owned vehicles amounted to 83 mtCO₂e. Additionally, diesel from generators produced approximately 5 mtCO₂e, and the fire-fighting pump contributed 0.2 mtCO₂e. Natural gas usage in water heaters resulted in 7 mtCO₂e of emissions. Emissions from transmission and distribution (T&D) losses totaled 684 mtCO₂e.



Category 5

Waste Generated in Operations

 $80_{\text{mtCO}_2\text{e}}$

Solid Waste Disposal

 $59_{\,mtCO_2e}$



Solid waste was reported in only two non-residential assets, generating a total of **78 tons** of waste, consisting of paper, board, and refuse. This resulted in **59 mtCO₂e** in indirect emissions, representing only **1%** of total solid waste emissions from SODIC facilities. The Polygon SODIC HQ was responsible for **43 mtCO₂e** (**72%**), while the Edara Buildings accounted for **17 mtCO₂e** (**28%**) of emissions in this category.

Wastewater Treatment

 $20_{\,\text{mtCO}_2\text{e}}$



In the 2023 reporting period, non-residential assets were responsible for discharging approximately **31,313 m** 3 of water into the sewage system for treatment. This wastewater treatment process resulted in emissions totaling about **20 mtCO** $_2$ **e**.



Category 6

Business Travel

 $23_{\text{mtCO}_2\text{e}}$

Air Travel

 $19_{\,mtCO_2e}$



Throughout the reporting period, employees collectively journeyed on international flights spanning a total distance of **50,774 km**. This travel activity generated approximately **17 mtCO₂e** in indirect emissions, along with **2 mtCO₂e** in WTT emissions.

Hotel Stay





During the year 2023, employees lodged for a total of **82 nights** in hotels spanning **7** different countries. This accommodation activity resulted in approximately **4 mtCO₂e** in indirect emissions.



Category 7

Employee Commuting & WTT

2,912 mtCO₂e

Employee commuting results in indirect emissions totaling 2,771 mtCO₂e , with an additional 141 mtCO₂e attributed to Well-to-Tank (WTT) emissions. We used the survey results for the defined boundaries. For employees who did not participate in the survey, we estimated their commuting distance based on an assumption of 25 km per person one way, consistent with last year's approach.



Category 11

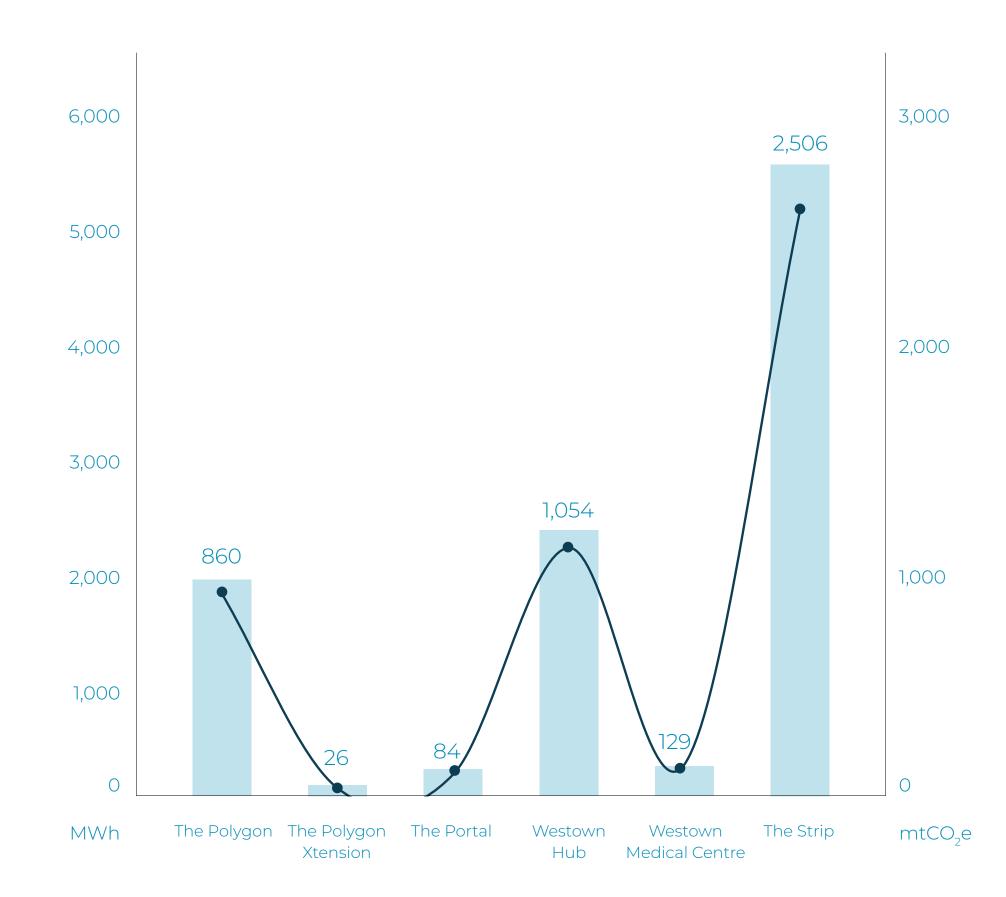
Use of Sold Products

4,660 mtCO,e

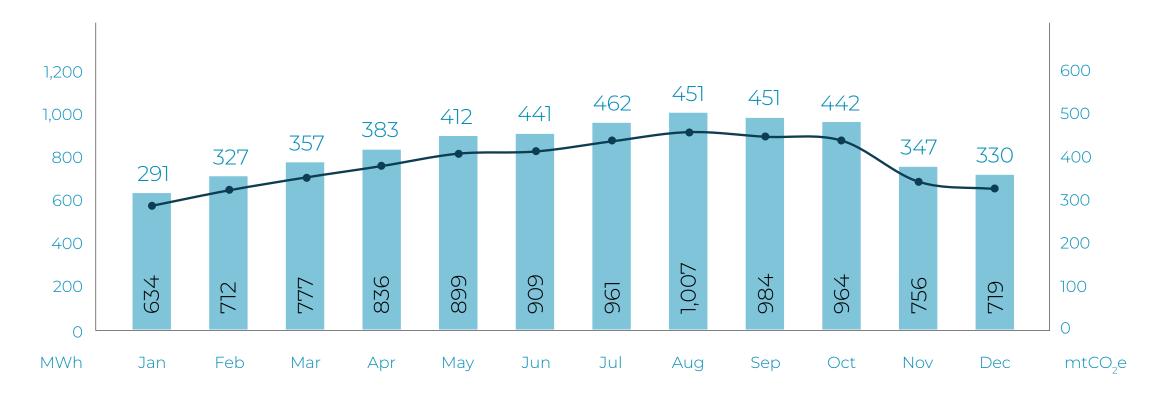
For the 2023 reporting period, the cumulative electricity consumption within non-residential assets amounted to 10,160 MWh, resulting in indirect emissions of 4,660 mtCO₂e. The facility with the highest electricity consumption was The Strip, with an electricity consumption of 5,463 MWh, contributing to emissions of 2,506 mtCO₂e. This represents 54% of the total electricity emissions. Conversely, The Polygon Xtension had the least electricity consumption at 58 MWh, resulting in emissions of 26 mtCO₂e, representing a mere 0.6% of the total electricity emissions within our non-residential assets.

Peak electricity consumption and associated emissions within all residential developments occurred in August and September. During these months, consumption reached 1,007 MWh and 984 MWh, resulting in emissions of 462 mtCO₂e and 451 mtCO₂e, respectively. The lowest electricity consumption was recorded in January, with consumption at 634 MWh, leading to emissions of 291 mtCO₂e.

Total Purchased Energy Consumption and Emissions Per Non-residential Asset, 2023



Total Purchased Energy Consumption and Emissions Per Non-residential Asset, 2023





Reduced Emissions

Renewable Energy

208 mtCO₂e

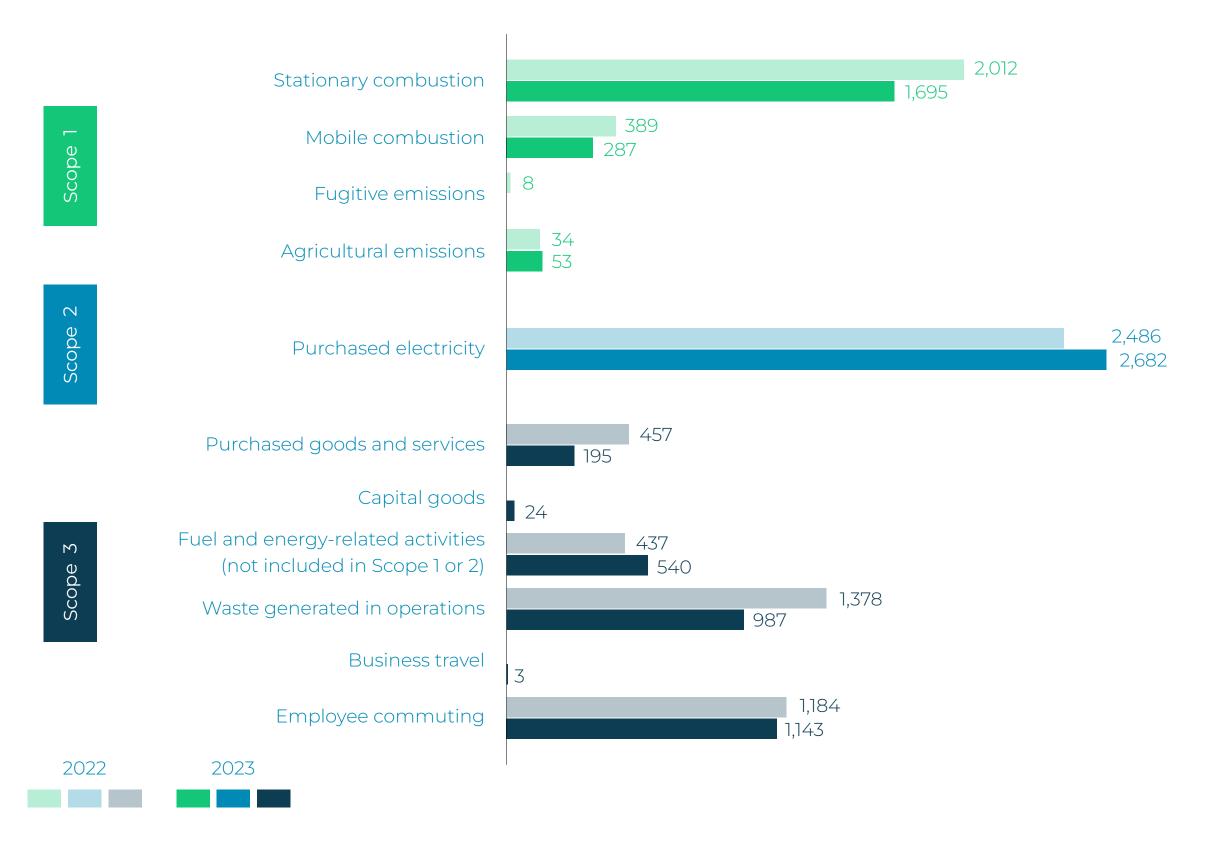
The Polygon made significant strides in emission reduction, achieving a noteworthy reduction of 129 mtCO₂e. This reduction was made possible by generating 281,580 kWh of clean energy, effectively displacing energy that would have otherwise been sourced from the electricity grid. Similarly, through the generation of 172,303 kWh of clean energy, Westown Hub also contributed to emission reduction efforts by achieving a total reduction of 79 mtCO₂e in 2023.



Sports Facilities

7,610 mtCO₂e





Total emissions from sports facilities amount to **7,610 mtCO₂e**, accounting for **2%** of SODIC's overall emissions. In residential developments, Scope 1 emissions represent **40%** of SODIC's total emissions, Scope 2 emissions constitute **8%**, and Scope 3 emissions make up **1%**. Within sports facilities developments, Scope 3 emissions are the largest, totaling **2,892 mtCO₂e (38%)**. Scope 2 emissions, resulting from electricity consumption, contribute **2,682 mtCO₂e (35%)**. Scope 1 emissions are the lowest at **2,035 mtCO₂e (27%)**.

Detailed data concerning SODIC's residential developments reveals that within Scope 1 emissions, the primary source arises from stationary combustion, predominantly due to generator usage. Following this, mobile combustion from company-owned vehicles also contributes significantly. As for Scope 3 emissions, the dominant factor is employee commuting, constituting 10% of the total SODIC Scope 3 emissions.

Emissions Overview Across 2022 and 2023

In 2022, total emissions amounted to **8,384 mtCO₂e,** marking a **9%** decrease. This decline is evident across various activities, with significant reductions observed in Category 1: Purchased goods and services, and Category 5: Waste generated in operations, decreasing by **57%** and **28%**, respectively. Even in Scope 2, where emissions from purchased electricity increased, the rise was minimal, at just **7%**.



SCOPE 1

2,035 mtCO₂e



Stationary Combustion

1,695 mtCO₂e

Diesel Generators Fuel Burning

 $75_{\text{mtCO}_2\text{e}}$



During the reporting period, diesel generators consumed a total of **28,279 liters** of fuel, leading to direct emissions of approximately **75 mtCO₂e**. Allegria Golf Course recorded the highest fuel consumption, resulting in approximately **70 mtCO₂e** in direct emissions, accounting for **93%** of emissions in this category. Conversely, Westown Club S reported the lowest consumption, contributing only **2%** to the overall emissions.

Natural Gas 1,620 mtCO₂e



Natural gas was utilized in Eastown Club S, as well as Westown Club S and Allegria Club S. The total consumption of natural gas reached 788,571 m³, contributing to emissions amounting to 1,620 mtCO₂e. The most substantial natural gas consumption occurred at Westown Club S, with a total consumption of 327,279 m³ and direct emissions of 672 mtCO₂e (42%), followed by Allegria Club S at 618 mtCO₂e (38%), and Eastown Club S at 330 mtCO₂e (20%).

Notably, the highest natural gas consumption across all sports facilities occurred in January and December, accounting for 17% and 14% of total natural gas emissions, respectively. The lowest consumption months were from July to September, with October having the lowest peak.

Monthly Natural Gas Emissions Per Sports Facility (Mtco₂e), 2023





Mobile Combustion

 $287_{\text{mtCO}_2\text{e}}$

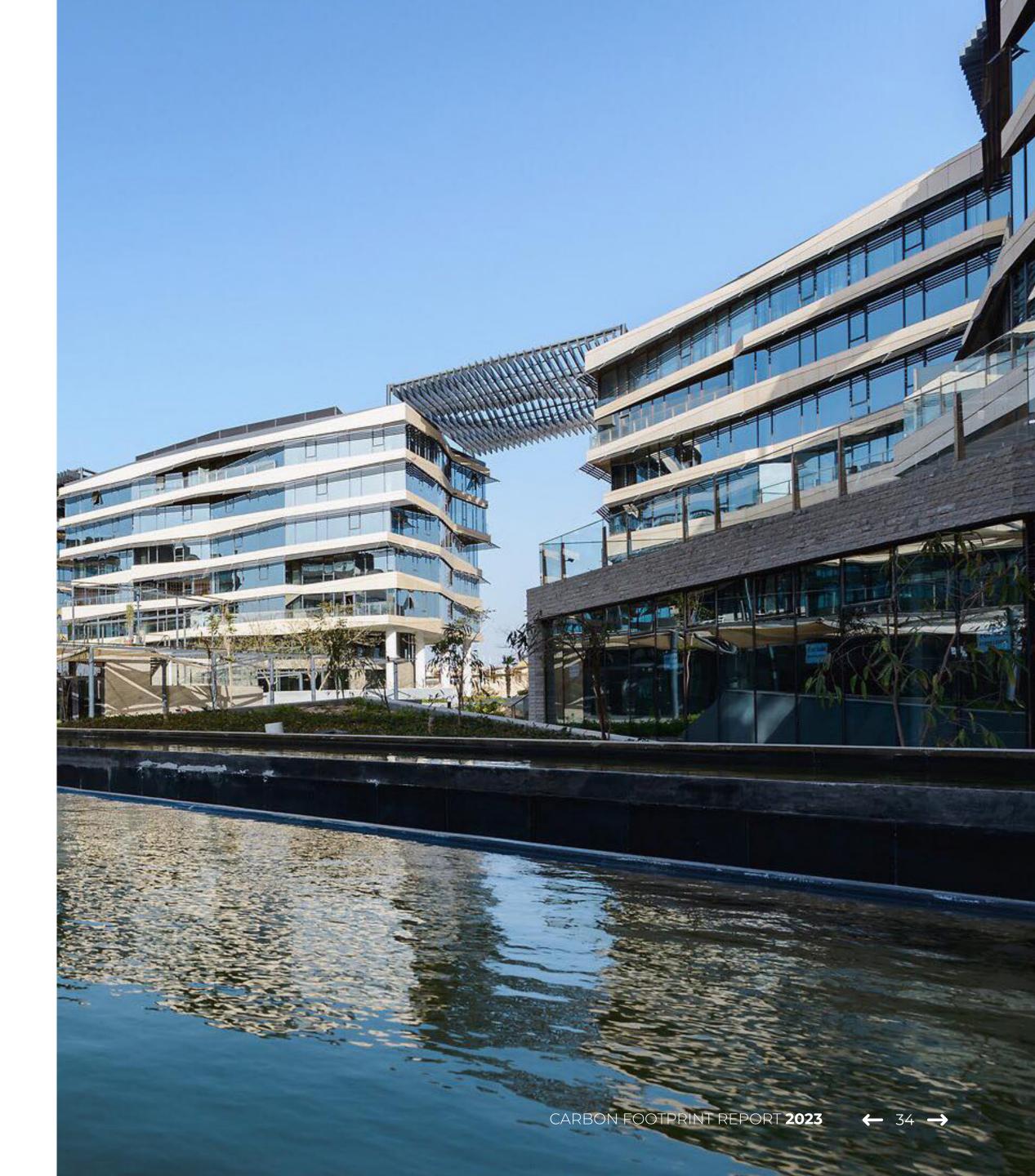
Emissions from the direct fuel consumption of SODIC's owned vehicles are included in this category, covering Allegria Club S and Allegria Golf Course. This includes both passenger and transport vehicles. Transport vehicles contribute the most, with emissions reaching 210 mtCO₂e, which represents 73% of the total mobile combustion emissions. Fuel combustion at Allegria Club S accounts for 60% of the emissions in this category, totaling 172 mtCO₂e.



Agricultural Emissions

 $53_{\text{mtCO}_2\text{e}}$

During the reporting period, **41,307 kg** of organic and synthetic fertilizers were used across the four sports facilities, resulting in direct emissions of approximately **53 mtCO₂e**. Synthetic fertilizers accounted for **90%** of the total. The emissions were distributed as follows: Allegria Golf Course contributed **48.7 mtCO₂e** (**91%**), Allegria Club S contributed **2.5 mtCO₂e** (**5%**), and both Westown and Eastown Club S contributed **1.1 mtCO₂e each** (**2% each**).



SCOPE 2

2,682 mtCO₂e



Purchased Electricity

2,682 mtCO₂e

For the 2023 reporting period, the cumulative electricity consumption within the sports facilities amounted to **5,847 MWh**, resulting in direct emissions of **2,682 mtCO₂e**. The sports facility with the highest electricity consumption was Allegria Club S, located within SODIC West, with a total of **2,580 MWh** consumed, resulting in emissions of **1,183 mtCO₂e**. This represents **44%** of the total electricity emissions across our sports facilities. The least electricity consumption was recorded at Allegria Golf Course, also located at SODIC West, with a yearly total of **292 MWh**, corresponding to **20 mtCO₃e** (11%).

The highest electricity consumption and corresponding emissions in all sports facilities were recorded in the months of June and September. During these months, consumption reached **726 MWh** and **629 MWh**, resulting in corresponding emissions of **333 mtCO₂e** and **289 mtCO₂e**, respectively. Conversely, the lowest electricity consumption was recorded in January and March, at **316 MWh**, and **325 MWh**, respectively, corresponding to direct emissions of **145** and **149 mtCO₃e**.

Monthly Electricity Emissions Per Sports Facility (mtCO₂e), 2023

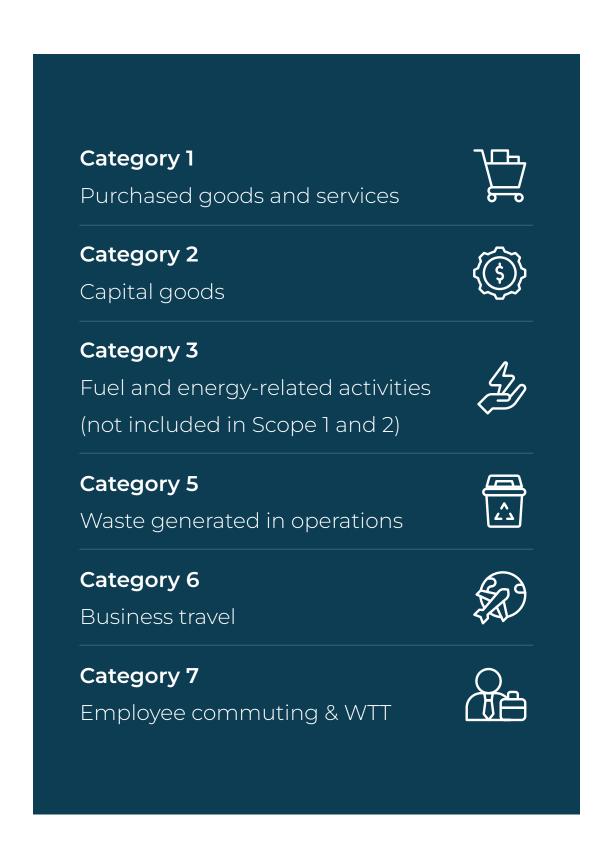


Purchased Energy Share Per Sports Facility, 2023



Total **2,682** mtCO₂e

The Scope 3 emissions calculations for the sports facilities encompassed the following categories





Category 1

Purchased Goods & Services

 $195\,\mathrm{mtCO_2e}$

Monetary Purchased Goods & Services

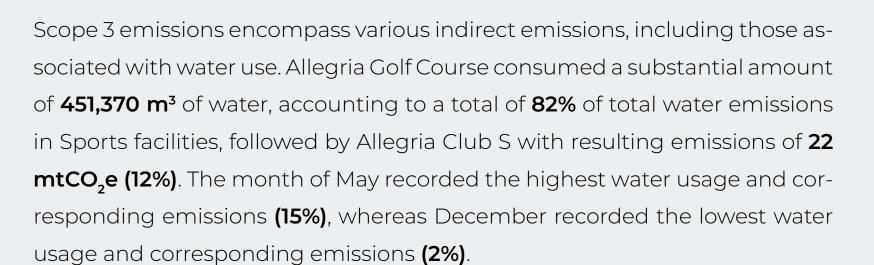




Emissions from purchased goods and services have been reported only for Allegria Club S with **1 mtCO₂e**.

Water Use

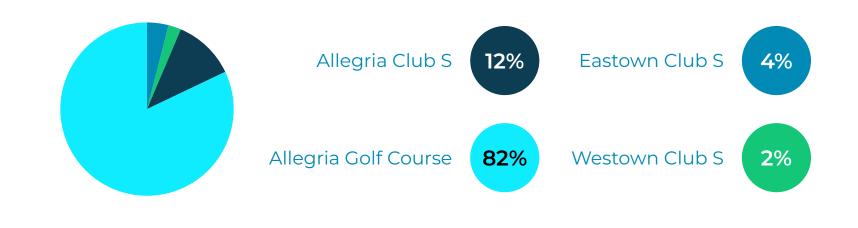
194 mtCO₂e



Monthly Water Use and Emissions in Sports Facilities, 2023



Water Use Emissions Share Per Sports Facility, 2023



Total 194 mtCO₂e.



Category 2

Capital Goods

 24_{mtCO_2e}

Emissions from capital goods have been reported across all four sports facilities, totaling **24 mtCO₂e**. Westown Club S leads with the highest emissions, contributing **15 mtCO₂e** or **61%** of the total. This is followed by Allegria Club S at **26%**, Eastown at **11%**, and Allegria Golf Course at **2%**.



Category 3

Fuel and Energy-related Activities (Not Included in Scope 1 And 2)

 $540\,\mathrm{mtCO_{2}e}$

In the reporting period of 2023, WTT emissions from SODIC-owned vehicles amounted to **69 mtCO₂e**. Additionally, diesel usage in generators produced around **18 mtCO₂e**, while natural gas usage in water heaters resulted in **265 mtCO₂e** of emissions. Emissions from transmission and distribution (T&D) losses totaled **188 mtCO₂e**.



Category 5

Waste Generated in Operations

 $987_{\,mtCO_2e}$

Solid Waste Disposal

668 mtCO,e



In total, **1,007 tons** of waste were generated across various sports facilities, including plastics, paper, metals, and general refuse, leading to indirect emissions of **668 mtCO₂e**. Refuse made up the majority, accounting for **96%** of the total waste. Allegria Club S was the largest contributor, generating **373 tons** of waste, which resulted in **254 mtCO₂e** emissions, representing **38%** of the total. On the other hand, Eastown Club S had the smallest impact, producing **139 tons** of waste and **85 mtCO₂e** emissions, comprising **13%** of the total.

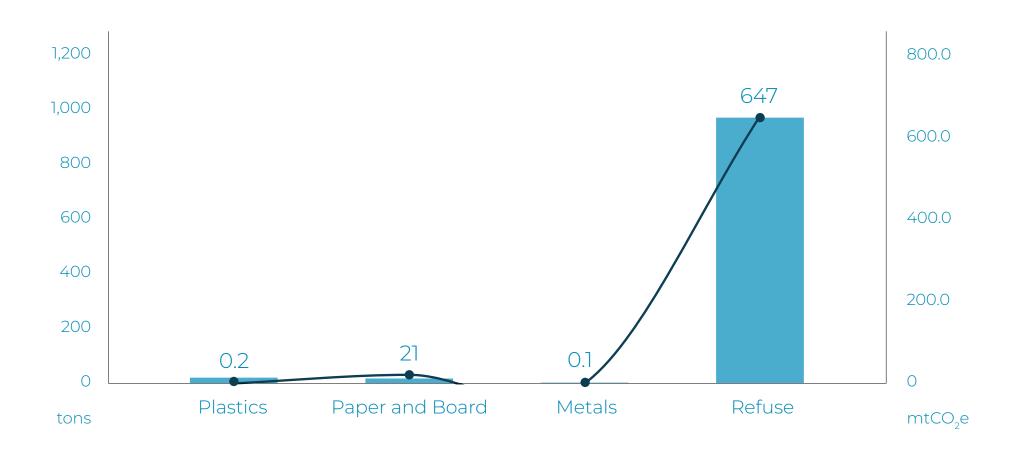
Wastewater Treatment

319 mtCO₂e

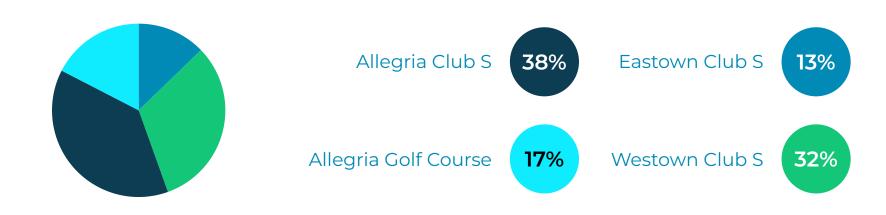


During the reporting period of 2023, sport facilities were responsible for approximately 494,969m³ of water that drained into the sewage system for treatment. The wastewater treatment process resulted in emissions totaling approximately 319 mtCO₂e.

Solid Waste Emissions by Type in Sports Facilties, 2023



Solid Waste Disposal Share Per Sports Facility, 2023



Total 668 mtCO₂e



Category 6

Business Travel

 3_{mtCO_2e}

Air Travel

 $2_{\text{mtCO}_2\text{e}}$



0.1 mtCO ϵ

Hotel Stay

During the reporting period, employees collectively traveled **12,340 km** on international and local flights. This travel resulted in around **2 mtCO₂e** of indirect emissions and **0.3 mtCO₂e** of WTT emissions.

In 2023, employees spent **6 nights** in hotels, generating approximately **0.1 mtCO₂e** in emissions from these stays.



Category 7

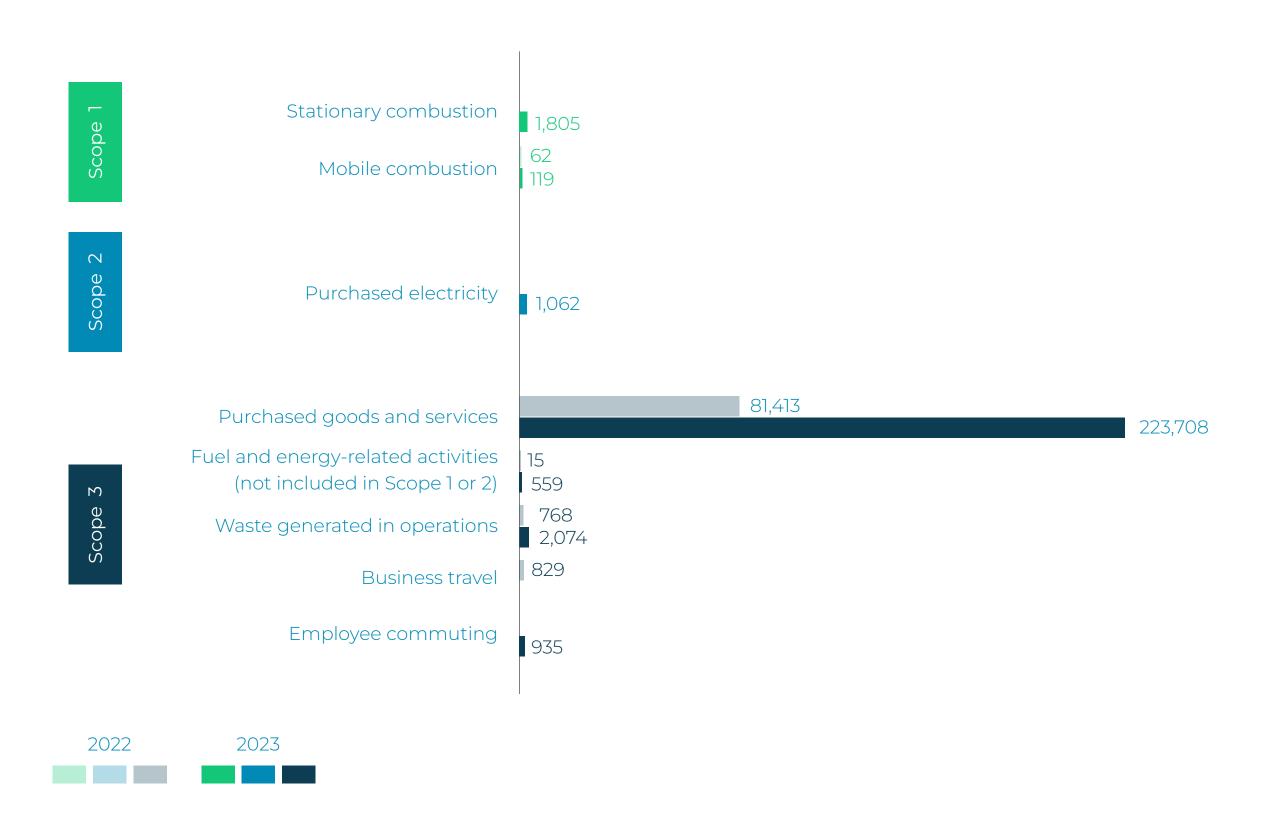
Employee Commuting & WTT

1,143 mtCO₂

Employee commuting results in indirect emissions totaling **924 mtCO₂e**, with an additional **219 mtCO₂e** attributed to Well-to-Tank (WTT) emissions.

Construction Projects 230,261 mtCo₂e

Construction Projects Absolute emissions by Scope per activity (mtCO₂e), 2022 & 2023



Total emissions from projects under construction amount to **230,261 mtCO₂e**, accounting for **71%** of SODIC's overall emissions. Scope 1 emissions represent **38%** of SODIC's total emissions, Scope 2 emissions constitute **3%**, and Scope 3 emissions make up **79%**.

Within construction projects, Scope 3 emissions are the largest, amounting to 227,276 mtCO₂e (98.7%). Following this are Scope 1 emissions, contributing 1,923 mtCO₂e (0.8%). Scope 2 emissions from electricity consumption are the lowest at 1,062 mtCO₂e (0.5%). Detailed data on SODIC's construction projects reveals that purchased goods and services account for 97% of the total emissions for these projects.

Emissions Overview Across 2022 and 2023

In 2022, total emissions were **83,087 mtCO₂e**, this marks this sector as the highest increase of **177%**. However, this change is due to the significant increase in Category 1: Purchased goods and services, which represent **98%** of construction projects' Scope 3 emissions and **78%** of SODIC's overall Scope 3 emissions.

Although only two construction projects were added during this reporting period, the year was characterized by a phase requiring increased procurement of raw materials essential for construction. Consequently, emissions from raw materials surged by 170%, accompanied by a substantial 390% increase in plastics usage. Therefore, it's important to note that this doesn't necessarily indicate a rise in carbon intensity. Instead, it reflects the material-intensive nature of the construction phase during this reporting period.





Stationary Combustion

1,805 mtCO₂e

Generators used both diesel and petrol, though petrol was only used in VYE and June. The highest fuel consumption was recorded at VYE, resulting in approximately **1,659 mtCO₂e** in direct emissions for both diesel and petrol, accounting for **92%** of total emissions in this category. Conversely, the lowest consumption was at Villette and V Residences, each with approximately **9 mtCO₂e** in direct emissions **(0.5%)**.

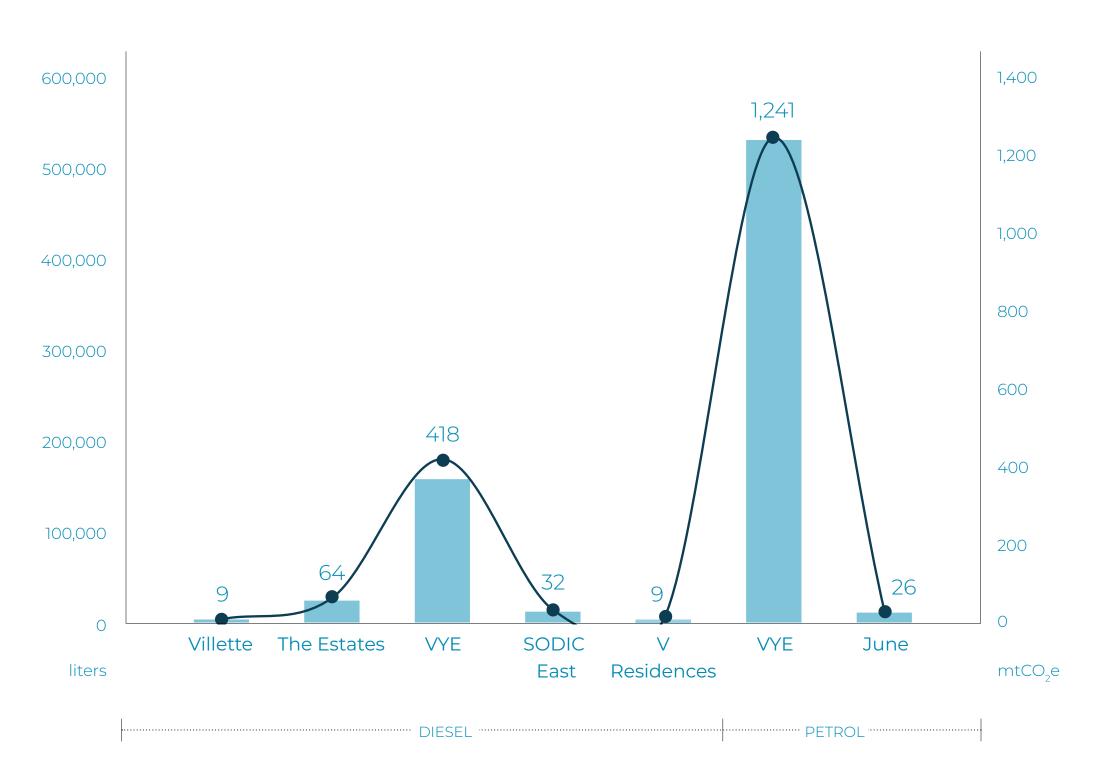


Mobile Combustion

119 mtCO₂6

Emissions from the direct fuel consumption of SODIC's transport vehicles are accounted for in this category, covering five projects under construction in East Cairo and West Cairo. The use of petrol and diesel vehicles results in direct emissions totaling **119 mtCO₂e**.

Generators' Fuel Burning and Emissions in Construction Projects, 2023



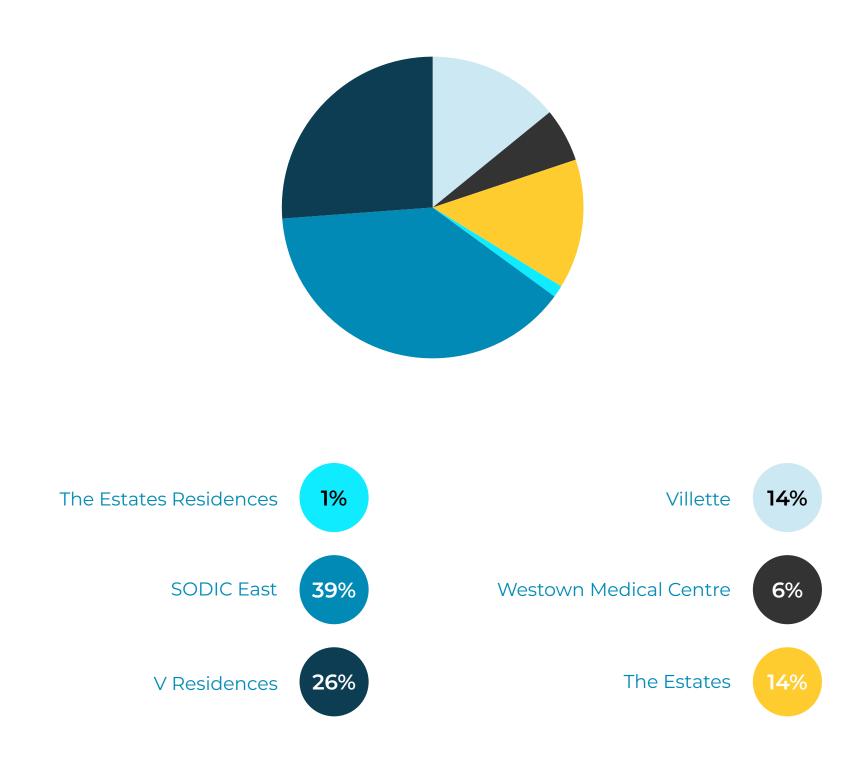


Purchased Electricity

1,062 mtCO₂e

For the 2023 reporting period, the cumulative electricity consumption across construction projects amounted to **2,315 MWh**, resulting in direct emissions of **1,062 mtCO₂e**. SODIC East recorded the highest electricity consumption at **897 MWh**, resulting in emissions of **412 mtCO₂e**, which represents **39%** of the total electricity emissions across our sports facilities. The Estates Residences had the lowest electricity consumption, with a yearly total of **30 MWh**, corresponding to **14 mtCO₂e** (**1%**).

Share Of Purchased Energy Emissions in Construction Projects, 2023



Total 1,062 mtCO₂e



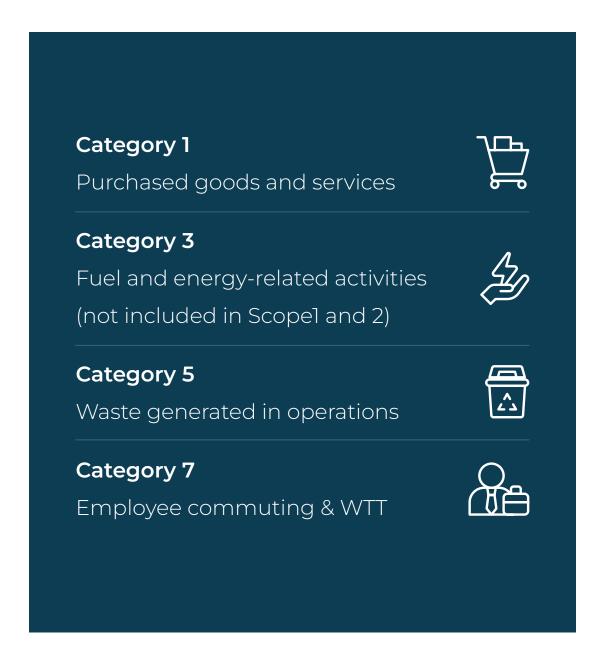
The Scope 3 emissions calculations for the construction projects encompassed the following categories:



Category 1

Purchased Goods & Services

223,708 mtCO₂e



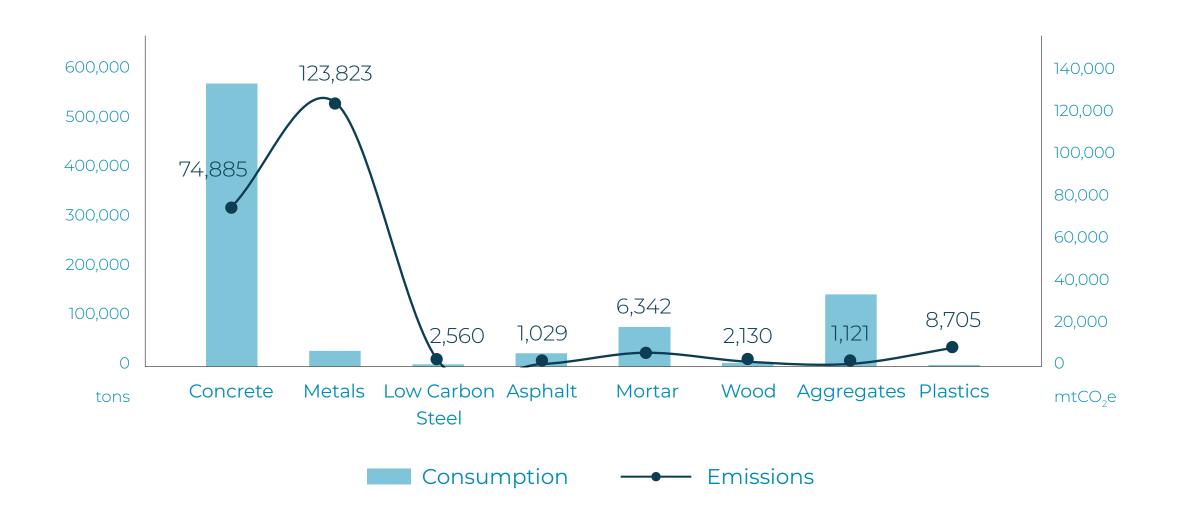
Raw Materials

220,596 mtCO₂e



In the 2023 reporting period, SODIC's construction projects utilized various raw materials. The total weight of raw materials used reached **862,714 tons**, resulting in emissions equivalent to approximately **220,596 mtCO₂e**. Among these raw materials, metal had the largest share, contributing to **56%** of the total raw materials emissions, followed by concrete at **34%**, while asphalt had the smallest share at **0.5%**.

Raw Materials Weight and Emissions in Construction Proejcts, 2023



SODIC's Pathway to Decarbonization:

Leveraging Low-Carbon Steel in Construction

As reported above, metals constitute only **3.6%** of total raw materials by weight, yet they have the largest share of emissions. This underscores the importance of innovation in low-carbon raw materials. In response, SODIC has begun using **4,000** tons of low-carbon steel across its construction projects. This steel is sourced from the largest steel manufacturer in Egypt and the MENA region, known for producing billet, rebar, and wire rod. The steel products are made using **97.5%** recycled materials, primarily ferrous scrap, to produce steel rebar and wire rod for concrete reinforcement applications, utilizing the scrap-based production route.

According to the World Steel Association's 2023 CO₂ data report, scrap-based production reduces carbon emissions by about 71% compared to the BF-route and by 50% compared to the DRI-route.

This initiative underscores SODIC's commitment to reducing its carbon footprint. By implementing these environmentally conscious measures, SODIC not only sets a benchmark for the industry but also paves the way for greener construction practices.

SODIC plans to continue exploring and adopting new technologies and materials that further its goal of decarbonization and sustainable constructio.

Contractors' Energy

2,115 mtCO₂e



Only two projects, SODIC East and VYE, relied on contractors' energy sources: diesel and natural gas respectively, resulting in a total emission of **2,115 mtCO**₂**e**.

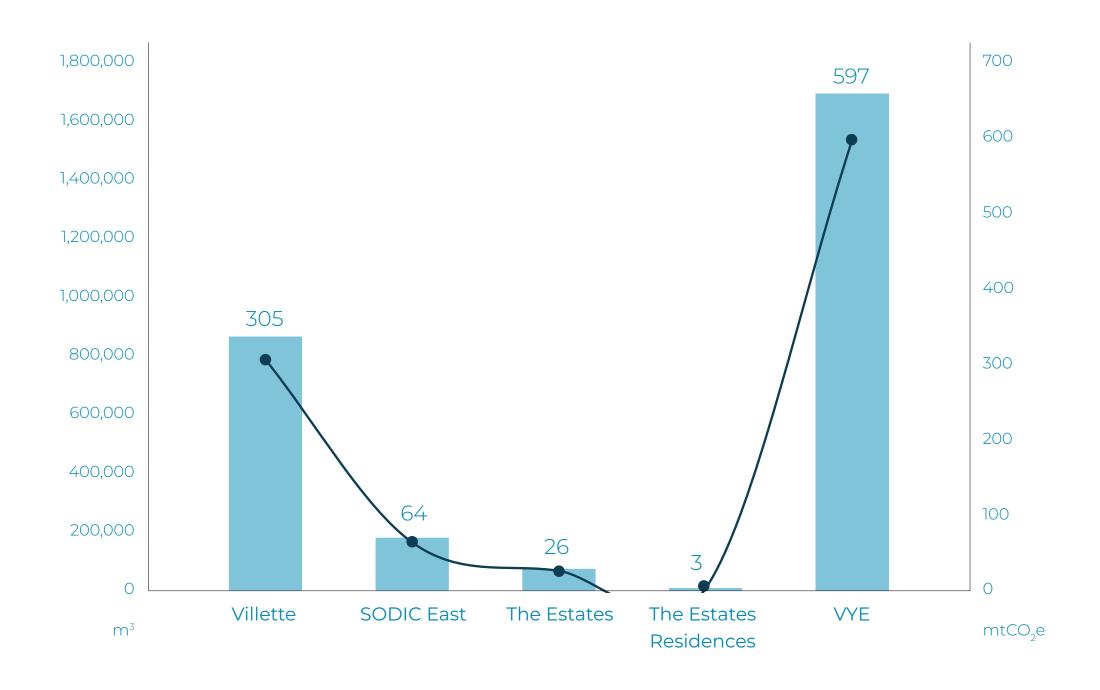
Water Use

997 mtCO,e



Water usage was reported across five construction projects: Villette, SODIC East, The Estates, The Estates Residences, and VYE. Among these, VYE had the highest water usage, resulting in **597 mtCO₂e**, which constituted 60% of the total water emissions. Conversely, The Estates Residences had the lowest consumption, resulting in only 3 mtCO₂e and accounting for just 0.3% of the total water emissions.

Water Use And Emissions in Construction Proejcts, 2023





Category 3

Fuel and Energy-related Activities (Not Included in Scope 1 And 2)

 $559_{\,mtCO_2e}$

In the reporting period of 2023, WTT emissions from SODIC-owned vehicles amounted to **30 mtCO₂e**. Additionally, diesel and petrol fuel usage in generators produced around **454 mtCO₂e**, while emissions from transmission and distribution (T&D) losses totaled **75 mtCO₂e**.



Category 7

Employee Commuting & WTT

935 mtCO₂e

Employee commuting results in indirect emissions totaling **762 mtCO₂e**, with an additional **173 mtCO₂e** attributed to Well-to-Tank (WTT) emissions.



Category 5

Waste Generated in Operations

2,074 mtCO₂e

Solid Waste Disposal

436 mtCO,e



Throughout 2023, a total of 443,184 tons of waste were generated, resulting in emissions totaling approximately 436 mtCO₂e. Among these emissions, 0.4% were from hazardous waste, while the remainder was non-hazardous. The highest waste generation occurred in East Cairo, representing 59.8% of the waste emissions, which totaled 261 mtCO₂e. West Cairo followed contributing 172 mtCO₂e (39.4%) to the emissions. Conversely, the North Coast recorded the lowest waste generation, making up the remaining 0.87% of the emissions, approximately 4 mtCO₂e.

Wastewater Treatment

 $1,\!638 \,\, \mathsf{mtCO_2e}$

During the reporting period of 2023, projects under construction were responsible for approximately **2,538,405 m**³ of water that drained into the sewage system for treatment. The wastewater treatment process resulted in emissions totaling approximately **1,638** mtCO₂e.

06/

Carbon Footprint Results Summary



← 6 / Carbon Footprint Results Summary

Scope 1 – Direct E	missions (mtCO ₂ e)	2022 (BY)	2023	
	Fuel burning – Diesel	118	721	
Stationary Combustion	Fuel burning – Natural gas	2,249 1	1,916	
	Fuel burning – Petrol	_	1,267	
Mobile Combustion	Mobile Fuel burning – Diesel	259	597	2 %
Mobile Corribustion	Mobile Fuel burning – Petrol	602	309	
Fugitive Emissions	Refrigerant leakage	245	125	
Agricultural Emissions	Fertilizers	170	191	
Total Scope 1 (mtCO ₂ e)		3,644	5,126	
Scope 2 – Indirect	Emissions (mtCO ₂ e)	2022 (BY)	2023	10 0/
Purchased energy	Purchased electricity	24,991	32,712	10%
Total Scope 2 (mtCO,e)			·	10 70
		24,991 ²	32,712	10 /0
		24,991 ²	<u> </u>	
Total Scope 1 & 2 Emission	ns (mtCO ₂ e)	24,991 ² 28,635	<u> </u>	mtCO ₂ e
Total Scope 1 & 2 Emission	ns (mtCO ₂ e) sity (kgCO ₂ e/ m²) – Sports Facilities	·	32,712	
Total Scope 1 & 2 Emission	sity (kg CO_2 e/ m ²) – Sports Facilities sity (kg CO_2 e/ m ²)	28,635	32,712 37,838	mtCO ₂ e
Total Scope 1 & 2 Emission Scope 1 & 2 Carbon intens Scope 1 & 2 Carbon intens	sity (kgCO ₂ e/ m²) – Sports Facilities sity (kgCO ₂ e/ m²) nts	28,635 10.54	32,712 37,838 10.09	mtCO ₂ e kgCO ₂ e/sqm

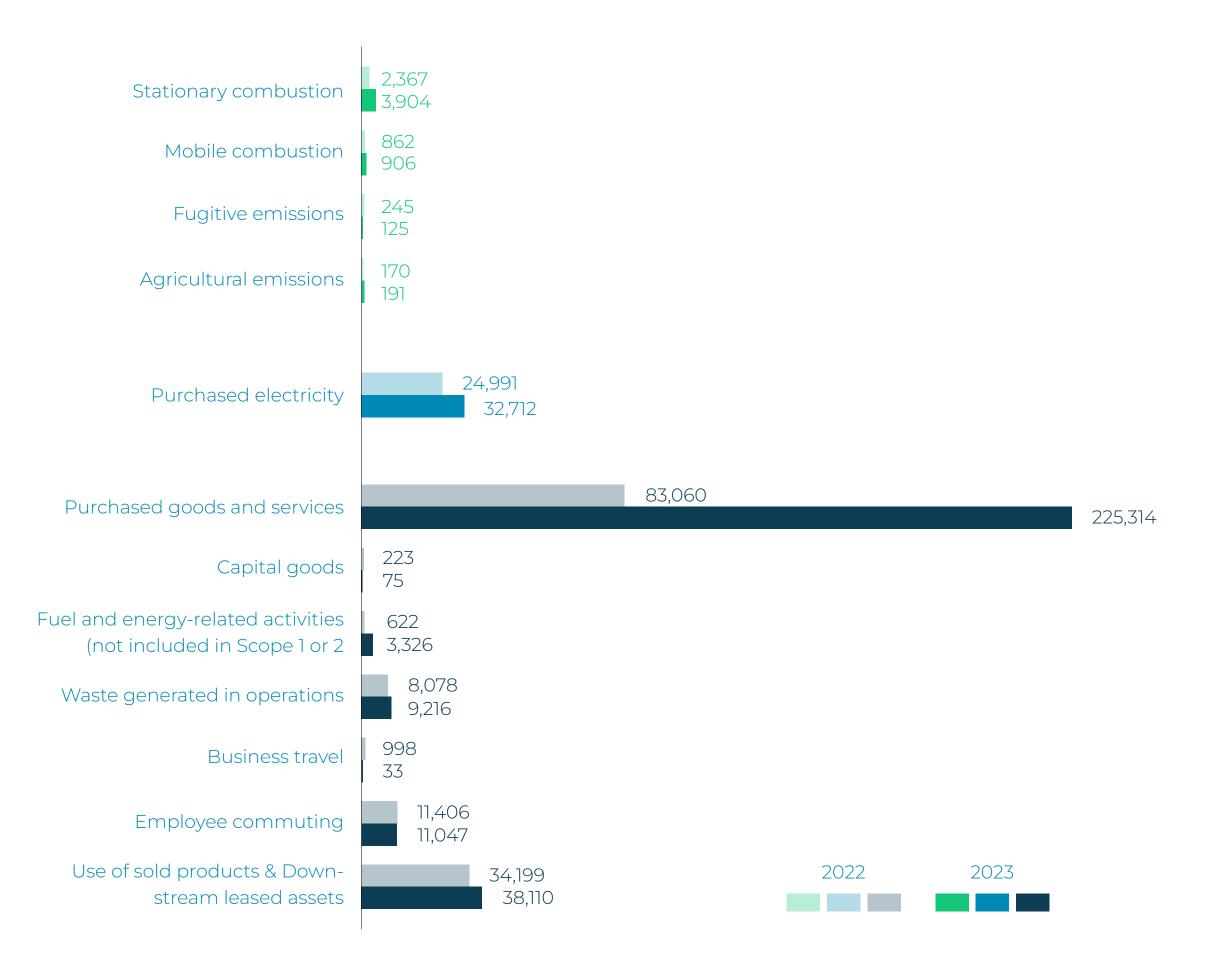
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²⁸⁴ Electricity figures for Polygon SODIC HQ were recalculated due to a prior error in collected data. This correction resulted in a change in its SCP 2 emissions, which shifted from 689 mtCO2e to 3,583 mtCO $_2$ e. Consequently, the total SCP 2 figure was modified. Additionally, there was a decrease in the purchased energy in CAT 11&13, as this figure was initially attributed to Main Road SODIC west but should have been allocated to Polygon SODIC HQ in SCP 2.

Scope 3 – Indirect	Emissions (mtCO ₂ e)	2022 (BY)	2023	
	Water use	1,723	2,496	
Category 1:	Raw materials	81,337	220,596	
Purchased Goods	Contractors	979	2,115	
and Services	Monetary goods and Services	_	107	
Category 2: Capital Goods	Capital goods	223	75	
	Transmission & Distribution losses	_	2,290	
Category 3:	Fuel burning – Diesel	27	169	
Fuel and energy-relat-	Fuel burning – Natural gas	380	314	
ed actives (not includ-	Fuel burning – Petrol		328	
ed in scope 1 and 2)	Mobile Fuel burning – Diesel	145	143	
	Mobile Fuel burning – Petrol	69	82	88%
Category 5: Waste generated in	Wastewater treatment	2,831	4,100	3370
operations	Solid waste disposal	5,246	5,116	
Catagory 6:	Air Travel + (WTT)	142	28	
Category 6: Business Travel	Land Travel + (WTT)	829	0	
Basilless Havel	Hotel stay	27	6	
Category 7: Employee Commuting	Employee commuting + (WTT)	11,406	11,047	
Category 11& 13: Use of sold products & Downstream leased assets	Purchased energy	34,199³	38,110	
Total Scope 3 (mtCO ₂ e)		138,586	287,122	
Total Scope 1, 2 & 3 Emissi	ons (mtCO ₂ e)	167,221	324,960	mtCO ₂ 6
REDUCED EMISSI	ONS (mtCO ₂ e)	2022 (BY)	2023	

REDUCED EMISSIO	ONS (mtCO ₂ e)	2022 (BY)	2023
Renewable Energy	PV electricity generation	70	209
Total Reduced Emissions (mtCO ₂ e)		70	209

Absolute Emissions by Scope per Activity (mtCO₂e), 2022 & 2023



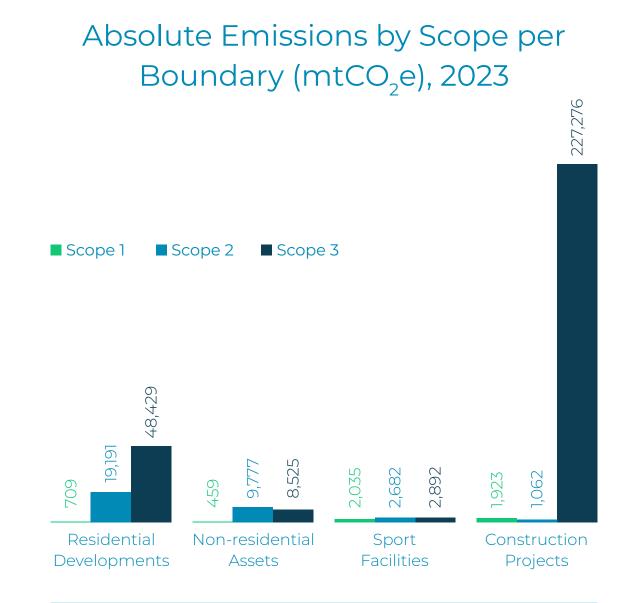


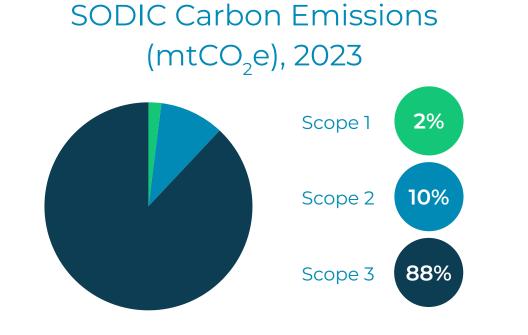
Total emissions increased by 94% compared to the base year of 2022, driven by several factors:

An increase in reported facilities resulted in higher overall energy consumption, particularly in Scope 2 and Categories 11&13 (Use of Sold products & downstream leased assets) in Scope 3, rising by 31% and 11% respectively.

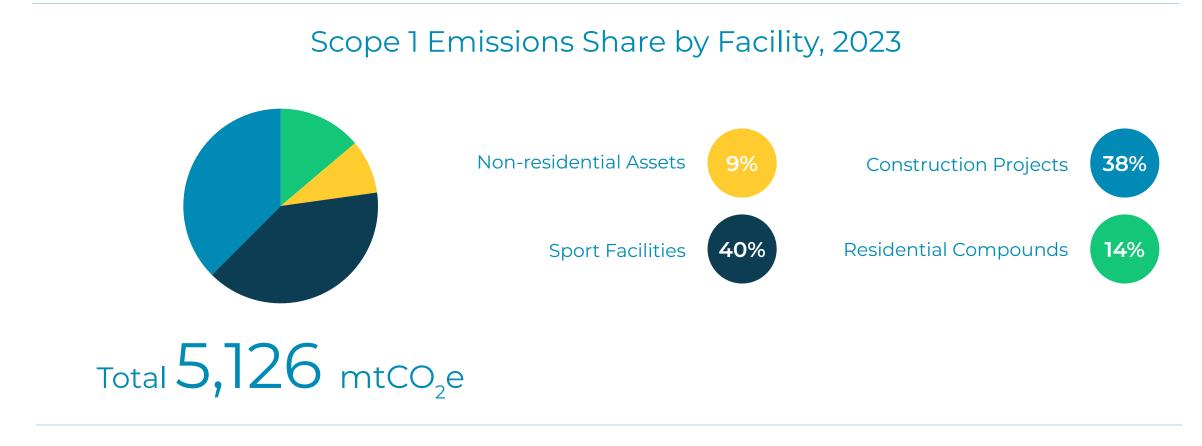
The inclusion of transmission and distribution (T&D) losses in CAT 3 (Fuel and energy-related activities) significantly contributed to the increase, soaring by a remarkable **434%**. This is because T&D losses were not previously included in this category.

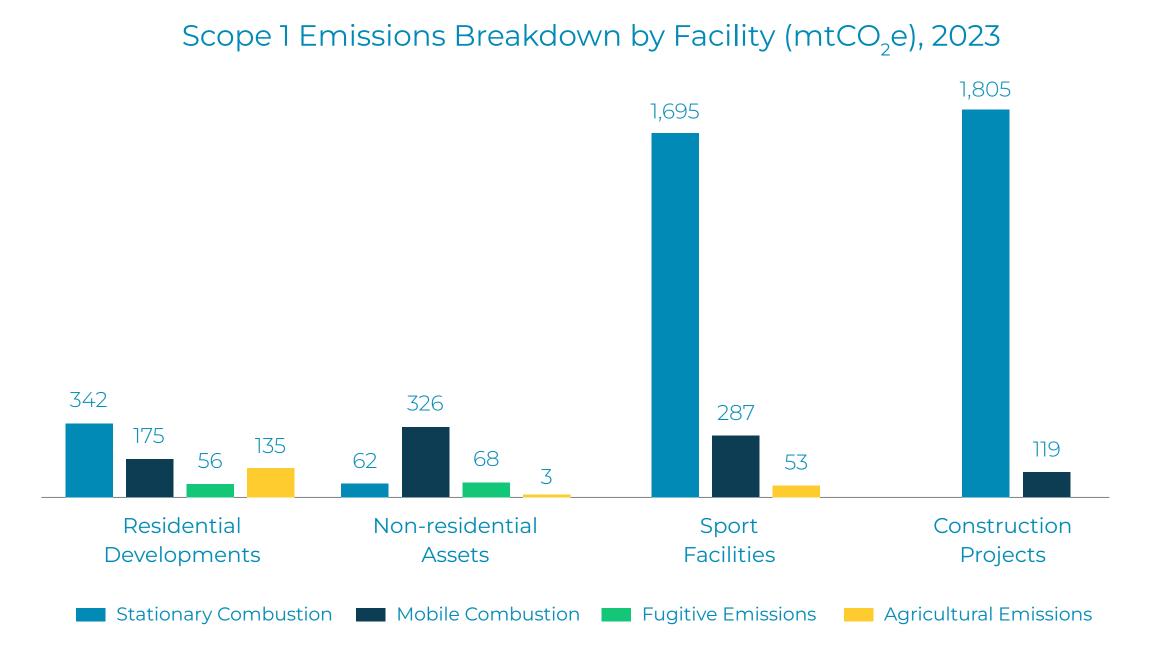
The construction phase during this reporting period became more material-intensive, leading to a substantial **171%** increase in CAT1 (Purchased goods & services). This increase was fueled by the higher demand for construction materials and plastics.





Total 324,960 mtCO₂e.



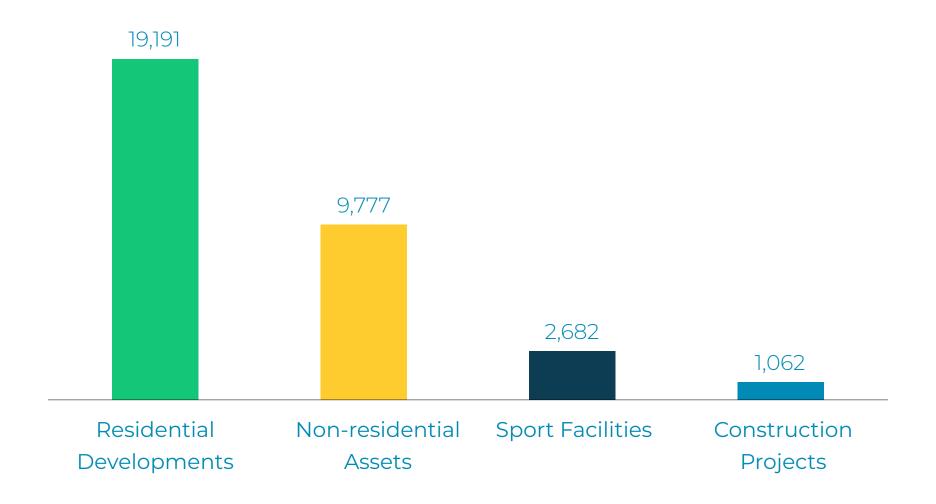


Total Scope 1 direct emissions in SODIC for all facilities amount to **5,126 mtCO₂e**. Among these, sports facilities contribute the highest share, totaling **2,035 mtCO₂e** and representing **40%** of the overall Scope 1 emissions. Construction projects account for **1,923 mtCO₂e**, making up **38%** of the total. Residential developments add **709 mtCO₂e**, which is **14%** of the Scope 1 emissions. Lastly, non-residential assets have the lowest emissions at **459 mtCO₂e**, accounting for **9%** of the total.

Breaking down the emissions by activity, stationary combustion represents the largest portion, contributing **76%** of the total Scope I emissions, amounting to **3,904 mtCO₂e**. Within this category, construction projects have the highest recorded stationary combustion emissions at **1,805 mtCO₂e**. Mobile combustion accounts for **18%** with a total of **906 mtCO₂e**. Fugitive emissions make up **2%** at **125 mtCO₂e**, while agricultural emissions contribute **4%** at **191 mtCO₂e**.



Scope 2 Emissions Breakdown by Facility (mtCO₂e), 2023



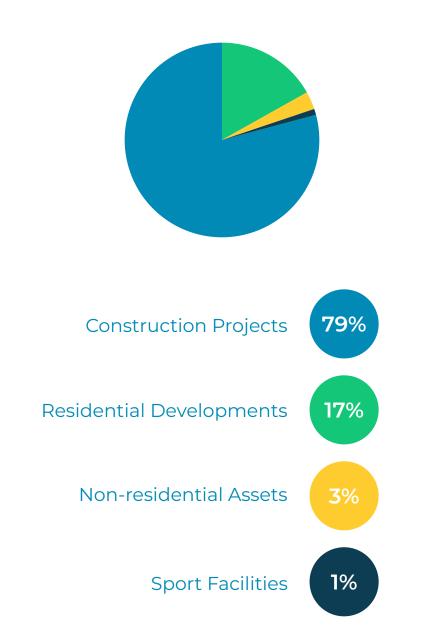
Scope 2 Emissions Share by Facility, 2023



Total Scope 2 indirect emissions in SOD-IC for all facilities, which include only purchased electricity, amount to 32,712 mt-CO₂e, accounting for a total of 70,537 MWh. Residential developments contribute the highest share with 19,191 mtCO₂e, representing 59% of the overall Scope 2 emissions. Non-residential assets follow, emitting 9,777 mtCO₂e, which accounts for 30%. Sports facilities contribute 8% of the total Scope 2 emissions, and construction projects have the least emissions, contributing 1,062 mt-CO₂e or 3% of the total Scope 2 emissions.

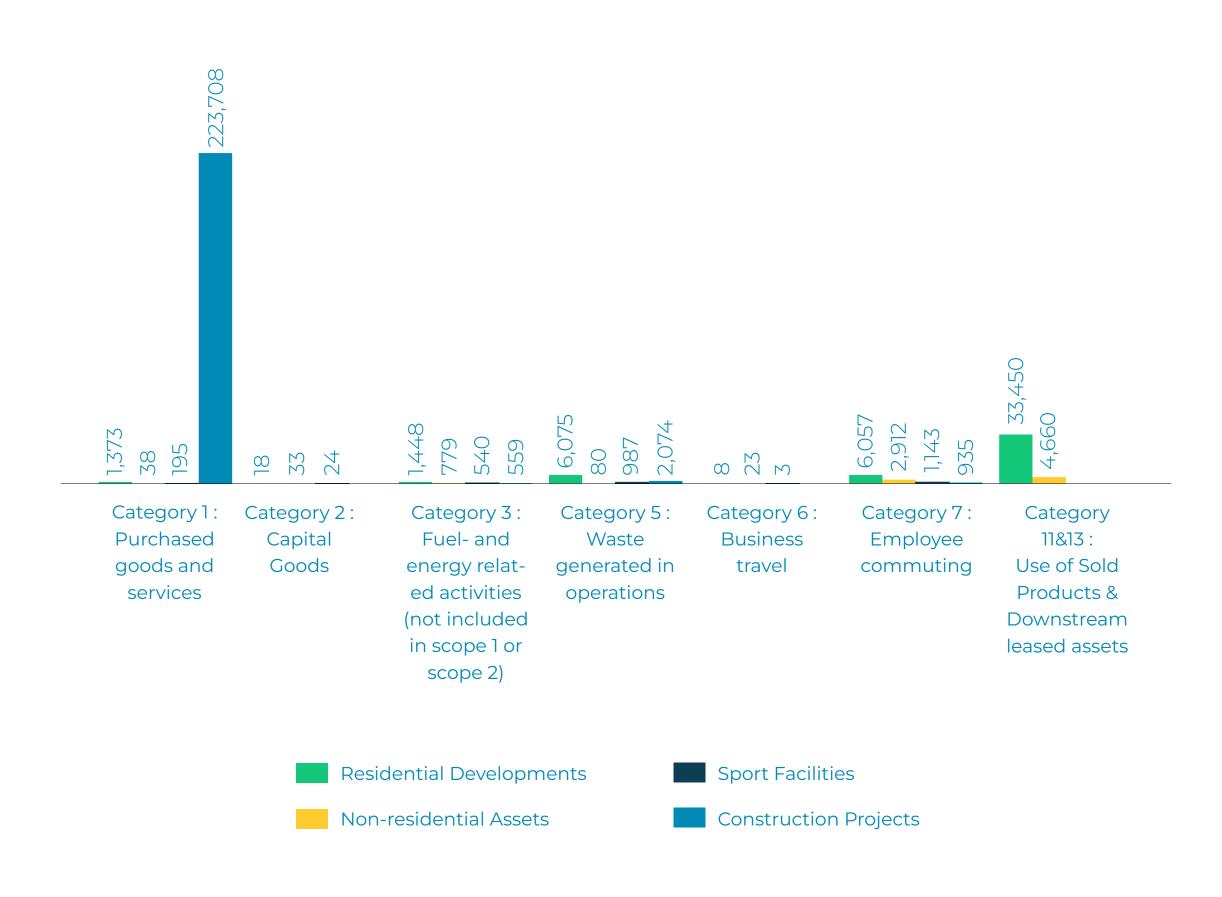


Scope 3 Emissions Share by Facility, 2023



Total 287,122 mtCO₂e.

Scope 3 Emissions Breakdown by Facility (mtCO₂e), 2023



Total Scope 3 indirect emissions across all SODIC facilities amount to 287,122 mt-CO₂e. Among these, construction projects contribute the highest share, totaling 222,276 mtCO₂e, which constitutes 79% of the overall Scope 3 emissions. In contrast, sports facilities have the lowest Scope 3 emissions at 2,892 mtCO₂e (1%). Non-residential facilities contribute 3% to the total Scope 3 emissions, at 8,525 mtCO₂e while residential developments resulted in emissions of 48,429 mtCO₂e (17%).

When analyzing emissions by activities, Category 1: Purchased goods and services emerges as the most significant, contributing 78% of the total Scope 3 emissions (225,314 mtCO₂e). Within this category, construction projects are the leading contributor, with recorded emissions at 223,708 mtCO₂e.

The second-highest emissions are found in Category 11: Use of sold products, contributing to 13% of the total Scope 3 emissions at 38,110 mtCO₂e.

The least contributing category is Category 2: Capital goods at **75 mtCO₂e**, representing **0.03%** of the total Scope 3 emissions.

07/

Energy Consumption



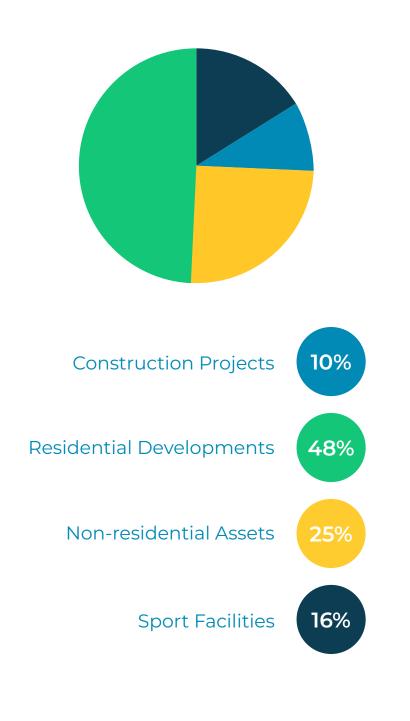
← 7 / Carbon Footprint Results Summary

In this reporting period, we have introduced an additional level of analysis to evaluate our fuel energy consumption. SODIC utilized a total of **93,442**MWh of purchased fuel energy. This included **398,373 liters** of diesel, **618,357 liters** of petrol, and **932,984 m³** of natural gas, in addition to **71,315 MWh** from purchased electricity, and **455 MWh** of Renewable energy.

When analyzing fuel energy consumption across various facility types, Residential developments emerged as the most significant energy consumer, claiming 48% of the total, equivalent to 45,511 MWh. Non-residential Facilities followed with 25%, amounting to 23,473 MWh. Sports Facilities accounted for 17% with 15,142 MWh, while Construction Projects had the lowest share at 10%, totaling 9,771 MWh.

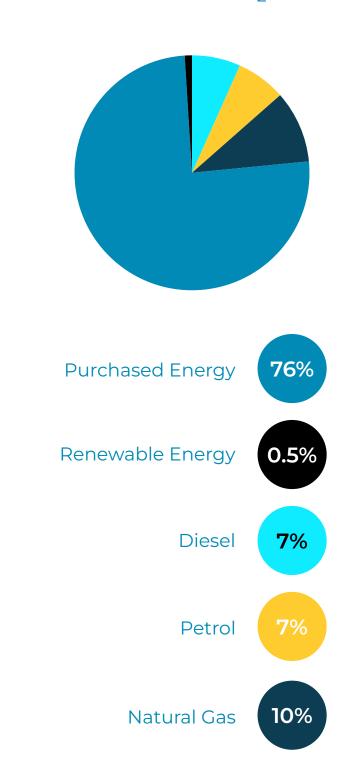
When examining fuel consumption by source, purchased energy emerged as the primary contributor, constituting **76%** of the total energy usage at **71,315 MWh**. Natural gas consumption followed closely, accounting for **10%** with **9,379 MWh**. Petrol and diesel consumption each represented **7%** of the total, with **6,445 MWh** and **6,304 MWh** respectively. Lastly, renewable energy contributed **0.5%** of the total energy consumption, totaling **455 MWh**.





Total **93,897** MWh

Energy consumption by Source (mtCO₂e), 2023



Total 93,897 MWh



08/

Performance Evaluation



Absolute **Emissions**

SODIC has set ambitious objectives to reduce its greenhouse gas emissions in alignment with global climate goals. However, in 2023, we saw a 32.1% increase in total absolute Scope 1 and Scope 2 emissions compared to 2022, primarily due to a rise in Scope 2 emissions. This increase underscores the challenges we face in balancing growth with sustainability.

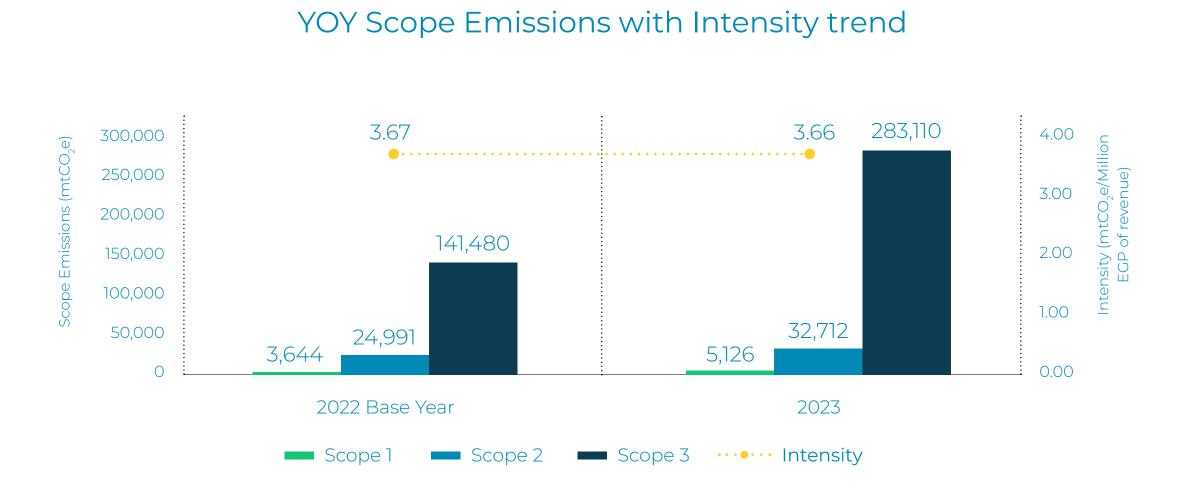
	Base Year 2022	Reporting Year 2023	Comparison
Scope 1 Emissions (mtCO ₂ e)	3,644	5,126	40.7% Increase Compared to 2022
Scope 2 Emissions (mtCO ₂ e)	24,991	32,712	30.9% Increase Compared to 2022
Scope 1 + 2 Emissions (mtCO ₂ e)	28,635	37,838	32.1% Increase Compared to 2022



Carbon Intensity

The carbon intensity refers to the rate of GHG emissions in mtCO2e over a specific period, relative to a relevant measure of activity. It's important to note that reported values of direct and indirect carbon emissions do not necessarily indicate an organization's efficiency in resource consumption. Metrics based on carbon intensity provide insights into an organization's resource utilization efficiency by assessing whether the emissions per unit of output have decreased or remained the same compared to previous years.

During this reporting period, SODIC's emissions intensity stands at **3.66 mtCO₂e per million EGP of revenue** for Scope 1 and 2 emissions, representing a **0.27%** reduction from the base year. This reduction highlights our dedication to operational efficiency and makes a significant contribution to sustainability. By decreasing emissions intensity, we are actively reducing our environmental impact while continuing to meet the growing demands within the real estate sector.



		Base Year 2022	Reporting Year 2023	Comparison
	Revenue Scope 1 & 2 Carbon intensity (mtCO ₂ e/ Million EGP Revenue)	3.67	3.66	0.27% Decrease Compared to 2022
Intensity	Residential Developments Scope 1 & 2 Carbon intensity (kgCO ₂ e/sqm)	8.26	7.09	14.2% Decrease Compared to 2022
Carbon	Non-Residential Assets Scope 1 & 2 Carbon intensity $(kgCO_2e/sqm)$	14.66	33.1	126% Increase Compared to 2022
	Sports Clubs Scope 1 & 2 Carbon intensity (kgCO ₂ e/sqm)	10.54	10.09	4.27% Decrease Compared to 2022

09/

Annex



Data Sources & Quality

All the information used to compute the carbon footprint comes from SODIC's database. The data quality has been evaluated and presented below, with data from each business sector evaluated independently to enable better analysis and display of resolution and further explanations. The quality of the data is divided into 3 levels to assess possible areas of improvement for each activity.

Primary Data

Data taken from documents that are directly linked to the assessment, such as electricity invoices, to calculate emissions caused due to electricity.

Secondary Data

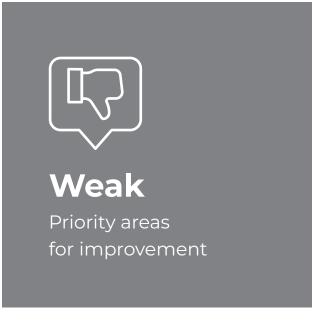
Such as databases, studies, and reports.

Assumptions

Assumptions made based on internationally recognized standards and studies.









Residential Developments Activity SCP **Units** Resolution **Data** 32,566 Diesel liters Stationary combustion On-site fuel burning Natural gas m^3 124,460 Passenger.km 717,380 Bus 22,770 liters Mobile combustion Owned vehicles Diesel 17,797 Petrol liters **Fugitive emissions** Refrigerants leakage 32 kg Agricultural emissions Fertilizers 169,796 kg Purchased energy Purchased electricity 41,838 MWh 2 Monetary value 20,226,813 EGP Purchased goods Water use 4,699,940 m^3 6,112 Solid waste tons Waste disposal 4,229,946 m^3 Wastewater treatment 12,000 km Data comprises a mix of survey results, actual data, and estimations derived **Employee commuting** Commuting & WTT from employee counts. 47,918,960 passenger.km 3 passenger.km 31,620 Air travel **Business travel** Hotel stay 19 Days Data not available for all residential developments, estimates made using average annual consumption based on built area as a reference. Use of sold products 72,925 MWh Purchased energy For October Plaza, only data for the second half of the year (July to December) was available. Estimated the first six months using the average consumption from the available data

Non-residential Assets

	SCP	Activity	Data		Units	Resolution
	C1 - 1 ·		7,869	Diesel	liters	
l l	Stationary combustion	On-site fuel burning	19,953	Natural gas	m^3	
			846,769	Passenger car	km	
,	Mobile combustion	Owned vehicles	589,052	Delivery vehicle	km	
1	Mobile Combustion	Owned verticles	13,176	Diesel	liters	
			3,023	Petrol	liters	
1	Fugitive emissions	Refrigerants leakage	39		kg	
1	Agricultural emissions	Fertilizers	8,072		kg	
	2 Danish and an array	ergy Purchased electricity	20,537		MWh	Data not available for The Polygon SODIQ HQ, estimates made using The Polygon's consumption as a reference.
2	Purchased energy		1,244,796		EGP	Data not available for the North Coast Sales Center, estimates made using Sales central East Cairo's consumption as reference.
		Monetary value	5,164,638		EGP	
	Purchased goods	Water use	34,792		m^3	 The Polygon SODIC HQ Data not Sales Center East Cairo WOC Customer Service North Coast Sales Center; Estimates made using Edara Buildings' consumption as a reference.
	Capital goods	Monetary value	12,676,410		EGP	
3	Wasta disposal	Solid waste	78		tons	
	Waste disposal	Wastewater treatment	31,313		m^3	
	Employee commuting	Commuting & WTT	10,439,303		km	Data comprises a mix of survey results, actual data, and estimations derived from em-
	Limployee commuting	Community & VVII	6,586,164		passenger.km	ployee counts.
	Business travel	Hotel stay	82		Days	
	Use of sold products	Purchased energy	10,160		MWh	Meters for tenants were installed in The Portal in September. Consumption for the remainder of the year is estimated using available average data

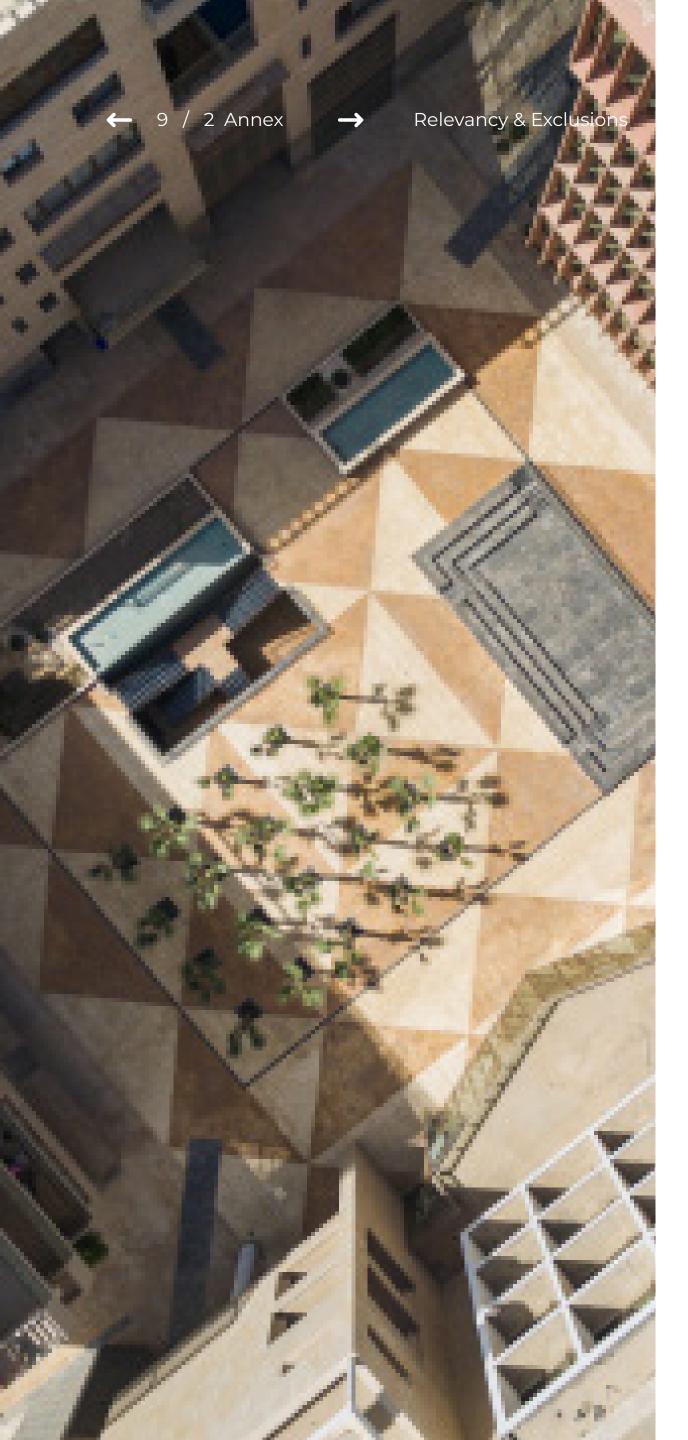
	Sports Facilities					
	SCP	Activity	Data		Units	Resolution
_	Stationary combustion	On site fuel burning	28,279	Diesel	liters	
ı	Stationary combustion	On-site fuel burning	788,571	Natural gas	m^3	
		Owned vehicles	79,128	Diesel	liters	
·	Mobile combustion	Owned verticles	32,700	Petrol	liters	
1	Agricultural emissions	Fertilizers	41,307		kg	
2	Purchased energy	Purchased electricity	5,847		MWh	
	Durchased goods	Monetary value	179,986		EGP	
	Purchased goods	Water use	549,965	549,965		
	Capital goods	Monetary value	411,4439		EGP	
7	\\/asta disposal	Solid waste	1,007		tons	
3	Waste disposal	Wastewater treatment	494,969		m^3	
	Employee commuting	Commuting & WTT	8,798,400		passenger. km	Data comprises a mix of survey results, actual data, and estimations derived from employee counts.
	Business travel	Hotel stay	6		Days	

Construction Projects Activity Units Resolution SCP **Data** Units 202,377 Diesel liters Stationary combustion On-site fuel burning 540,150 Petrol liters Passenger 164,917 km 12,208 Mobile combustion Owned vehicles Diesel liters 24,687 Petrol liters Purchased energy Purchased electricity 2,315 MWh Raw materials 862,715 tons Purchased goods Fuel 792,000 Diesel liters m^3 1,776,450 Water use Solid waste 443,184 3 tons Waste disposal m^3 1,598,805 Wastewater treatment Data comprises a mix of survey results, actual data, and estimations **Employee commuting** Commuting & WTT 6,942,000 passenger.km derived from employee counts.

Relevancy & Exclusions

The following table describes the GHG emissions sources that were excluded from SODIC's GHG inventory due to several reasons, including: some activities are minor/immaterial, lack of data, and data that is beyond SODIC'S operation and control and hence considered technically infeasible to attain. The exclusion rationale per activity has also been specified.

	Scope 3 category	Description	Emissions	Status
Category 1:	Purchased goods and services	Emissions from company purchases, including construction raw materials, energy used by contractors and water use.	225,314	Relevant, calculated
Category 2:	Capital goods	Emissions from capital expenditures including computers, computer software, motor vehicles, furniture, office equipment and plant and project machinery.	75	Relevant, calculated
Category 3:	Fuel and energy related activities (Not included in Scope 1 and 2)	Emissions from extraction, production and transportation of fuels and energy sources In addition to the emissions of electricity transmission and distribution losses.	3,326	Relevant, calculated
Category 4:	Upstream transportation and distribution	Emissions from logistics for developments, e.g., courier or logistics services, including inbound logistics, outbound logistics, transportation, and distribution between the company's facilities have not been accounted for due to limitations in data availability pertaining to these specific logistics-related emissions.	-	Relevant, not yet calculated
Category 5:	Waste generated in operations	Emissions from the transportation of solid waste, landfill emissions from the disposed waste and emissions from wastewater treatment.	9,216	Relevant, calculated
Category 6:	Business travel	Emissions generated from various modes of travel associated with business activities, including flights, land travel, and hotel stays.	33	Relevant, calculated
Category 7:	Employee commuting	Emissions from the transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by SODIC).	11,047	Relevant, calculated
Category 8:	Upstream leased assets	Emissions from building space leased from other companies not already included in Scope 1 or 2. SODIC, in this context, is not a lessee; instead, this category is relevant for building occupiers or tenants who lease space within SODIC's developments.	N/A	Not relevant, explanation provided



	Scope 3 category	Description	Emissions	Status
Category 9:	Downstream transportation	Emissions from the transport of goods/services to end-user. Not relevant as any building sold would probably not be transported.	N/A	Not relevant, explanation provided
Category 10:	Processing of sold products &	Emissions from goods/services that are processed further. Not relevant as any building sold would likely not have elements that need to be further processed.	N/A	Not relevant, explanation provided
Category 11:	Use of sold products	Emissions from end-use of goods/services sold by SODIC, this includes the electricity consumption and stationary combustion of sold assets.		Relevant, calculated
	&		38,110	
Category 13:	Downstream leased assets	Emissions from end-use of goods/services sold by SODIC, this includes the electricity consumption and stationary combustion of leased assets.		
Category 12:	End of life treatment of sold products	Emissions from demolition activities including the recycling, or disposal methods employed for items such as building materials, fixtures, and other components at the end of their useful life within the properties developed and sold by SODIC.	-	Not evaluated
Category 14:	Franchises	Emissions from the operation of franchises. SODIC does not have any franchises.	N/A	Not relevant, explanation provided
Category 15:	Investments	Emissions from operation of investments, including equity and debt investments and project finance. SODIC does not have any investment in any projects .	N/A	Not relevant, explanation provided

Quality Assurance Statement

To the **SODIC** Board of Directors.

We have been appointed by **SODIC** to conduct carbon footprint calculations pertaining **SODIC's** operational activities for the period **1**st **of January 2023** to the **31**st **of December 2023**. This assessment encompasses SODIC's portfolio across three main locations in Egypt: 'West Cairo' (6th October), 'East Cairo' (New Cairo), and Egypt's 'North Coast'. The scope includes residential projects, non-residential assets, sports facilities, and construction projects.

Auditors' Independence and Quality Control

We adhere to integrity, objectivity, competence, due diligence, confidentiality, and professional behavior. We maintain a quality control system that includes policies and procedures regarding compliance with ethical requirements, professional standards, and applicable laws and regulations.

Auditors' Responsibility

In conducting the carbon footprint calculations, we have adopted the Greenhouse Gas Protocol Guidelines, IPCC Guidelines for Greenhouse Gas Inventories, and finally ISO 14064-1:2018 specification with guidance at the organization level for quantification and reporting of GHG emissions and removals.

It is our responsibility to express a conclusion about the quality and completeness of the primary data collected/ provided by **SODIC**. We have performed the following quality assurance/ quality control tasks:

- · Several rounds of data requests were performed whenever the received information was not clear;
- All data presented in this report were provided by the reporting entity and revised and completed by our technical teams;
- For data outliers, meetings were held to investigate the accuracy of the data and new data was provided when requested;
- Any gaps, exclusions and/or assumptions have been clearly stated in the report.

Conclusion

Based on the aforementioned procedures, nothing has come to our attention that would cause us to believe that **SODIC's** raw data used in the carbon footprint calculations have not been thoroughly collected, verified, and truly represent **SODIC's** resource consumption in the reporting period related to all categories/aspects identified in this report. We do not assume and will not accept responsibility to anyone other than **SODIC** for the provided assurance and conclusion

Dr. Abdelhamid Beshara, Founder and Chief Executive Officer MASADER, ENVIRONMENTAL & ENERGY SERVICES S.A.E CAIRO, July 2024











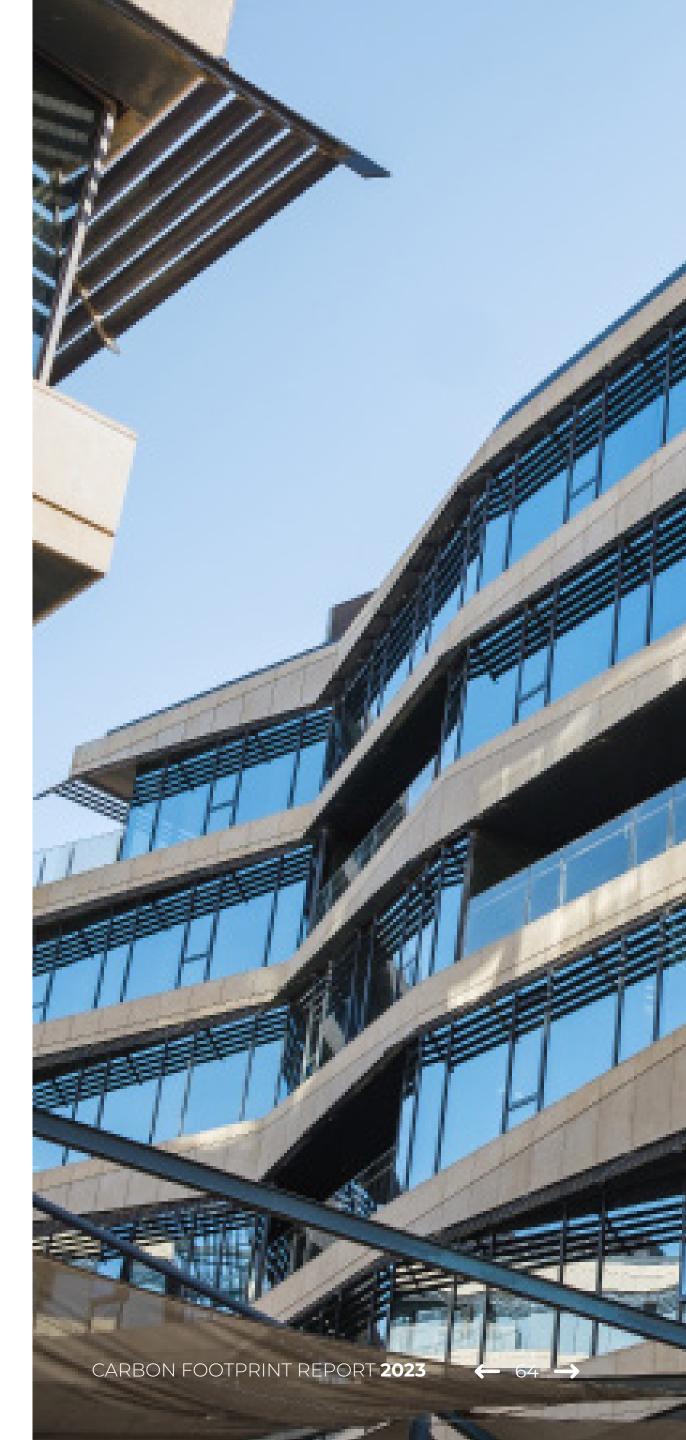
About Masader

Masader is an innovative interdisciplinary consulting, design and engineering sustainability firm based in Cairo, aiming at leveraging positive impact across the MENA region and globally. It specializes in Resource Efficiency, Sustainable Management of Natural Resources and Integrated Sustainability Solutions. Since 2015, Masader has led 100+ projects across the areas of energy, environment, climate change & carbon footprint, circular economy, green building (LEED), as well as corporate sustainability strategies, reporting and certification.

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