



2021 CARBON FOOTPRINT REPORT



ELSEWEDY
ELECTRIC





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CARBON FOOTPRINT REPORT
2021

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Abbreviations & Acronyms

CDP	Carbon Disclosure Project
CFP	Carbon Footprint
CH ₄	Methane
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide equivalent
DEFRA	Department for Environment, Food & Rural Affairs
EF	Emission Factor
ERA	Egyptian Electric Utility and Consumer Protection Regulatory Agency
GHG	Greenhouse Gases
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standard Organization
kWh	Kilowatt hour
L	Litre
m ²	Square meter
m ³	Cubic meter
mt	Metric tons
mtCO ₂ e	Metric tons Carbon Dioxide equivalent
MWh	Megawatt hour
pkm	Passenger-kilometre
SBT	Science-based Targets
SBTi	Science-based Targets initiative
Scp	Scope
SDG	Sustainable Development Goals
tkm	Ton kilometer
WTT	Well-to-Tank

EMISSIONS SUMMARY

Starting this year (2021), we decided to expand our operational boundaries to cover 17 subsidiaries and to expand scope 3 activities.

60,629 mtCO₂e
Base year 2017

Base year 2017 emissions resulting from the following organizational boundaries

- UIC
- EGYTECH
- ISKRAEMECO
- ISKR SLOVENIA
- TRANSFORMERS
- EGYPLAST

84,457 mtCO₂e

Total Emissions for the year 2020

34,354 mtCO₂e

50,103 mtCO₂e

Reporting year 2020 emissions resulting from the following organizational boundaries:

- UIC
- EGYTECH
- ISKRAEMECO
- ISKR SLOVENIA
- TRANSFORMERS
- EGYPLAST

+

34,354 mtCO₂e

Emissions resulting from additional organization boundaries:

USW
+
Additional operational boundaries, this includes:
Scope 1: Refrigerant leakage (mtCO₂e)
New Scope 3 activities (mtCO₂e):

- WTT emissions for all fuel burning activities
- Water and wastewater treatment
- Purchased goods
- Downstream transportation
- Exports

50,103 mtCO₂e

251,824 mtCO₂e

Total Emissions for the year 2021

195,374 mtCO₂e

56,450 mtCO₂e

Emissions resulting from 2020 and 2021 additional organization boundaries:

- USW
- United Metals
- SEDCO Petroleum
- ECMEI
- Elsewedy Electric Infra.
- GIAD Elsewedy
- Yanbu Al-Sinaiyah
- Elsewedy Cables Algeria
- Elsewedy Cables Ethiopia
- Doha Cables
- Iskraemeco Bosnia

+

195,374 mtCO₂e

Additional operational boundaries, this includes:

Scope 1: Refrigerant leakage (mtCO₂e)
New Scope 3 activities (mtCO₂e):

- WTT emissions for all fuel burning activities
- Water and wastewater treatment
- Purchased goods
- Downstream transportation
- Exports
- Ink consumption
- Packing material
- Hotel stays

56,450 mtCO₂e

EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		31,832 mtCO ₂ e	13%
ACTIVITY		mtCO ₂ e	
Mobile Combustion	Fuel burning – Owned vehicles	1,817	
Stationary Combustion	Fuel burning – Diesel	4,056	
	Fuel burning – Natural Gas	21,366	
Fugitive Emissions	Refrigerant leakage	4,594	

SCOPE 2 – INDIRECT EMISSIONS		102,722 mtCO ₂ e	41%
ACTIVITY		2021	
Purchased Energy	Purchased Electricity	102,722	

SCOPE 1 – DIRECT EMISSIONS		117,271 mtCO ₂ e	47%
ACTIVITY		mtCO ₂ e	
Fuel and energy-related activities (not included in Scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	462	
	Fuel burning – Diesel (WTT)	943	
	Fuel burning – Natural Gas (WTT)	3,632	
	Water usage & wastewater treatment	323	
Waste generated in operations	Solid waste disposal	1,282	
	Purchased goods	304	
Purchased goods and services	Paper consumption	47	
	Ink consumption	8	
	Packing material	9,787	
	Commuting + (WTT)	71,310	
Employee Commuting	Fuel Burning – Business travel + (WTT)	171	
	Air Travel + (WTT)	705	
	Hotel Stay	117	
Business travel	Downstream transportation + (WTT)	3,853	
	Exports	24,325	
Downstream transportation and distribution			

TOTAL EMISSIONS FOR THE YEAR 2021

251,824 mtCO₂e

Scope 1
31,832 mtCO₂e

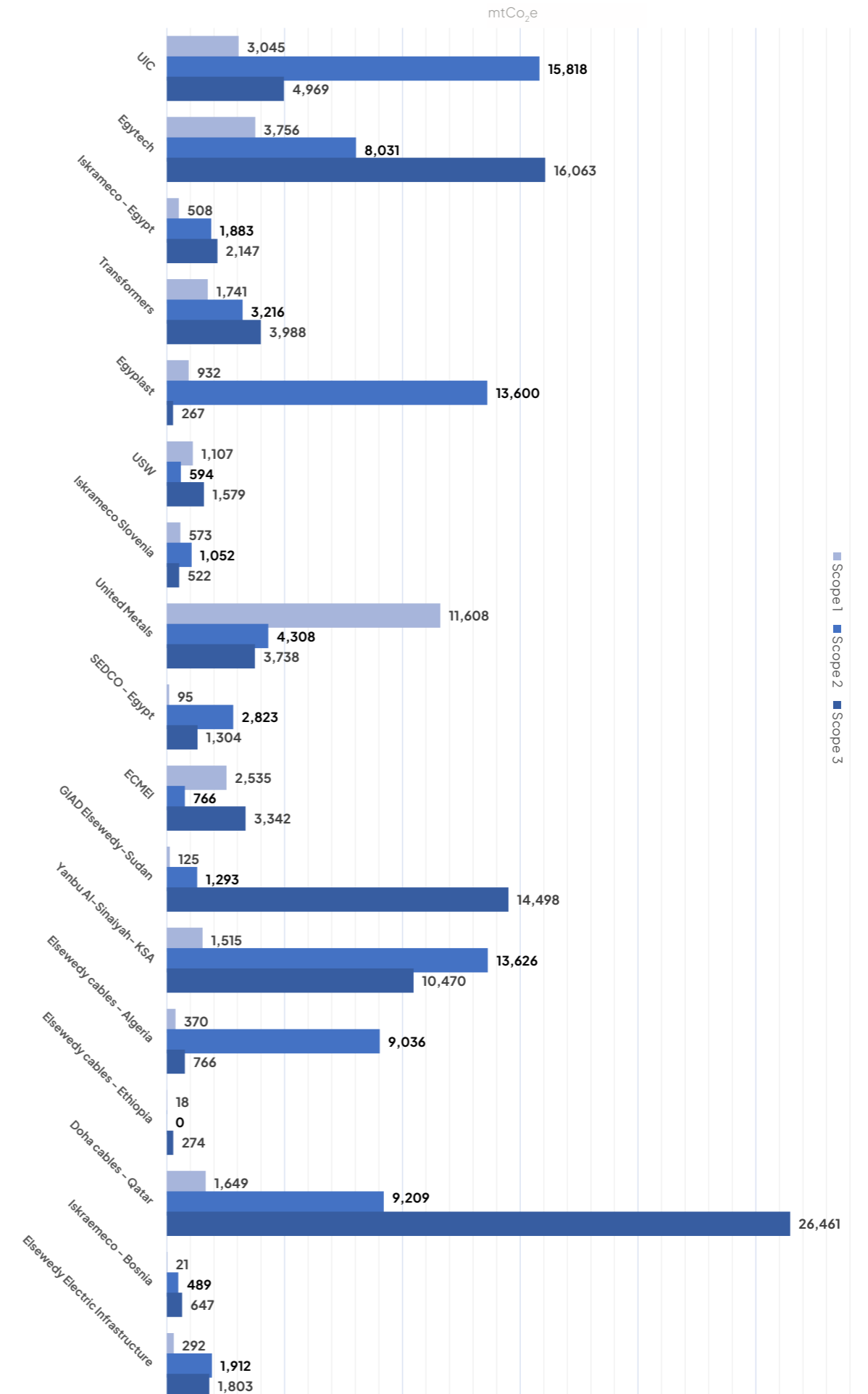
12.6%

Scope 2
102,722 mtCO₂e

40.8%

Scope 3
117,271 mtCO₂e

46.6%



2021 CARBON FOOTPRINT RESULTS PER FACTORY

	UIC		EGYTECH		ISKRAEMECO Egypt		TRANSFORMERS	
	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%
Fuel burning – Owned vehicles	288	1%	-	-	121	2%	220	1.282%
Fuel burning – Diesel	-	-	779	2%	28	0.367%	1,015	6%
Fuel burning – Natural Gas	2,501	9%	-	-	-	-	-	-
Refrigerant leakage	33	0.118%	1,153	3%	330	4%	673	4%
Purchased electricity	18,952	68%	10,250	25%	1,783	24%	4,488	26%
Fuel burning – Owned vehicles (WTT)	76	0.271%	-	-	29	0.391%	63	0.368%
Fuel burning – Diesel (WTT)	-	-	181	0.444%	6	0.085%	236	1%
Fuel burning – Natural Gas (WTT)	425	2%	-	-	-	-	-	-
Water usage & wastewater treatment	38	0.136%	15	0.036%	17	0.220%	18	0.104%
Solid waste disposal	54	0.193%	124	0.304%	3	0.036%	214	1%
Purchased goods	19	0.068%	113	0.276%	15	0.205%	3	0.018%
Packing material	-	-	-	-	91	1%	60	0.353%
Paper consumption	4	0.014%	10	0.024%	0.615	0.008%	6.611	0.039%
Ink consumption	-	-	2	0.005%	0.340	0.004%	0.446	0.003%
Fuel Burning – Business travel + (WTT)	28	0.099%	46	0.114%	-	-	36	0.208%
Air Travel + (WTT)	13	0.046%	20	0.050%	160	2%	15	0.087%
Hotel stay	4	0.013%	1	0.003%	108	1%	-	-
Exports	1,375	5%	21,412	53%	440	6%	1,028	6%
Downstream transportation + (WTT)	109	0.390%	158	0.388%	50	0.662%	17	0.100%
Commuting + (WTT)	4,127	15%	6,520	16%	4,331	58%	9,050	53%
Total	28,047		40,784		7,512		17,142	
Intensity* (mtCO₂e/Product)	0.964		0.308		0.002		4.129	

* Scope 1 and 2 only

	EGYPLAST		USW		ISKRAEMECO SLOVENIA		United Metals	
	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%
Fuel burning – Owned vehicles	332	2%	-	-	20	1%	48	0.242%
Fuel burning – Diesel	600	4%	136	0.810%	-	-	0.325	0.002%
Fuel burning – Natural Gas	-	-	4,391	26%	606	34%	11,531	59%
Refrigerant leakage	-	-	378	2%	-	-	29	0.146%
Purchased electricity	13,600	92%	9,319	56%	867	49%	4,308	22%
Fuel burning – Owned vehicles (WTT)	84	0.569%	-	-	5	0.269%	11	0.056%
Fuel burning – Diesel (WTT)	139	0.942%	32	0.188%	-	-	0.075	
Fuel burning – Natural Gas (WTT)	-	-	747	4%	103	6%	1,960	10%
Water usage & wastewater treatment	14	0.093%	61	0.361%	58	3%	47	0.242%
Solid waste disposal	8	0.057%	767	5%	8	0.442%	57	0.291%
Purchased goods	4	0.027%	-	-	-	-	-	-
Packing material	-	-	-	-	0.286	0.016%	-	-
Paper consumption	5.699	0.039%	1	0.008%	4.493	0.254%	5	0.023%
Ink consumption	1.180	0.008%	-	-	0.336	0.019%	-	-
Fuel Burning – Business travel + (WTT)	-	-	2	0.015%	-	-	49	0.249%
Air Travel + (WTT)	7	0.044%	-	-	48	3%	1	0.006%
Hotel stay	4	0.025%	-	-	-	-	0.137	0.001%
Exports	-	-	-	-	-	-	-	-
Downstream transportation + (WTT)	-	-	-	-	-	-	128	0.651%
Commuting + (WTT)	-	-	945	6%	48	3%	1,479	8%
Total	14,799		16,779		1,768		19,655	
Intensity* (mtCO₂e/Product)	0.127		0.224		0.0007		0.128	

	SEDCO		ECMEI		GIAD Elsewedy -Sudan		Yanbu Al-Sinaiyah- KSA	
	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%
Fuel burning – Owned vehicles	26	0.609%	88	1%	2	0.015%	23	0.090%
Fuel burning – Diesel	5	0.127%	60	0.896%	63	0.396%	433	2%
Fuel burning – Natural Gas	15	0.347%	2,250	34%	35	0.220%	1	0.003%
Refrigerant leakage	49	1%	138	2%	25	0.155%	1,058	4%
Purchased electricity	2,823	67%	766	12%	1,293	8%	13,626	53%
Fuel burning – Owned vehicles (WTT)	6	0.141%	22	0.325%	1	0.004%	6	0.023%
Fuel burning – Diesel (WTT)	1	0.030%	14	0.208%	15	0.092%	101	0.393%
Fuel burning – Natural Gas (WTT)	2	0.059%	383	6%	6	0.037%	0.121	0.0005%
Water usage & wastewater treatment	13	0.314%	19	0.286%	4	0.026%	8	0.032%
Solid waste disposal	0.193	0.005%	1	0.016%	0.183	0.001%	16	0.062%
Purchased goods	47	1%	3	0.044%	46	0.286%	12	0.047%
Packing material	557	13%	89	1%	59	0.372%	7,388	29%
Paper consumption	0.862	0.020%	0.606	0.009%	0.269	0.002%	1.759	0.007%
Ink consumption	1.992	0.047%	0.182	0.003%	-	-	0.235	0.001%
Fuel Burning – Business travel + (WTT)	-	-	8	0.121%	0.056	0.0004%	-	-
Air Travel + (WTT)	43	1%	1	0.019%	12	0.077%	-	-
Hotel stay	-	-	1	0.017%	-	-	-	-
Exports	-	-	69	1%	-	-	-	-
Downstream transportation + (WTT)	611	14%	88	1%	9	0.056%	2,671	10%
Commuting + (WTT)	19	0.453%	2,644	40%	14,346	90%	267	1%
Total	4,222		6,643		15,915		25,611	
Intensity* (mtCO₂e/ Product)	0.009		0.005		0.011		0.692	

	Elsewedy Cables Al-geria		Elsewedy Cables Ethi-opia		Doha Cables - Qatar	
	mtCO ₂ e	%	mtCO ₂ e	%	mtCO ₂ e	%
Fuel burning – Owned vehicles	90	0.880%	5	2%	534	1%
Fuel burning – Diesel	146	1%	13	4%	487	1%
Fuel burning – Natural Gas	34	0.335%	-	-	1	0.003%
Refrigerant leakage	100	0.987%	-	-	627	2%
Purchased electricity	9,036	89%	0.441	0.151%	9,209	25%
Fuel burning – Owned vehicles (WTT)	24	0.236%	1	0.395%	129	0.346%
Fuel burning – Diesel (WTT)	34	0.334%	3	1%	113	0.303%
Fuel burning – Natural Gas (WTT)	6	0.057%	-	-	0.167	0.0004%
Water usage & wastewater treatment	0.210	0.002%	0.008	0.003%	5	0.014%
Solid waste disposal	8	0.077%	0.261	0.089%	17	0.046%
Purchased goods	0.005	0.00005%	40	14%	3	0.007%
Packing material	-	-	-	-	1,536	4%
Paper consumption	0.180	0.002%	2.11	0.723%	2.703	0.007%
Ink consumption	-	-	0.250	0.086	0.778	0.002%
Fuel Burning – Business travel + (WTT)	-	-	2	0.604%	-	-
Air Travel + (WTT)	19	0.191%	-	-	365	0.978%
Hotel stay	-	-	-	-	-	-
Exports	-	-	-	-	-	-
Downstream transportation + (WTT)	-	-	-	-	-	-
Commuting + (WTT)	675	7%	225	77%	24,289	65%
Total	10,172		292		37,320	
Intensity* (mtCO₂e/ Product)	0.980		0.039		0.204	

	Iskraemeco - Bosnia		Elsewedy Electric Infrastructure	
	mtCO ₂ e	%	mtCO ₂ e	%
Fuel burning - Owned vehicles	21	2%	-	-
Fuel burning - Diesel			292	7%
Fuel burning - Natural Gas	-	-	-	-
Refrigerant leakage	-	-	-	-
Purchased electricity	489	42%	1,912	48%
Fuel burning - Owned vehicles (WTT)	5	0.475%		
Fuel burning - Diesel (WTT)			68	2%
Fuel burning - Natural Gas (WTT)	-	-	-	-
Water usage & wastewater treatment	1	0.065%	6	0.160%
Solid waste disposal	-	-	4	0.107%
Purchased goods	0.021	0.002%	0.048	0.001%
Packing material	6	0.525%	-	-
Paper consumption	0.225	0.019%	0.795	0.020%
Ink consumption	0.058	0.005%	-	-
Fuel Burning - Business travel + (WTT)	-	-	-	-
Air Travel + (WTT)	-	-	-	-
Hotel stay	-	-	-	-
Exports	-	-	-	-
Downstream transportation + (WTT)	11	0.931%	-	-
Commuting + (WTT)	623	54%	1,723	43%
Total	1,157		4,007	
Intensity* (mtCO₂e/ Product)	0.008		0.00027	





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EXECUTIVE SUMMARY

Elsewedy Electric prides itself on being at the forefront of energy industry. In this context, it recognizes the importance of conserving the environment while creating a long-term stakeholder value as a world leader in the industry providing energy, infrastructure, and digital solutions, across five primary business lines: wires & cables, turnkey solutions, meters, transformers, and electrical products. In this context, Elsewedy Electric is committed to eradicate and mitigate the adverse environmental impacts associated with its business operations, namely Climate Change.

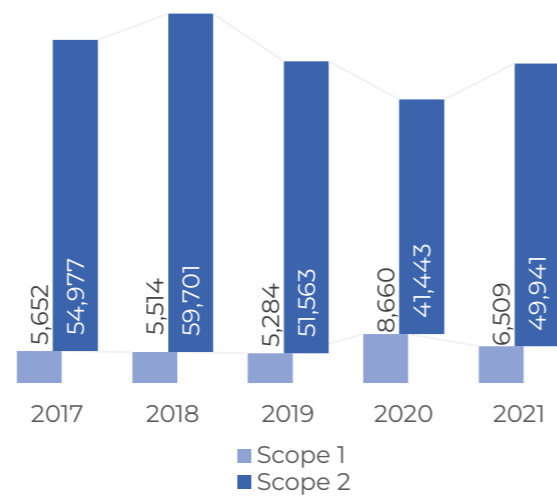
The reporting period covers the 1st of January 2021 to the 31st of December 2021. The year 2017 is the base year to which all the activities were compared to and referenced. However, because of the expansion in the reporting organizational boundaries, this year 2021 will serve as a new base year against which all upcoming years will be compared. Similarly, the GHG reduction targets at Elsewedy Electric have extended its timeline to be achieved by the year 2028, relevant to the new base year.

To further avoid and reduce our carbon footprint, this year we effectively increased both our organizational boundary to include 17 factories, and our operational boundary to encompass an even wider range of Scope 3 activities in the emissions inventory.

With annual footprint accounting, we can benchmark performance indicators, evaluate our environmental performance, and assess its evolution over time, in addition to staying on track with our net-zero goals.

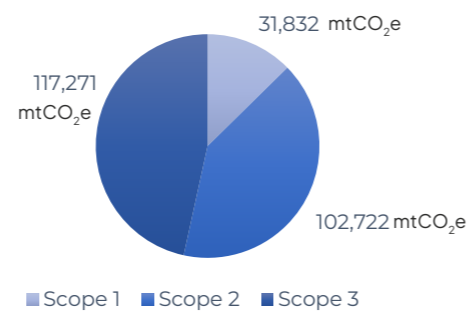
Enlisting in the Carbon Disclosure Project (CDP) for the second year, setting GHG reduction targets ensuring that our activities emissions contribute to global temperature increase of no more than 1.5 degree celsius, developing and monitoring the adherence to our environmental policies and our continual carbon footprint reporting exemplifies our aspiration to be leaders in corporate sustainability.

The analysis and calculations were based on the Greenhouse Gas Protocol, the Intergovernmental Panel on Climate Change (IPCC) Guidelines for Greenhouse Gas Inventories, and the ISO 14064-1:2019 standards.



The total GHG emissions of the studied boundary as of 2021 is 251,824 mtCO₂e, including:

- Scope 1 – Direct emissions: 31,832 mtCO₂e
- Scope 2 – indirect emissions: 102,722 mtCO₂e
- Scope 3 – indirect emissions: 117,271 mtCO₂e



Scope 1	GHG Absolute Emissions	
2017*	60,629** mtCO ₂ e	
2018	62,215 mtCO ₂ e	↑ +7.6%
2019	56,847 mtCO ₂ e	↓ -6.2%
2020	50,103 mtCO ₂ e	↑ -17.3%
2021	56,450 mtCO ₂ e	↓ -7%

* 2017 is considered the old base year to which the years 2018 to 2020 are compared to.

**Scopes 1 and 2 only are take into account for the same operational and organizational boundaries as 2017



21%

We have already achieved 21% of the 2025 1.5-degree targets in 2021 and set a new target for the year 2028 based on our new base year.

7%

The total scopes 1 & 2 absolute emissions for the year 2020 decreased by over 7% in comparison with the base year

10%

Since 2017, ELSEWEDY Electric has reduced its scope 2 emissions by over 10%

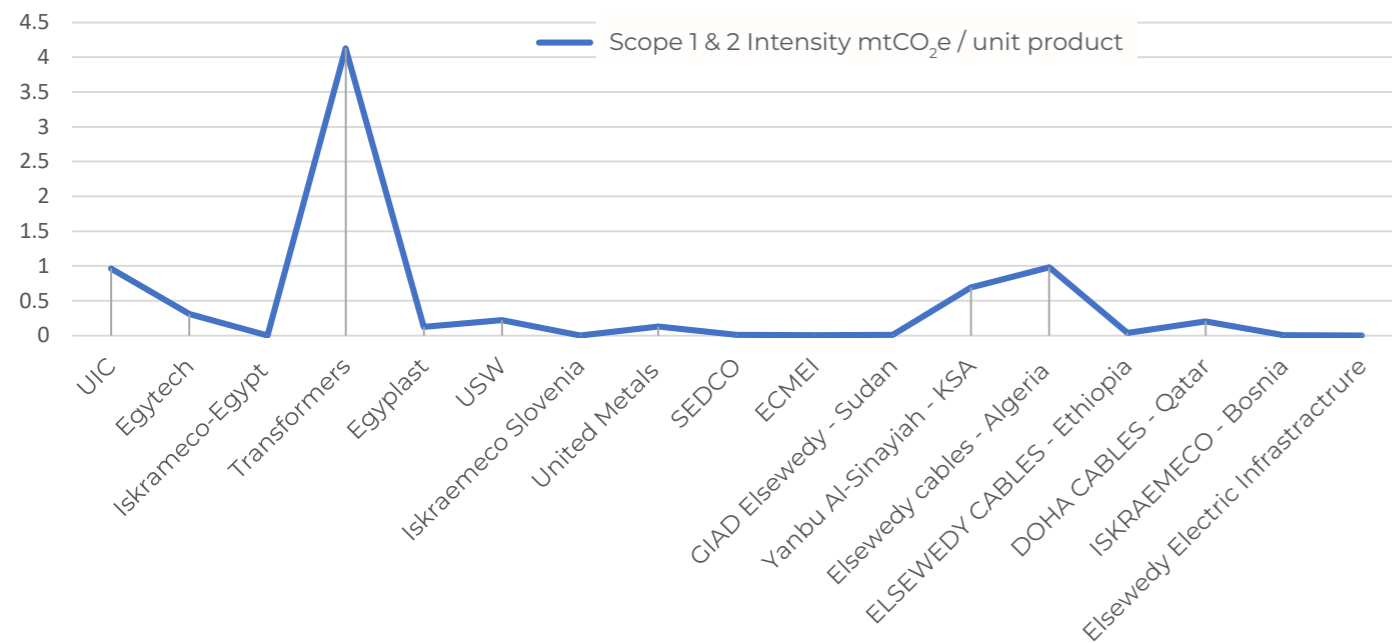
2017 Base Year (BY) Comparison

The year 2021 saw continued growth in Elsewedy Electric's productivity for all its factories which should have increased the emissions when compared to the base year 2017. However, the total Scope 1 and 2 emissions were reduced by over 7%.

Scope	BY - 2017	2018	2019	2020 - Actual	2020 Modified*	Difference	2021- Actual	2021- Modified*	Difference
Scope 1 – mtCO ₂ e	5,652	5,515	5,285	13,195	8,660	+53%	8,698	6,509	+15%
Scope 2 – mtCO ₂ e	54,977	59,701	51,563	41,443	41,443	-24%	49,941	49,941	-10%
Scope 1 +2 – mtCO ₂ e	60,629	65,215	56,847	54,638	50,103	-17%	58,639	56,450	-7%
Scope 3 – mtCO ₂ e	1,899	1,708	1,867	29,819	12,724	-	117,268	24,627	-
Total – mtCO ₂ e	62,529	66,923	58,714	84,457	62,827	+0.5%	175,907	81,077	+30%

Carbon Intensity

Carbon intensity for the year 2021 is calculated per unit of product for each factory. Carbon intensity helps us in analyzing the performance of our factories and in setting our reduction plans.



* 2017 is considered the old base year to which the years 2018 to 2020 are compared to.

Scope 1 emissions resulting from refrigerants leakage were removed as it was not accounted for in the previous year.

Scope 3 emissions resulting from the following activities were removed in order to compare the emissions accurately:

- Well to Tank emissions for all fuel burning activities
- Water and wastewater treatment
- Purchased goods
- Downstream transportation
- Exports
- Hotel stays
- Packing material
- Ink consumption

2028 Targets

New targets aligned with a 1.5 Degree temperature goal

The GHG reduction targets have been set for Scope 1 and 2 emissions to prevent global climate change and an increase of no more than 1.5 degrees Celsius. All targets are set in line with the Absolute contraction approach of a 1.5 degrees C future, to be achieved by 2028.

Scope	Base year 2021	Target Year 2028	% Reduction	Status
Scope 1 – mtCO ₂ e	31,832	21,136	33.6%	-
Scope 2 – mtCO ₂ e	102,722	68,207	33.6%	-
Scope 1 + 2 – mtCO ₂ e	134,554	89,344	33.6%	-

Old targets aligned with a 1.5 Degree temperature goal

The emissions for the year 2021 were adjusted and included the same organizational and operational boundaries as 2017, allowing us to evaluate our activities with respect to the previously established targets. In the year 2021 (modified year) we have achieved 21% reduction in scope 1 and 2 emissions when compared with the base year.

Scope	Base year 2017	Reporting Year 2021*	Target Year 2025	% Reduction	Status
Scope 1 – mtCO ₂ e	5,652	6,509	3,753	33.6%	0% achieved
Scope 2 – mtCO ₂ e	54,977	49,941	36,505	33.6%	9.5% out of 33.6% achieved (27% achieved)
Scope 1 + 2 – mtCO ₂ e	60,629	56,450	40,258	33.6%	6.9% out of 33.6% achieved (21% achieved)

ABSOLUTE EMISSIONS COMPARISON WITH PREVIOUS YEARS

Starting this year we decided to expand our boundaries for more accurate calculations and this included more Scope 3 activities. We included the following activities in our calculations:

- ▶ **Ink Consumption (Scope 3)**
- ▶ **Packing Material (Scop3 3)**
- ▶ **Hotel Stay (Scope 3)**
- ▶ **We also expanded our organizational boundaries to include 10 more facilities.**

* 2017 is considered the old base year to which the years 2018 to 2020 are compared to.

Scope 1 emissions resulting from refrigerants leakage were removed as it was not accounted for in the previous year.

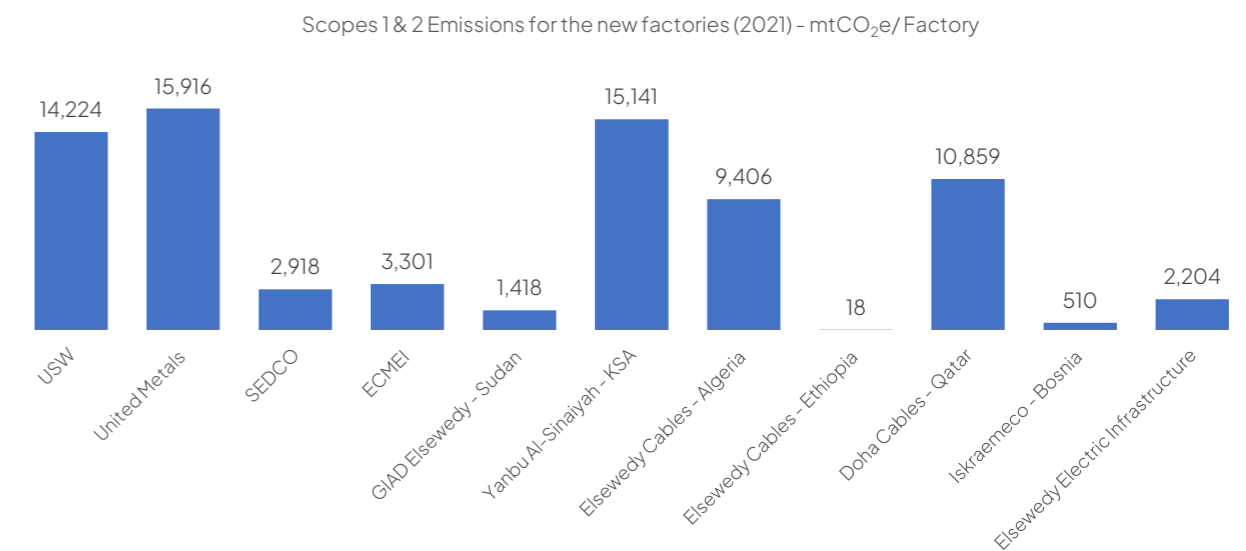
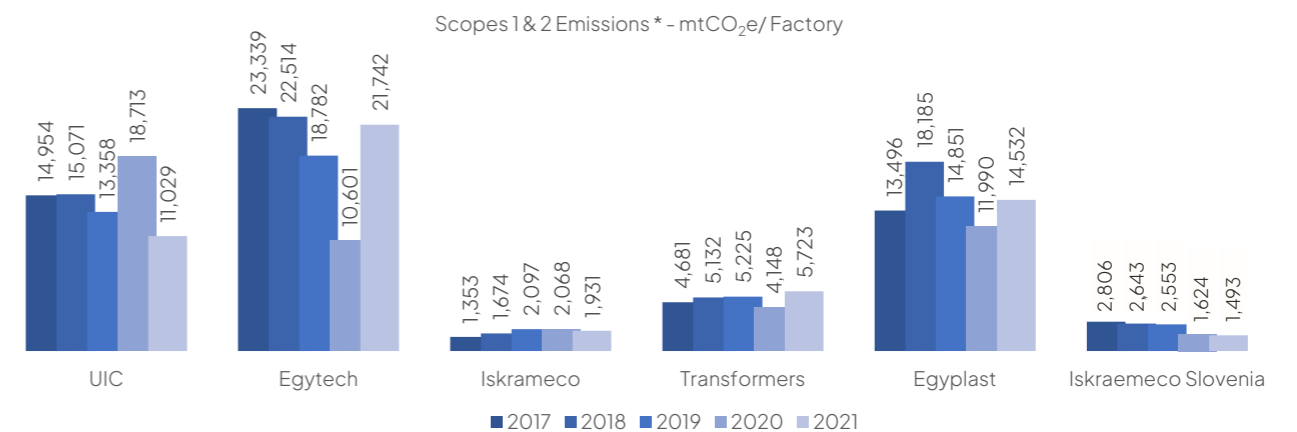
Scope	2017	2018	2019	2020	2021
Number of factories	6	6	6	7	17
UIC	✓	✓	✓	✓	✓
Egytech	✓	✓	✓	✓	✓
Iskraemeco - Egypt	✓	✓	✓	✓	✓
Iskraemeco - Slovenia	✓	✓	✓	✓	✓
Transformers	✓	✓	✓	✓	✓
Egyplast	✓	✓	✓	✓	✓
USW	✗	✗	✗	✓	✓
United Metals	✗	✗	✗	✗	✓
SEDCO	✗	✗	✗	✗	✓
ECMEI	✗	✗	✗	✗	✓
GIAD Elsewedy - Sudan	✗	✗	✗	✗	✓
Yanbu Al-Sinaiyah - KSA	✗	✗	✗	✗	✓
Elsewedy cables - Algeria	✗	✗	✗	✗	✓
Elsewedy cables - Ethiopia	✗	✗	✗	✗	✓
Doha cables - Qatar	✗	✗	✗	✗	✓
Iskraemeco - Bosnia	✗	✗	✗	✗	✓
Elsewedy Electric Infrastructure	✗	✗	✗	✗	✓

Scope 1 Emissions* (mtCO₂e)	5,652	5,514	-2.4%	5,284	-6.5%	8,660.5	+53.2%	6,509	+15%
Scope 2 Emissions* (mtCO₂e)	54,977	59,701	+8.6%	51,563	-6.2%	41,442.9	-24.6%	49,941	-10%
Total Scope 1 & 2* (mtCO₂e)	60,629	65,215	+7.6%	56,847	-6.2%	50,103.3	-17.3%	56,450	-7%

Additional boundaries:	
• 10 new factories (Scopes 1, 2 and 3)	195,374
• New Scope 3 activities (mtCO ₂ e)	
• Scope 1 Refrigerants leakage (mtCO ₂ e)	

Total Carbon Footprint for the year 2021	251,824
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* When comparing 2021 with the base year emissions, the following should be considered:
1- USW factory emissions were removed from the comparison in order to ensure consistency in the operational and organizational boundaries.
2- Scope 1 emissions resulting from refrigerant leakage were removed as it was not accounted for in the previous year. "



INTRODUCTION

Esewedy Electric is committed to take solid actions to prevent the irreversible damage from climate change. As a leading global integrated energy solution provider in the industry. Esewedy Electric fully understands its momentous climate responsibilities as an industrial carbon producer. With the understanding that at Esewedy Electric we play a pivotal role in driving global decarbonization, we remain focused on our emissions reduction plan to reach and sustain net-zero greenhouse gas (GHG) emissions by 2030 and limit the rise in temperature above 1.5°C.

The plan entails discipline-specific policy approaches, formulated to focus on various aspects to control the potentially negative impacts of harmful emissions and environmental hazards. The policies apply to the Group, its lines of business, subsidiaries, collaborations, and joint ventures across all markets where the business operations are held.

CDP Water Security and Climate Change Reporting

Esewedy Electric commits to taking the lead on corporate environmental transparency and action. CDP, known as the Carbon Disclosure Project, provides a global system for organizations to maintain transparency with its stakeholders through an environmental disclosure and scoring process. With an aim to be recognized for its actions to reduce harmful emissions, alleviate climate risks and develop a low-carbon economy, Esewedy Electric disclosed for the second time to CDP's 2021 [Climate Change](#) and [Water Security](#).

Carbon Footprint Assessment and Mitigation Strategies

Measuring GHG emissions is fundamental to effectively manage them and achieve the goal of net-zero carbon dioxide emissions. As such, assessing our baseline performance is the first step to reduce emissions where possible and adopt decarbonization strategies where needed.

Esewedy Electric undertook its first GHG emissions reporting in 2017 and continues to monitor its plan to achieve carbon neutrality by 2030 by reporting on its carbon emissions for all the following years. This reporting period, CFP 2021, our organizational and operational boundaries have expanded to include an additional 11 facilities from those reported in the 2017 base year, accounting to a total of 17 facilities distributed across 5 broad business lines.



ABOUT OUR FACILITIES IN THE SCOPE OF THIS REPORT

Esewedy Electric is an all-in-one integrated energy solutions provider, with an unparalleled insight into the local Egyptian market, which set aspirations to be a global leader; extending through Africa, Europe, GCC, the Americas, Asia and Oceania.

	A Wires & Cables	B Turnkey Solutions	C Meters	D Transformers	E Electrical Products
1996	Egytech Cables Egyplast				
1997	United Industries				
1998	United Metals				Esewedy SEDCO
2002	GIAD Esewedy - Sudan				
2006	Yanbu Al-Sinaiyah - KSA				
2007	United Steel Wires		ISKRAEMECO - Bosnia		
2008	Esewedy Cables Algeria	Esewedy Electric Infrastructure	ISKRAEMECO - Slovenia ISKRAEMECO - Egypt		ECMEI
2009	Esewedy Cables - Ethiopia			Esewedy Transformers	
2010	Doha Cables - Qatar				

A WIRES & CABLES

Esewedy Electric name became Egypt's first specialized cables distributor by 1960, and Egypt's first private manufacturer of cables in 1984. Over the following decades, Esewedy Electric employed both organic and inorganic growth through the establishment of plants and the acquisition of companies across the value chain on a local and global scale. Within our organizational boundary, a diversified set of product offerings exist within the single business line, to which 10 out of our 17 reporting facilities belong to, across 5 different countries: Egypt, KSA, Algeria, Ethiopia, and Qatar.

Egytech Cables	<ul style="list-style-type: none"> Cables Wires Fiber-optic cables Cables accessories 	<ul style="list-style-type: none"> Special cables Integrated solutions Fire fighting cables
Egyplast	Plastic compounds	
	<ul style="list-style-type: none"> PVC compound Masterbatch Special compounds 	<ul style="list-style-type: none"> Polyolefin compound PP fibers
United Industries	<ul style="list-style-type: none"> Domestic appliance cords LAN cables 	<ul style="list-style-type: none"> Domestic telephone cables Instrumentation cables
United Metals	Copper rods	
	<ul style="list-style-type: none"> Power & telephone cables Enameled wires 	<ul style="list-style-type: none"> Special cables
GIAD	<ul style="list-style-type: none"> Medium & low-voltage power & control cables LED lamps Electrical installations 	
Yanbu Al-Sinaiyah – KSA	<ul style="list-style-type: none"> Cables and energy solutions 	
United Steel Wires	Steel products	
	<ul style="list-style-type: none"> Low-carbon galvanized steel wires High-carbon galvanized steel wires/strands Prestressed concrete steel strands 	
	Aluminum products	
	<ul style="list-style-type: none"> All aluminum conductors (AAC) and alloy conductors (AAAC) Aluminum conductor steel reinforced (ACSR) Aluminum Conductor Aluminum Clad Steel Reinforced (A.C.S.R./AW) 	
	raw materials	
	<ul style="list-style-type: none"> Steel Zinc Aluminum and aluminum alloys 	
Elsewedy Cables	fiber optic cables	
	<ul style="list-style-type: none"> Duct cables Duct buried cables Micro duct cables 	<ul style="list-style-type: none"> Central tube duct cables Central tube buried cables Light pack design
	energy cables	
	<ul style="list-style-type: none"> Low voltage cables Medium voltage cables High voltage & extra high voltage cables 	
	special cables	
	<ul style="list-style-type: none"> Instrumentation Control cables Fire fighting cables Railway cables Telephone cables 	<ul style="list-style-type: none"> Automotive wire & cable Coaxial Lan cable Irrigation cables
	winding wires	
	<ul style="list-style-type: none"> Paper insulated flat wires (copper) Paper insulated round wires 	<ul style="list-style-type: none"> Enamelled round copper wires Welding wires (bare copper)
Elsewedy Cables	<ul style="list-style-type: none"> Power cables 	

B TURNKEY SOLUTIONS

Elsewedy Electric's **turnkey solutions** segment delivers electricity generating assets and transmission and distribution (T&D) networks on an EPC basis. This can be divided into power generation, electricity transmission & distribution, construction & infrastructure, and telecom and networking solutions.

POWER GENERATION

Customized integrated EPC solutions, including thermal power plants, solar technology, wind farms, and hydropower energy.

TELECOMMUNICATION AND NETWORKING

Covers ICT and security needs from complex projects to minor upgrades, including LAN/WAN, routers, and switches, industrial ethernet, wireless radio & paging systems, and unified communications

ELECTRICITY DISTRIBUTION

Management of every aspect of power distribution:

- ▶ Design, supply, installation, testing, and commissioning
- ▶ Complete power networks using underground cables
- ▶ Electrical supply to telephone and security systems
- ▶ MV switchgear with all auxiliaries and civil works

ELECTRICITY TRANSMISSION

Complete EPC solutions for transmission lines with a wide range of configurations and voltages up to 500kV

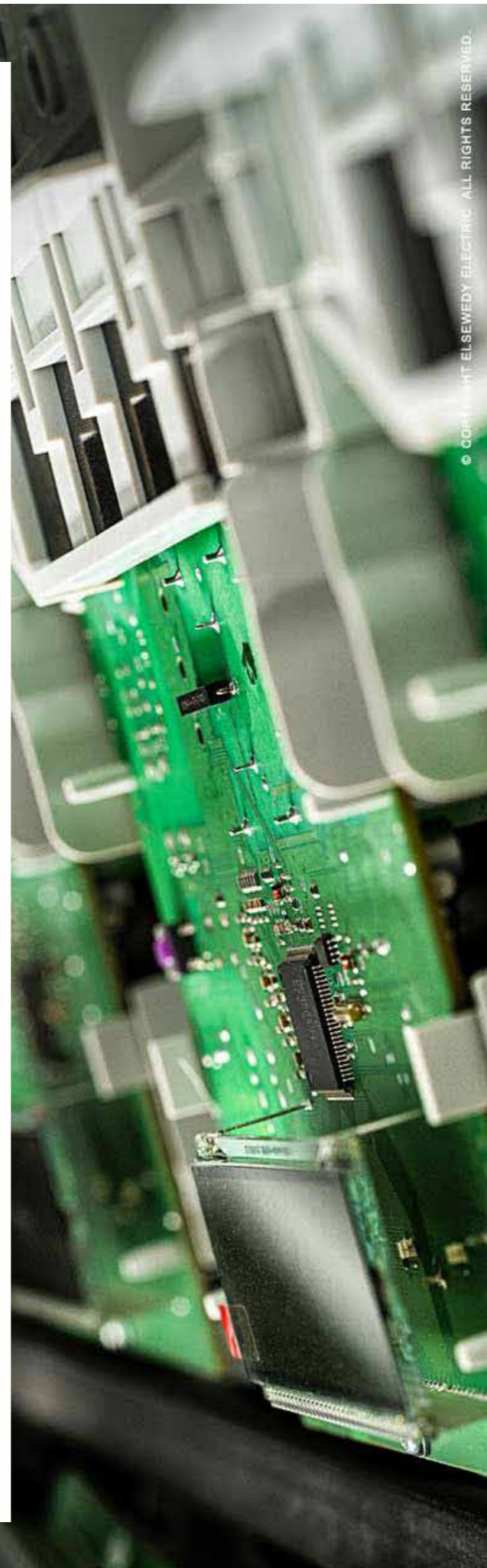
C METERS

ISKRAEMECO is a global provider of integrated energy, digital, and infrastructure solutions. The merge with Elsewedy Electric was based on a shared vision of transforming customer's needs into comprehensive energy management solutions. As part of the Elsewedy Electric group, Iskraemeco undertook a successful transformation from a product-oriented business to a smart metering solution provider, currently considered one of the leading smart metering solution providers. At Iskraemeco, we comply with all relevant health, safety, and environmental legislation and standards – ISO 9001, ISO 14001, ISO 17020, ISO 17025, ISO 27001, ISO 45001, ISO 50001, MID Directive and OHSAS 18001.



The robust portfolio of smart metering solutions incorporates digitalized solutions for efficient energy management through:

- 1) **Smart water meters** allow accurate and consistent billing based on actual meter reads; efficient operation by cutting the manual time-consuming meter reading; providing hands-on access for customers to tariffs, detailed meters and prices data which enhances the customer awareness and consumer service; and enhanced utility performance as gathered data is translated into meaningful insights in terms of planning, customer service and revenue collection.
- 2) **Smart cities** provide an environment of connected buildings and infrastructure which gives utilities the needed data to optimize resource consumption and increase resident's security through intelligent interconnected systems and artificial intelligence; improved transportation through adaptive systems, optimized parking systems, and optimized public transportation; in addition to minimized emissions and waste management efficiency through intelligent systems.
- 3) **Digital grid** maximizes the transparency and reliability of the energy supply chain, as they avoid power outages and reduce consumption; adjust according to changes in transmission lines and feeders; allow the self-diagnosis of faults and errors; run network simulations in real time; reduce the extent of peak demand; and predict maintenance requirements more effectively.
- 4) **Energy IoT** provides one central point of data collection from multiple devices, remote device configuration and control, device management, and over-the-air firmware updates. It also supports integration with as many sensors and devices as possible, allowing for a higher level of automation, and a solid analytic capacity.
- 5) **Smart prepayment solutions** integrate a vending system with powerful AMI infrastructure. It serves as a qualified, reliable, and secure electrical service for customers to allocate their resources much more reasonably, reducing the loss of energy and saving costs, and improved customer relations through transparent, real-time data.



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D TRANSFORMERS

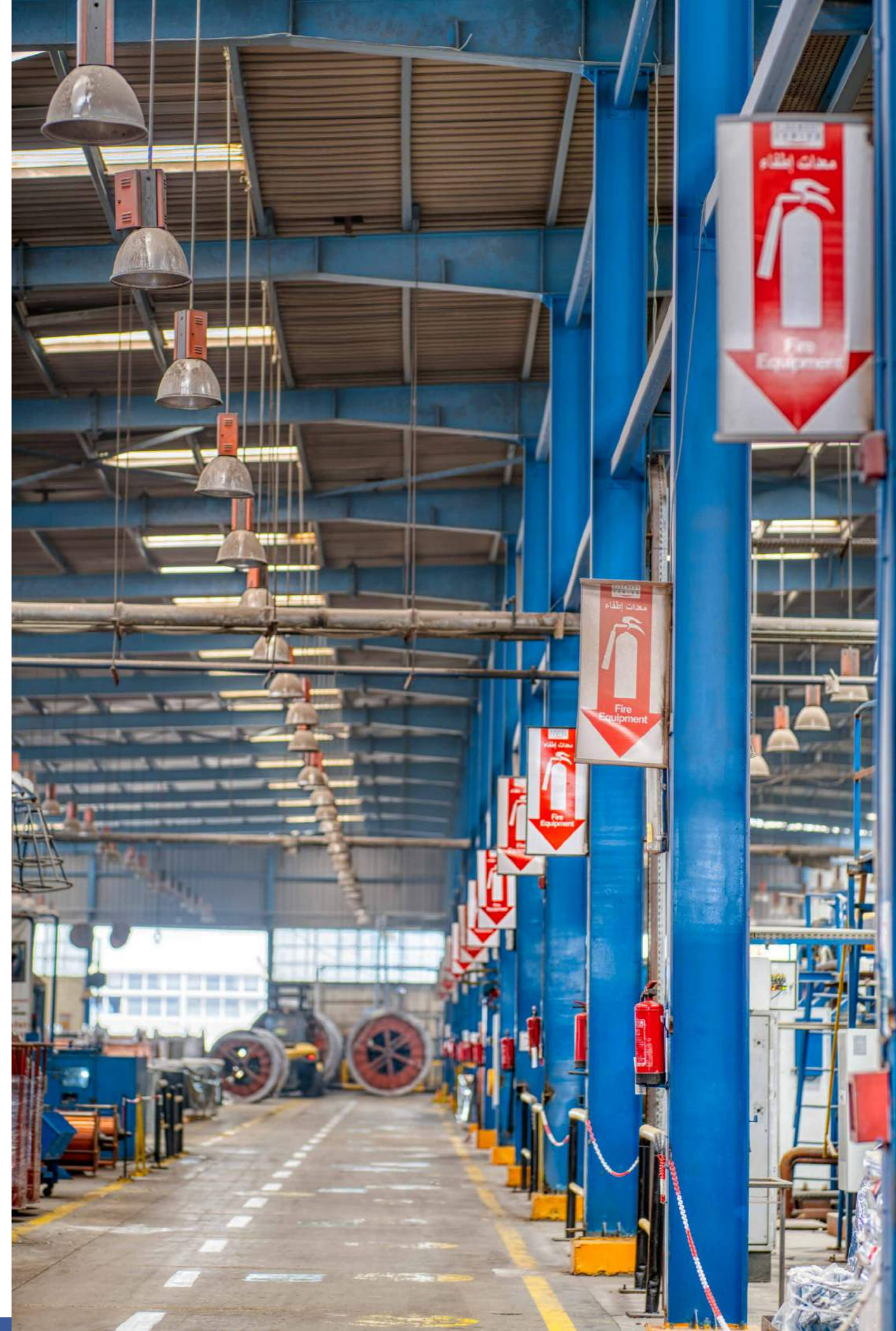
Only one facility out of our 17 reporting facilities belongs to this business line. Elsewedy Transformers, is the leading company in Egypt's power solutions industry, manufacturing a complete range of power and distribution transformers: oil-immersed distribution transformers, cast resin dry transformers, and power transformers. They range from 5 MVA to the most powerful transformer on the local market up to 500kV. Additional services include modular solutions and an after-sale services and support division.

The products adhere to the highest international standards subject to effective and consistent quality controls and standards which ensure that all delivered products are of the highest levels of stability and efficiency. Innovative, best-in-class processes include the remote and close-monitoring of transformer components such as the windings, core, fan operation, and power output; this allows for a more dynamic and optimized operating environment with limited fault current. In addition, the magnetic field analysis ensures high levels of efficiency and stability in both core and winding designs. Elsewedy power transformers range from 5 MVA to the most powerful transformer on the local market up to 500kV. At Elsewedy Transformers, products comply with the requirements of worldwide approved standards including: ISO 9001:2008, ISO 17025, ISO 14001:2004, OHSAS 18001:2007, and IEC 60076-5.

E ELECTRICAL PRODUCTS

Two facilities out of our 17 reporting facilities belong to this business line. The Egyptian Company for Manufacturing Electrical Insulators (ECMEI), the leading manufacturer of ceramic insulators in the Middle East, and Elsewedy SEDCO.

ECMEI	Porcelain insulators	<ul style="list-style-type: none"> Cap & pin insulators Bushing insulators Low voltage insulators 	<ul style="list-style-type: none"> Pin insulators Stay insulators Line post insulators
	Polymer insulators	<ul style="list-style-type: none"> Post insulators/silicone long rod insulators Ball & socket long rod insulators 	<ul style="list-style-type: none"> Socket/socket long rod insulators Coding structure
	Fittings	<ul style="list-style-type: none"> Overhead transmission metal fittings Insulator string fittings 	
	RTV coating	<ul style="list-style-type: none"> RTV coating hardness range from very soft to medium 	
	Cable accessories	<ul style="list-style-type: none"> Premolded cable joints Premolded cable termination Porcelain outdoors sealing end Dead break separable connectors 	<ul style="list-style-type: none"> Link box Heat shrink products Metal accessories
Elsewedy SEDCO	Electrical materials for hazardous environments	<ul style="list-style-type: none"> Explosion proof & weather proof equipment MV & LV Industrial, hazardous area cable glands & accessories LED lighting fixtures Lighting protection system Cable trays & support systems Junction boxes Round junction Cable cleats Earthing system 	



1

CARBON FOOTPRINT METHODOLOGY

FOLLOWED PROTOCOLS & STANDARDS

This carbon footprint assessment is conducted based on the GHG Protocol Guidelines, along with several international and widely applied standards, protocols, and guidelines specially developed for accounting and reporting GHG emissions, including but not limited to the following:

- › The Greenhouse Gas (GHG) Protocol Guidelines which include, but not limited to:
 - A Corporate Accounting and Reporting Standard
 - Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- › ISO 14064-1 2019: Specification with guidance at the organization level for the quantification and reporting of greenhouse gas emissions and removals
- › 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for Greenhouse Gas Inventories (with 2019 Refinements).

The emissions of all activities related to Elsewedy Electrics' 17 factories have been identified and accounted for. Activity data of 2021 was retrieved from the data recordings and all data has been reviewed and refined. Each activity is classified based on its respective scope, described in more detail in the 'Boundaries' section.

Each activity falls under a certain scope according to the GHG Protocol Guidelines; Scope 1 (Direct emissions), Scope 2 (Indirect emissions associated with the consumption of purchased electricity) and Scope 3 (Indirect emissions that are a consequence of the operations of the organization but are not directly owned or controlled by the reporting company).

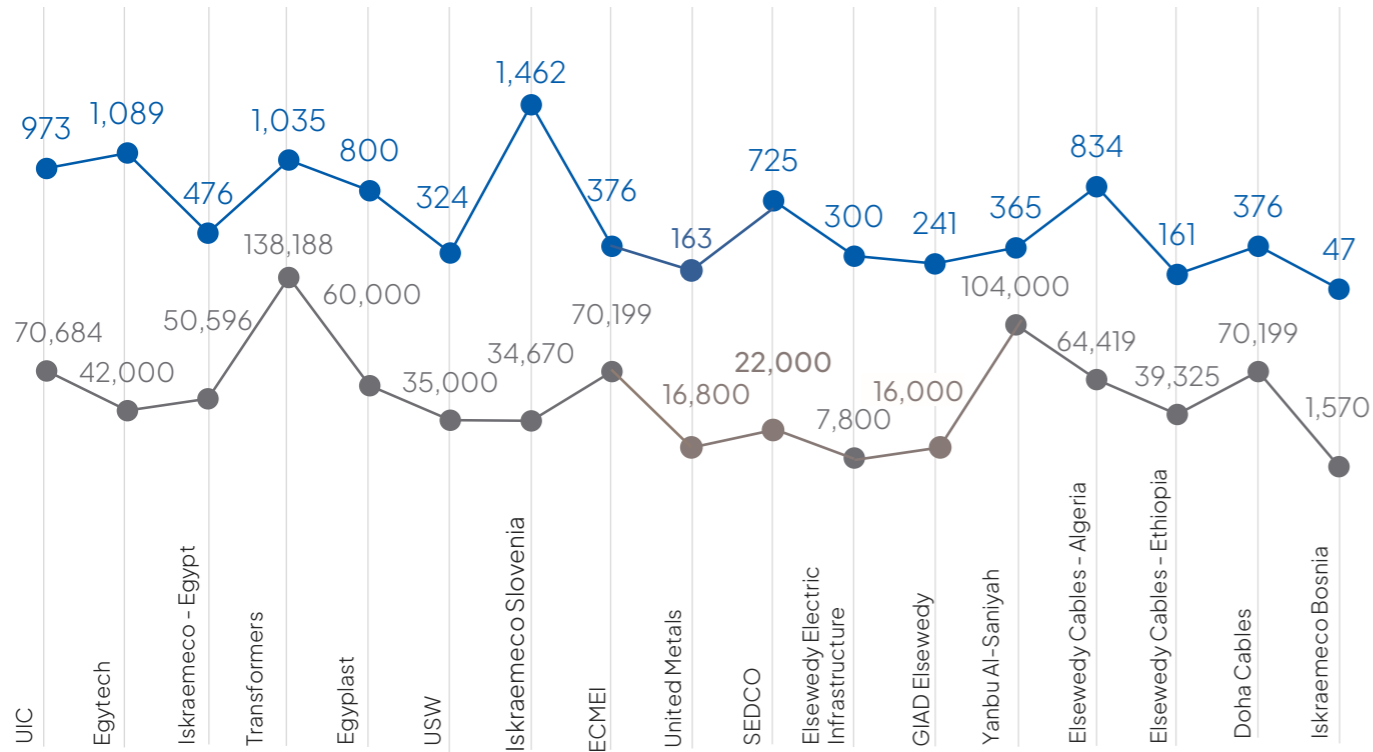


1.1 INVENTORY BOUNDARIES

ORGANIZATIONAL BOUNDARIES

The organizational boundary defines the businesses and operations that constitute the company for the purpose of accounting and reporting greenhouse gas emissions. Companies can choose to report either the emissions from operations over which they have financial or operational control (the control approach) or from operations according to their share of equity in the operation (the equity share approach). Elsewedy Electric's carbon footprint uses the operational control approach. As such, it included 17 of the main factories across the entire business's geographical locations.

Employees ●
Area (m²) ●



OPERATIONAL BOUNDARIES

The emissions fall under different scopes: Scope 1, resulting from our owned or controlled equipment and assets; Scope 2 covering emissions from purchased electricity; and Scope 3 embracing significant indirect emissions resulting from our operations.

In conformance with the GHG Protocol Corporate Standard, the reporting of Scope 1 and Scope 2 emissions, direct emissions and indirect emissions resulting from purchased electricity, are mandatory to report. However, emissions falling under Scope 3 are optional and businesses may choose which emissions to report. The operational boundaries for Elsewedy Electric's 2021 CFP report include the following:

Scope 1

Emissions from sources that are owned or controlled by the Elsewedy Electric Group (i.e. any owned or controlled activities that release emissions straight into the atmosphere). **The list of Scope 1 activities includes the following:**

- ▶ Refrigerants leaking
- ▶ Diesel fuel burning on-site (Generators, equipment, ... etc.)
- ▶ Owned vehicles fuel burning
- ▶ Natural gas fuel burning on-site

SCOPE 2

Emissions associated with the consumption of purchased electricity, from a source that is not owned or controlled by the Elsewedy Electric Group. **The list of Scope 2 activities includes the following:**

- ▶ Purchased electricity

SCOPE 3

Emissions resulting from other activities. This includes transport fuel used by air business travel, and employee-owned vehicles for commuting to and from work; emissions resulting from courier shipment; emissions from waste disposal, etc. **This year Scope 3 activities have been expanded and includes the following:**

- ▶ Fuel and energy-related activities (not included in Scope 1 and 2):
 - Fuel burning - Owned vehicles Well-to-tank (WTT)
 - Fuel burning - Diesel (WTT)
 - Fuel burning - Natural Gas (WTT)
 - Water usage & wastewater treatment
- ▶ Waste generated in operations
 - Solid waste disposal
- ▶ Purchased goods and services
 - Purchased goods
 - Paper consumption
 - Ink consumption
 - Packing material
- ▶ Employee Commuting
 - Commuting + (WTT)
- ▶ Business travel
 - Fuel Burning - Business travel + (WTT)
 - Air Travel + (WTT)
 - Hotel Stay
- ▶ Downstream transportation and distribution
 - Downstream transportation + (WTT)
 - Exports



1.2 CALCULATION APPROACH

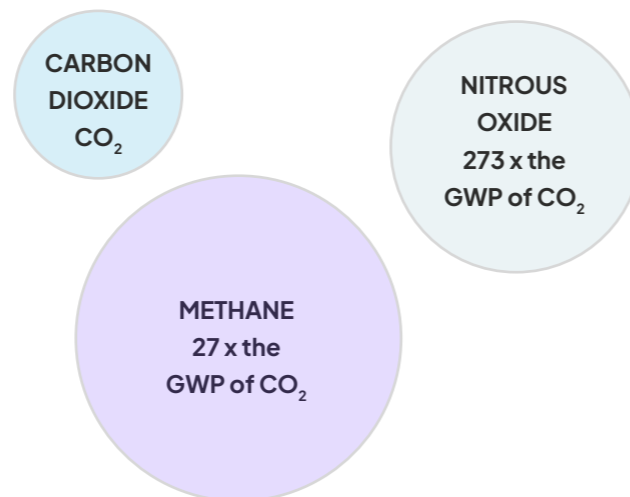
As required by best practice in organizational GHG accounting and the chosen WBCSD/WRI GHG Protocol, all seven Kyoto Protocol greenhouse gases have been included in the assessment. Global warming potentials (GWPs) are factors describing the radiative forcing impact of one unit of a specific greenhouse gas (e.g. methane) relative to one unit of carbon dioxide. They are used in GHG accounting to convert individual greenhouse gas emissions to a standardized unit for comparison; carbon dioxide equivalent (CO₂e).

Elsewedy Electric applied 100-year GWPs to all emissions data in this inventory in order to calculate total emissions, in metric tons carbon dioxide equivalent (mtCO₂e). Global warming potential values were sourced from the Intergovernmental Panel on Climate Change's (IPCC) sixth Assessment Report (AR6 2021), the most recent IPCC report available at the time of assessment. The Kyoto Protocol GHGs (or categories of GHGs) and their respective GWPs are listed in the table below.

Greenhouse gas	Chemical formula	100-Year GWP
Carbon dioxide	CO ₂	1
Methane	CH ₄	27
Nitrous oxide	N ₂ O	273
Hydrofluorocarbons (HFCs)	Various	Various
Perfluorocarbons (PFCs)	Various	Various
Nitrogen trifluoride	NF ₃	17,400
Sulphur hexafluoride	SF ₆	25,200

Each activity falls under a certain Scope according to the GHG Protocol Guidelines; Scope 1 (Direct emissions), Scope 2 (Indirect emissions associated with the consumption of purchased electricity) and Scope 3 (Indirect emissions) that are a consequence of the operations of the organization but are not directly owned or controlled by the reporting company.

When calculating the CFP of Elsewedy Electric, the emissions of each activity under Scope 1, 2 and 3 have been considered. Each activity falls under a certain scope, which is described more in depth under each activity. The general calculation approach for the emissions, counted in mtCO₂e, is multiplying the activity with its corresponding emission factor.



When doing this, a unit analysis is performed in order to make sure the results of the emissions are obtained in the desired unit mtCO₂e. The general formula for calculating the emissions for each activity is according to the below equation.

The unit of the GHG Emissions is metric tons carbon dioxide equivalent (mtCO₂e). The unit CO₂e refers to an amount of a GHG, whose atmospheric impact has been standardized to that one-unit mass of carbon dioxide (CO₂), based on the global warming potential (GWP) of the gas.

The general formula could be applied for each activity to obtain its emissions. All activities were calculated for the fiscal year, 2021. Thus, the emissions accounted for, were those of the total value for each activity in a single year.

$$\text{GHG Emissions, E [mtCO}_2\text{e]} = \text{Activity, A [unit]} \times \text{Emission Factor, EF [mtCO}_2\text{e/unit]}$$

1.3 EMISSION FACTORS

Emission factors (EF) are representing the quantity of pollutants released to the atmosphere caused by a certain activity. The emission factor is usually expressed as the carbon dioxide equivalent (CO₂e) emissions generated by a unit weight, volume, distance, or duration of the activity, e.g., CO₂e/liter fuel consumed, CO₂e/km driven or CO₂e/kWh of purchased electricity etc.

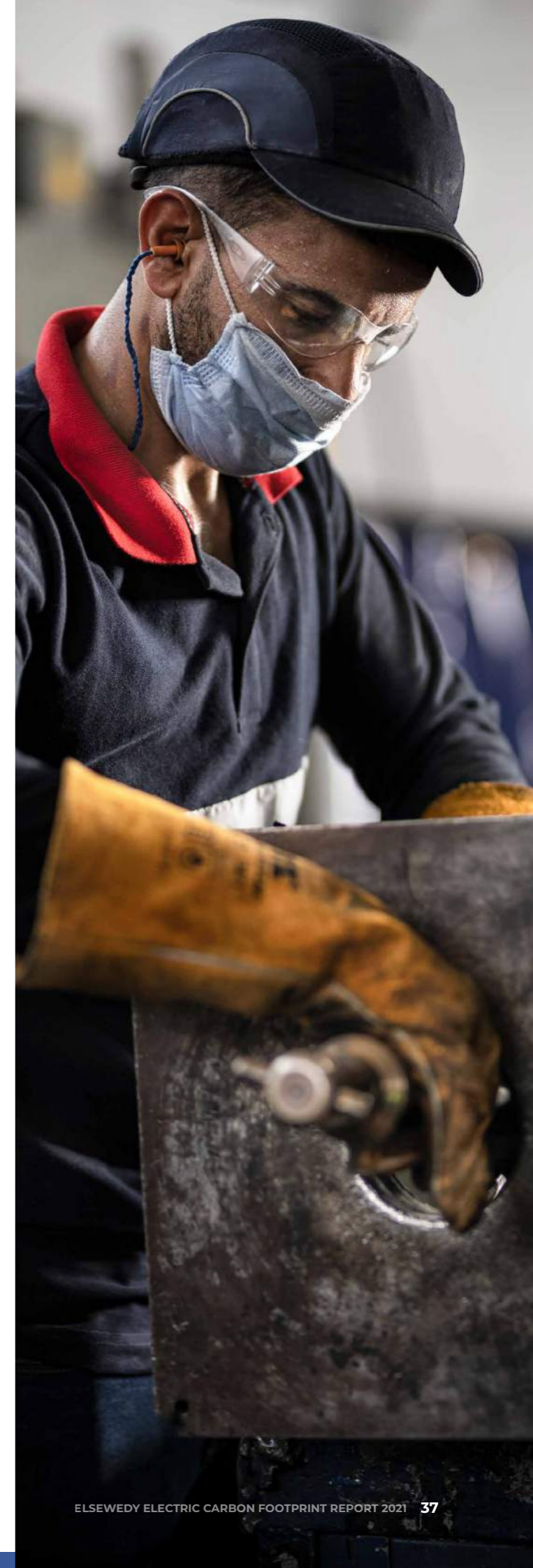
The Emission Factors were identified based are:

DEFRA
Department for Environment, Food & Rural Affairs UK 2021

IPCC
Intergovernmental Panel on Climate Change

Country Specific Emission Factors
Emission factor calculated specifically for each country

As regards to the country specific grid electricity emission factor, the emission factor is derived based on the Egyptian Electric Utility and Consumer Protection Regulatory Agency (Egypt ERA) published reports of monthly data of the grid electricity, where the emission factor is based on Egypt's actual fuel mix and power generation.



1.4 DATA SOURCES AND QUALITY

All data utilized to calculate the emissions arising from our activities is derived from our database. The quality of the data has been assessed and presented below, where the data of each sector of the business has been assessed separately in order to allow a better analysis and demonstration of resolution and additional clarifications.

Different types of data may be used to carry out a corporate carbon footprint. The most used types of data are:

- **Primary data:** data taken during interviews as well as recorded data that are directly linked to the assessment.
- The **monthly consumption** of each factory in the form of invoices that are used to calculate the emissions resulting from different activities.
- **Secondary data:** such as databases, studies, and reports.
- **Assumptions:** assumptions made based on internationally recognized standards and studies.

Activity	Data	Resolution	Comments
Fuel Burning - Owned vehicles	2,142,465 469,815	Km Liters	-
Fuel Burning - Diesel	1,499,159	Liters	-
Fuel Burning - Natural gas	10,500,629	m ³	-
Refrigerant leakage	990,097 - 2,209	kg Nitrogen - Kg Refrigerant	-
Purchased Electricity	224,458,586	kWh	-
Water usage and wastewater	881,762	m ³	-
Solid Waste disposal	60,519	Tons	The office solid waste quantities need to be recorded. The quantity for each waste stream needs to be grouped.
Purchased goods	89	Tons	The specification of some of the purchased goods was assumed.
Packing material	7,176	Tons	The specifications of packaging materials are assumed.
Downstream transportation	3,169,283	km	-
Fuel Burning - Business travel	754,668	p.km	Data needs to be recorded in km or liters and not destinations.
Air Travel	2,152,120	km	-
Hotel Stay	2,446	Night	-
Exports	1,019,738,980	Ton.km	More accurate data about the exact weight per container and the name of each port needs to be provided.
Commuting	559,607,893	p.km	-
Paper Consumption	51	Tons	More accurate data about the size and weight of each paper category should be recorded.

■ Weak - Priority area for improvement
 ■ Satisfactory - Could be improved
 ■ Good - No changes recommended

1.5 RELEVANCY & EXCLUSIONS

Some of our Scope 3 emissions have not been included in this carbon footprint report due to data not being attainable or activities whose emission quantification is beyond Elsewedy Electric's operation and control. The exclusion rationale per category has also been specified.

ACTIVITY	DESCRIPTION	STATUS
Purchased goods and services	Purchased consumables such as office supplies; envelopes, printing materials, paper consumption and disposable items.	Relevant, calculated
Capital goods	Includes the emissions from embodied carbon in owned assets, buildings, etc.	Relevant, but not yet calculated
"Fuel and energy-related actives (not included in Scope 1 and 2)"	Emissions from energy consumed for municipal water supply and wastewater treatment, as well as WTT from fuel burning and transportation.	Relevant, calculated
Upstream transportation and distribution	Emissions from raw materials and products transportation to the factories.	Relevant, but not yet calculated
Waste generated in operations	This includes the waste generated from the different operations occurring at each factory in addition to the waste generated from the employees.	Relevant, calculated
Business travel	This includes business travel using Elsewedy Electric's owned vehicles, air travel and hotel stays.	Relevant, calculated
Employee commuting	This includes emissions from use of coasters, and from employees commuting using their private vehicles.	Relevant, calculated
Upstream leased assets	This category is not relevant as Elsewedy Electric does not lease any type of assets.	Not relevant
Downstream transportation	Transportation from the factories to the warehouses and exports.	Relevant, calculated
Processing of sold products	-	Relevant, but not yet calculated
Use of sold products	-	Relevant, but not yet calculated
End of life treatment of sold products	-	Relevant, but not yet calculated
Downstream leased assets	Elsewedy Electric does not lease any assets to any third party.	Not relevant
Franchises	Elsewedy Electric does not operate any franchises.	Not relevant
Investments	-	Relevant, but not yet calculated

1.6 REPORTING PERIOD

The reporting period covers the 1st of January 2021 to the 31st of December. The year 2017 is the base-year to which all the activities from the year 2017 to 2020 are compared to and referenced. As a result of the expansion in the reporting organizational and operational boundaries, the year 2021 is considered as a new base-year to which upcoming years will be compared to.

1.7 CARBON FOOTPRINT CALCULATIONS AND EQUATIONS

SCOPE 1

Stationary combustion

○ DIESEL FUEL

Diesel fuel is consumed by the generators that supply most of our factory's electricity demands. Every month, the fuel burned by in our factories is logged into the data base. The total amount of fuel consumed was multiplied by the corresponding emission factor to calculate the corresponding direct emissions.

$$\text{Fuel burning – Diesel emissions (mtCO}_2\text{e)} = \text{Fuel consumption (L)} \times \text{EF (mtCO}_2\text{e/L)}$$

○ NATURAL GAS

Natural gas is consumed by the generators to meet some of the factory's electricity demands. The monthly consumption of natural gas in m³ were retrieved from the data recordings. The emissions due to the natural gas consumption was calculated by multiplying the total annual amount consumed in m³ by the corresponding emission factor.

$$\text{Fuel burning – Natural Gas emissions (mtCO}_2\text{e)} = \text{Fuel consumption (m}^3\text{)} \times \text{EF (mtCO}_2\text{e/ m}^3\text{)}$$

Mobile combustion

○ OWNED VEHICLES

Emissions resulting from the owned vehicles fall under Scope 1 direct emissions. The fuel burned by the owned vehicles, or the data related to the distance travelled for each owned truck is logged into each factory's data base monthly.

$$\text{Owned Vehicle Emissions (mtCO}_2\text{e)} = \text{Fuel consumption (L)} \times \text{EF (mtCO}_2\text{e/ L)}$$

or

$$\text{Owned Vehicle Emissions (mtCO}_2\text{e)} = \text{Distance traveled (km)} \times \text{EF (mtCO}_2\text{e/ km)}$$

Fugitive emissions

○ REFRIGERANTS LEAKAGE

Refrigeration fluids are fluids which are used to cool a space in refrigeration cycles. Each of the sites has been analysed and wherever applicable, the amount of refrigerants used to re-charge the cooling systems in order to compensate for the leakage that happened during the operating year have been included. The refrigerant type and all its related data were found in Elsewedy Electric's database.

$$\text{Refrigerant Leakage Emissions (mtCO}_2\text{e)} = \text{Refrigerant leakage (kg)} \times \text{EF (mtCO}_2\text{e /kg)}$$

SCOPE 2

○ PURCHASED ELECTRICITY

At Elsewedy Electric, electricity is used in HVAC, lighting, computers, and other equipment. The electricity consumption data per month was obtained from each factory's database. Emissions from electricity consumption are the product of the national grid emission factor and the annual electricity consumption of each factory.

Purchased Electricity falls under Scope 2 (Indirect emissions). The electricity consumption includes all Elsewedy Electric's operating factories. The monthly electricity consumed at the factories, was retrieved from the electricity bills in kWh. Therefore, the total electricity consumption of the fiscal year was calculated using the formula below:

$$\text{Electricity Consumption Emissions (mtCO}_2\text{e)} = \text{Electricity Consumption (kWh)} \times \text{EF (mtCO}_2\text{e/kWh)}$$

SCOPE 3

Purchased goods and services

○ PURCHASED GOODS

For the factories consumables consist of hygiene disposable items, such as gloves, head covers, face masks, etc. The resulting emissions fall under Scope 3. The yearly amounts of consumables per type have been retrieved from the factories' data recordings, as units of items. The emissions were obtained by multiplying the emission factor per unit by the weight of items.

$$\text{Emissions of purchased goods (mtCO}_2\text{e)} = \sum \text{weight of items (ton)} \times \text{EF of material (mtCO}_2\text{e/ton)}$$

○ PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions). Emissions from paper consumption are the product of the emission factor of the paper by the weight of paper used for each paper type. The emission factor accounted for extraction, processing, manufacturing, and transportation.

$$\text{Paper consumption emissions (mtCO}_2\text{e)} = \sum \text{weight of Paper (ton)} \times \text{EF of paper (mtCO}_2\text{e/ton)}$$

○ INK CONSUMPTION

Ink consumption emissions fall under Scope 3 (indirect emissions). Emissions from ink consumption are the product of the emission factor of the ink by the number of ink cartridges used. The emission factor accounted for extraction, processing, manufacturing, and transportation.

$$\text{Ink consumption emissions (mtCO}_2\text{e)} = \sum \text{quantity of ink cartridges (cartridges)} \times \text{EF of item (mtCO}_2\text{e/cartridge)}$$

○ PACKING MATERIAL

Packing materials emissions fall under Scope 3 (indirect emissions). Packing materials include cello-tape, stretch rolls, packing cartoon, etc. Emissions from packing materials are the product of the weight of each type of packing material by the emission factor of this material.

$$\text{Packing material emissions (mtCO}_2\text{e)} = \sum \text{weight of packing material (ton)} \times \text{EF of material (mtCO}_2\text{e/ton)}$$

Fuel and energy-related activities (not included in Scope 1 and 2)

WELL-TO-TANK (WTT) EMISSIONS

WTT emissions are those that result from the production of a fuel, including resource extraction, initial processing, transportation, fuel production, distribution and marketing, and delivery into a consumer vehicle's fuel tank. WTT emissions were taken into consideration in order to reflect the full range of climatic impacts from fuel-burning activities.

$$\text{WTT Emissions (mtCO}_2\text{e)} = \text{Fuel consumption (unit)} \times \text{WTT EF (mtCO}_2\text{e/unit)}$$

WATER USAGE & WASTEWATER TREATMENT:

The emission factor for water supply and wastewater treatment is calculated by using a conversion formula, provided by Holding Company for Water and Wastewater (HCWW). The emissions are based on the amount of energy consumed in each process. The emission factors for water supply and wastewater treatment are accordingly calculated by multiplying the conversion factor by the electricity emission factor. At the same time, a unit analysis is performed to make sure the units are conforming.

$$\begin{aligned} \text{Water Supply emission (mtCO}_2\text{e)} &= \text{Water supply (m}^3\text{)} \times \text{EF (mtCO}_2\text{e/m}^3\text{)} \\ \text{Wastewater treatment emissions (mtCO}_2\text{e)} &= \text{Wastewater treated (m}^3\text{)} \times \text{EF (mtCO}_2\text{e/m}^3\text{)} \end{aligned}$$

Waste generated in operations

SOLID WASTE DISPOSAL

Solid waste disposal falls under Scope 3 (indirect emissions). Emissions from solid waste disposal are the product of the emission factor for each waste type, the quantity of waste for each type and the fate of each waste stream. Several waste types are generated and disposed of at each factory, including cardboard, plastics, metal scrap and wood. Since the activities of each factory differ, the waste disposal varies accordingly as well. Most of the waste at the factories is measured in tons, except for some other streams which are counted as units of items. The waste quantities,

$$\text{Solid Waste Emissions (mtCO}_2\text{e)} = \text{Quantity of waste/type (ton)} \times \text{EF/type (mtCO}_2\text{e/ ton)}$$

Business travel

HOTEL STAYS

For each of the hotel stays, dates, location, no. of hotel rooms and nights were obtained from Elsewedy Electric's data records. The hotel stays encompassed approximately 15 countries for the year 2021. DEFRA is providing the emission factors per hotel night for each country as UK and non-UK countries. In those cases where the country of the hotel stay is not available in DEFRA, an average value of all non-UK values has been used to approximate the emissions.

$$\text{Hotel stay Emissions (mtCO}_2\text{e)} = \text{Hotel stays per country (nights)} \times \text{EF (mtCO}_2\text{e/night per country)}$$

Business travel

AIR TRAVEL + WELL TO TANK EMISSIONS

In 2021, both international and domestic flights took place. Elsewedy Electric's data records provided data of flight routes, dates and no. of tickets. The international flights are calculated as the distance of departure location to final destination including transits. The flight distances have been obtained from airport distances calculator. The emissions factors were obtained from DEFRA as average passenger, flights to/from non-UK countries.

$$\text{Air Travel Emissions (KgCO}_2\text{e)} = \text{Distance travelled per passenger (p.km)} \times \text{EF (KgCO}_2\text{e/ p.km)}$$

WTT emissions were also accounted for to capture the maximum climate impacts related to this activity.

$$\text{Air Travel WTT Emissions (KgCO}_2\text{e)} = \text{Distance travelled per passenger (p.km)} \times \text{WTT EF (KgCO}_2\text{e/ p.km)}$$

BUSINESS TRAVEL

Beside air travel and commuting, there are other business travel related emissions occurring at each of our factories. This is when an employee takes a vehicle in order to get to a meeting/ conference or other business-related purpose. Since that the vehicles used are not owned by Elsewedy Electric, the emissions resulting from the business travel fall under Scope 3 (indirect emissions). The emissions were calculated by multiplying the traveled distance per passenger by the corresponding emission factor (average passenger car or coach). The following formulae were used to calculate the exact emissions in mtCO₂e:

$$\begin{aligned} \text{Business Travel Emissions (mtCO}_2\text{e)} &= \text{Traveled distance (km)} \times \text{EF (mtCO}_2\text{e/ km)} \\ \text{or} \\ \text{Business Travel Emissions (mtCO}_2\text{e)} &= \text{Traveled distance} \times \text{Number of passengers (p.km)} \times \text{EF (mtCO}_2\text{e/ p.km)} \end{aligned}$$

$$\begin{aligned} \text{Business Travel WTT Emissions (mtCO}_2\text{e)} &= \text{Traveled distance (km)} \times \text{WTT EF (mtCO}_2\text{e/ km)} \\ \text{or} \\ \text{Business Travel WTT Emissions (mtCO}_2\text{e)} &= \text{Traveled distance} \times \text{Number of passengers (p.km)} \times \text{WTT EF (mtCO}_2\text{e/ p.km)} \end{aligned}$$

COMMUTING

Employees and workers commute every day to and from work from different locations all over Egypt. In general, the employees and workers use different types of transportation means including private cars, carpooling, minibuses, and micro buses. The daily distances were calculated for the buses in km multiplied by the working days and then multiplied by the corresponding emission factor to get the commuting emissions. Emissions from employee commuting vehicles falls under Scope 3. WTT emissions are also accounted for under Scope 3.

$$\begin{aligned} \text{Commuting Emissions (mtCO}_2\text{e)} &= \\ \text{Working days} \times \text{Travelled distance} \times \text{Number of passengers (pkm)} &= \\ \times \text{EF (mtCO}_2\text{e/ pkm)} & \end{aligned}$$

$$\begin{aligned} \text{Commuting WTT Emissions (mtCO}_2\text{e)} &= \\ \text{Working days} \times \text{Travelled distance} \times \text{Number of passengers (pkm)} \times \text{WTT-EF (mtCO}_2\text{e/ pkm)} & \end{aligned}$$

Downstream Transportation and Distribution

EXPORTS

As a leading electric cables, transformers and meters manufacturer in Egypt, Elsewedy Electric exports its products to more than 100 countries worldwide. The exported products were transported via ocean routes on container ships. The emissions resulting from marine and land shipping of our products were accounted for under Scope 3.

The type, weight, and destination of each shipment were retrieved from our database. The distance travelled per shipment was then calculated using a port-to-port calculator. The distance travelled and the weight of each product were multiplied to produce the ton-km (ton.Km), which was then multiplied by the corresponding emission factor to produce the total emissions. WTT emissions were also accounted for under Scope 3.

Export emissions (mtCO₂e) = Emissions from factory to port + Emissions from port-to-port

Emissions from factory to port = Exported goods weight (ton) x distance travelled (km) x EF (mtCO₂e/ton.km)

Emissions from port-to-port = Exported goods weight (ton) x distance travelled (km) x EF (mtCO₂e/ton.km)

Export emissions WTT (mtCO₂e) = WTT emissions from factory to port + WTT emission from port-to-port

WTT emissions from factory to port = Exported goods weight (ton) x distance travelled (km) x WTT EF (mtCO₂e/ton.km)

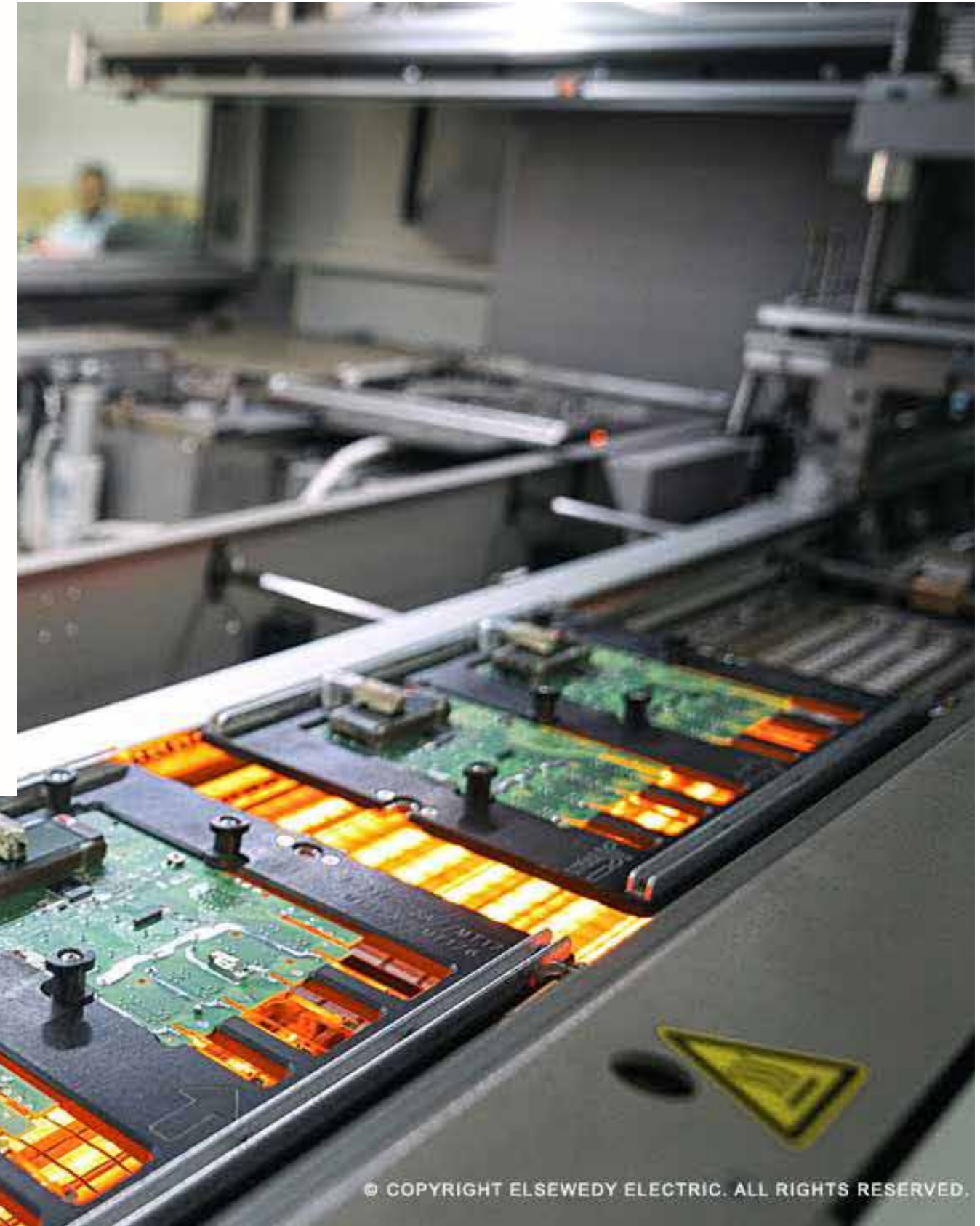
WTT emissions from port-to-port = Exported goods weight (ton) x distance travelled (km) x WTT EF (mtCO₂e/ton.km)

DOWNSTREAM TRANSPORTATION

This represents the emissions resulting from the transportation of products and shipments to different destinations. The resulting emissions fall under Scope 3 and were calculated by multiplying the distance travelled by the corresponding emission factor. The data was retrieved from the database of each factory.

Downstream transportation Emissions (mtCO₂e) = Distance travelled (km) x EF (mtCO₂e/ km)

Downstream transportation WTT Emissions (mtCO₂e) =
Distance travelled per weight of shipment (km) x WTT EF (mtCO₂e/ km)



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2021 Carbon Footprint Results

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1

UIC FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel in UIC is used to operate mobile machinery, cars, forklifts and minibuses.

UIC consumed 50,764 liters of diesel in 2021. Emissions resulting from diesel consumption are included within owned vehicles emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 direct emissions. Owned vehicles include cars, forklifts and minibuses.

The distance travelled by the factory's owned vehicles for the year 2021 was 1,101,700 km which resulted in **288 mtCO₂e** and **76 mtCO₂e** in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

UIC factory consumed 1,229,345 m³ of natural gas annually. Which resulted in **2,501 mtCO₂e** and **425 mtCO₂e** in WTT emissions.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for under scope 3.

UIC's business trips totaled 124,834 p.km in 2021, which resulted in **28 mtCO₂e** including WTT emissions.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. UIC's purchased goods totaled 5 ton in 2021, which resulted in **19 mtCO₂e**.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 43,568,464 kWh, which resulted in **18,952 mtCO₂e**.

Electricity consumption is the largest contributor to UIC's emissions at around 68% of total emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 24 kg of A134 refrigerant and 15,339 kg N in the UIC factory which resulted in **33 mtCO₂e**.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 indirect emissions. The emissions are associated with the transportation of the waste to recycling facilities. UIC's waste generated for the year 2021 was about 2,550 tons of solid waste. This resulted in **54 mtCO₂e**.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

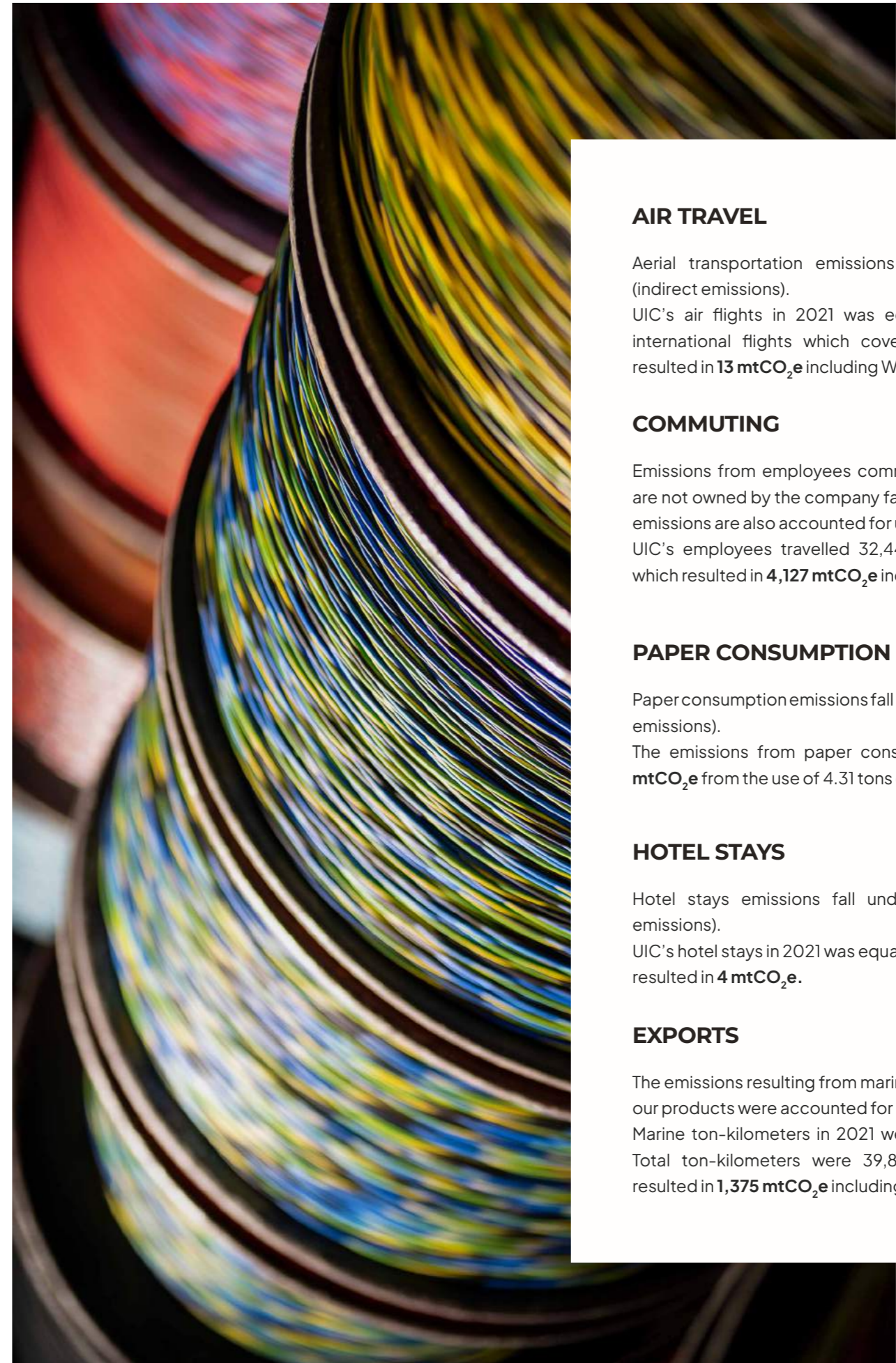
The UIC factory's water consumption for the year 2021 was 103,920 m³, which resulted in **38 mtCO₂e** in both water consumption and wastewater treatment.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 indirect emissions.

Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance travelled by these trucks in the year 2021 was equal to **91,987 km**, which resulted in **109 mtCO₂e** including WTT emissions.



AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

UIC's air flights in 2021 was equal to 25 round-trip international flights which covered 82,520 km. This resulted in **13 mtCO₂e** including WTT emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for under Scope 3.

UIC's employees travelled 32,442,000 p.km in 2021, which resulted in **4,127 mtCO₂e** including WTT emissions.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled **3.96 mtCO₂e** from the use of 4.31 tons of paper.

HOTEL STAYS

Hotel stays emissions fall under Scope 3 (indirect emissions).

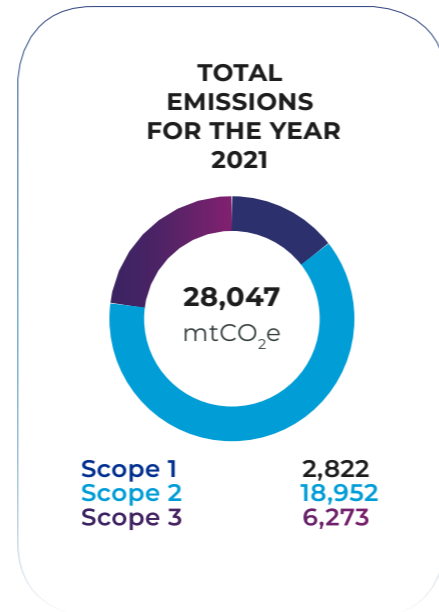
UIC's hotel stays in 2021 was equal to 74 hotel nights. This resulted in **4 mtCO₂e**.

EXPORTS

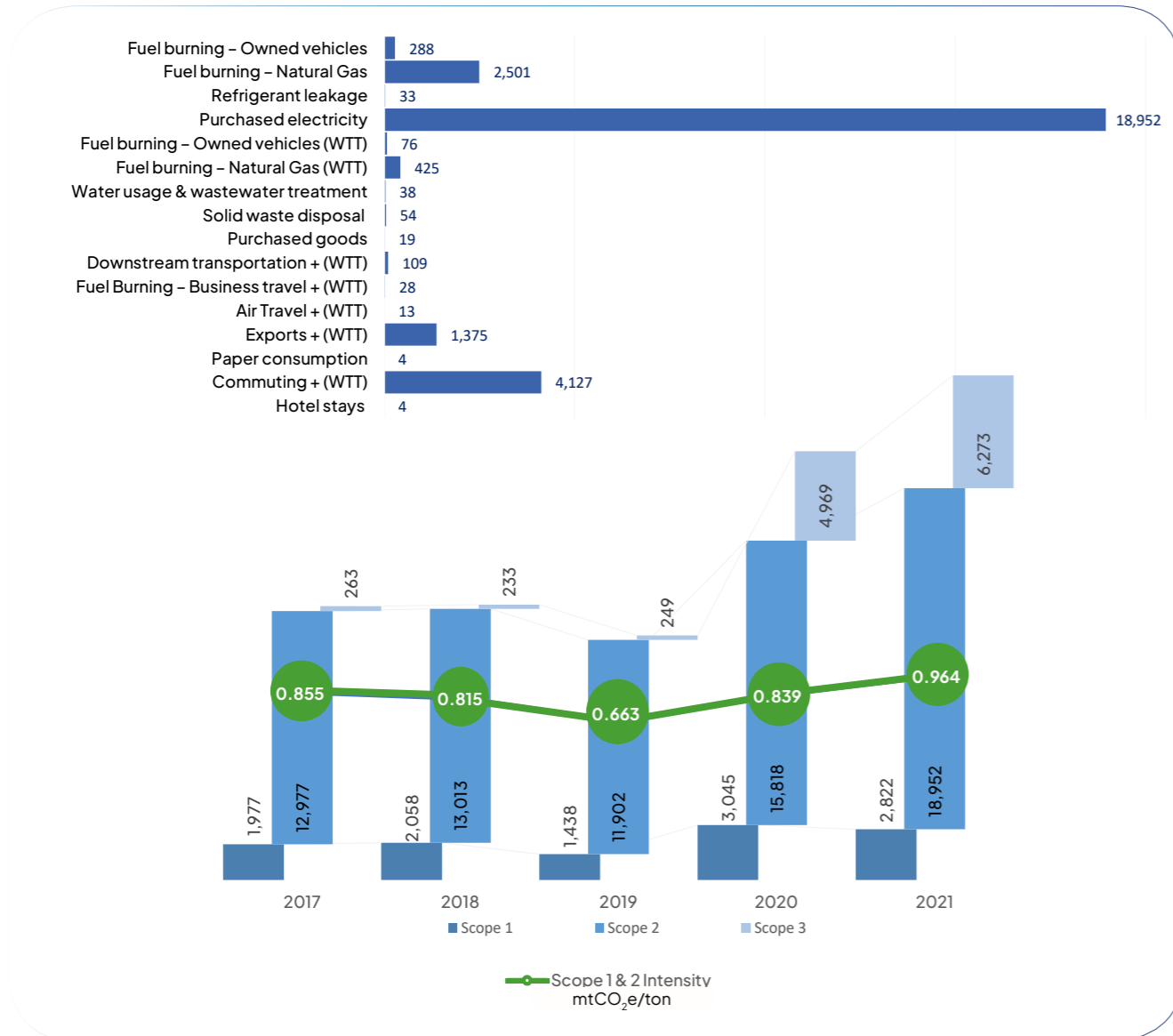
The emissions resulting from marine and land shipping of our products were accounted for under Scope 3.

Marine ton-kilometers in 2021 were 37,761,506 ton.km. Total ton-kilometers were 39,839,234 ton.km which resulted in **1,375 mtCO₂e** including WTT emissions.

TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	70,684
Number of employees	973
Scope 1 (mtCO ₂ e)	2,822
Scope 2 (mtCO ₂ e)	18,952
Scope 3 (mtCO ₂ e)	6,273
Scope 1,2 and 3 (mtCO ₂ e)	28,047
Scope 3 (mtCO ₂ e)	22,586
Scope 3 (mtCO ₂ e)	Ton
Scope 3 (mtCO ₂ e)	0.964
Scope 3 (mtCO ₂ e)	1.242



The largest contributor to GHG emissions in UIC factory is purchased electricity with a percentage of 68%, followed by commuting with a percentage 15% and then natural gas fuel burning (Scope 1) with a percentage of 9%.



UIC's EMISSIONS PER ACTIVITY Over the Years

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e				
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning - Owned vehicles	137	116	135	127	288
	Fuel burning - Diesel	384	384	385	130	-
Stationary Combustion	Fuel burning - Natural Gas	1,456	1,558	919	2,638	2,501
	Fugitive Emissions	NA	NA	NA	149	33
Total Scope 1 (mtCO₂e)		1,977	2,058	1,438	3,045	2,822

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e				
ACTIVITY		2017	2018	2019	2020	2021
Purchased Energy	Purchased Electricity	12,977	13,013	11,902	15,818	18,952

SCOPE 3 - INDIRECT EMISSIONS		mtCO ₂ e				
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	-	-	-	35	76
	Fuel burning - Diesel (WTT)	-	-	-	31	-
	Fuel burning - Natural Gas (WTT)	-	-	-	343	425
	Water usage & wastewater treatment	-	-	-	18	38
Waste generated in operations	Solid waste disposal	63	39	39	306	54
	Purchased goods and services	-	-	-	-	19
Business Travel	Paper consumption	5	8	6	4	4
	Fuel Burning - Business travel + (WTT)	16	31	40	28	28
	Air Travel + (WTT)	-	-	-	33	13
Downstream transportation and distribution	Hotel Stays	-	-	-	-	4
	Exports	-	-	-	-	1,375
Employee Commuting	Downstream transportation + (WTT)	-	-	-	232	109
	Commuting + (WTT)	178	155	163	3,939	4,127
Total Scope 3 (mtCO₂e)		263	233	249	4,969	6,273
Total Scope 1, 2 & 3 Emissions (mtCO₂e)		15,217	15,304	13,589	23,832	28,047

2 EGYTECH FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands. The factory consumed 287,781 liters of diesel annually, which resulted in 779 mtCO₂e (Scope 1) and 181 mtCO₂e in WTT emissions (Scope 3).

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under scope 1. We have consumed 439.4 kg of refrigerants (Between R22 and A134) and 433,854 kg N in the EGYTECH factory which resulted in 1,153 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3, indirect emissions. EGYTECH factory's water consumption for the year 2021 was 39,744 m³, which resulted in 15 mtCO₂e in both water consumption and wastewater treatment emissions.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 indirect emissions. Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets. The distance travelled by our trucks in the year 2021 was equal to 133,008 km, which resulted in 158 mtCO₂e including WTT emissions.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions). EGYTECH's air flights in 2021 were equal to 16 international round-trip flights which covered 130,948 km. This resulted in 20 mtCO₂e including WTT emissions.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions). The electricity consumption for the year 2021 was 23,563,680 kWh, which resulted in 10,250 mtCO₂e. Electricity consumption is the second largest contributor to EGYTECH's emissions at around 25% of total emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 indirect emissions. The emissions are associated with the transportation of the waste to recycling facilities. EGYTECH's waste generated for the year 2021 was about 5,853 tons of waste, which resulted in 124 mtCO₂e.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for under scope 3. EGYTECH's business trips totaled 208,246 p.km in 2021, which resulted in 46 mtCO₂e including WTT emissions.

EXPORTS

The emissions resulting from marine and land shipping of our products were accounted for under Scope 3. Our products were exported to various cities all over the world by marine and land shipping. Marine ton-kilometers were equal to 916,757,675 ton.km. The total ton-kilometers including land shipping were equal to 930,818,535 ton.km, which resulted in 17,347 mtCO₂e in indirect emissions and 4,065 mtCO₂e in WTT emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for under scope 3. EGYTECH's employees travelled 51,252,000 p.km in 2021, which resulted in 6,520 mtCO₂e including WTT emissions.

HOTEL STAYS

Hotel stays emissions fall under Scope 3 (indirect emissions). EGYTECH's hotel stays in 2021 was equal to 20 hotel nights. This resulted in 1 mtCO₂e.

PAPER CONSUMPTION

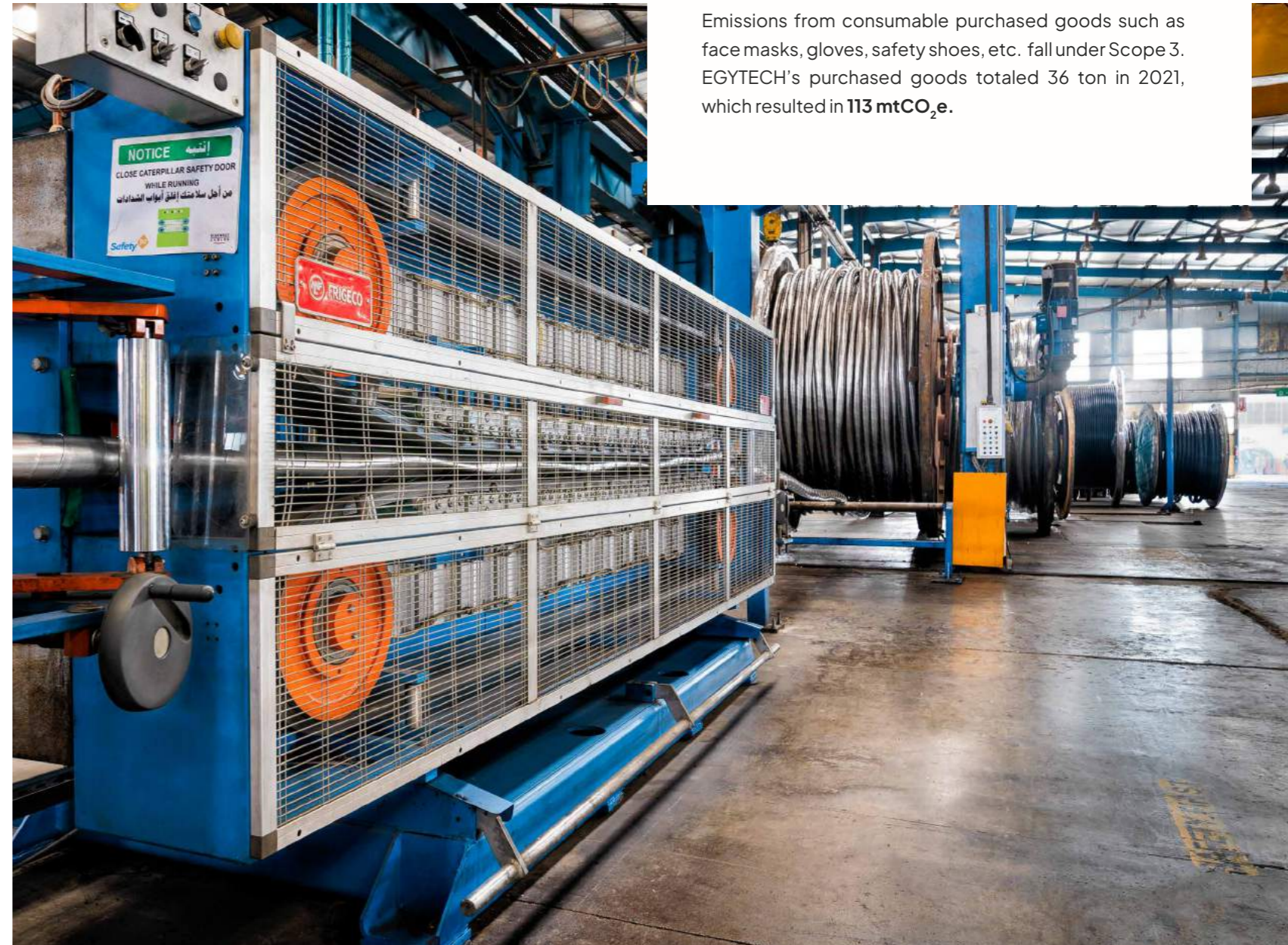
Paper consumption emissions fall under Scope 3 (indirect emissions). The emissions from paper consumption totaled 9.8 mtCO₂e from the use of 10.7 tons of paper.

INK CONSUMPTION

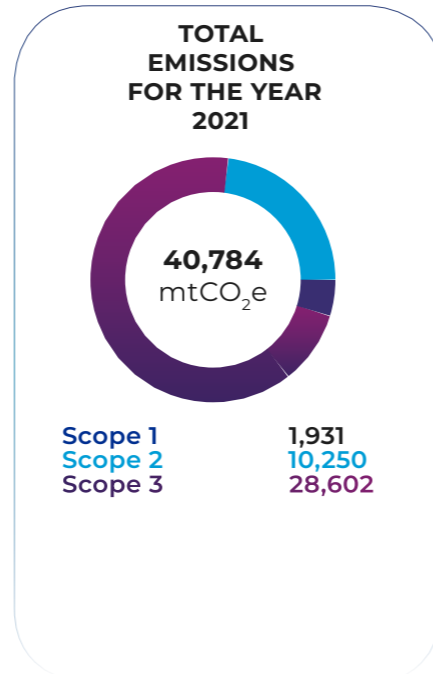
Emissions resulting from ink consumption fall under Scope 3 indirect emissions. Ink is used for printing purposes within our facility. In the year 2021, we consumed 456 cartridge of ink which resulted in 2.2 mtCO₂e.

PURCHASED GOODS

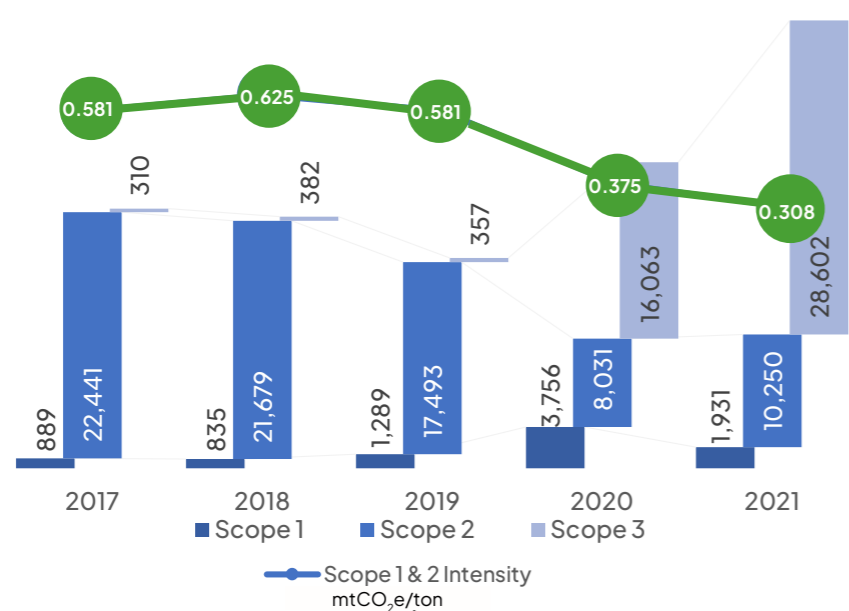
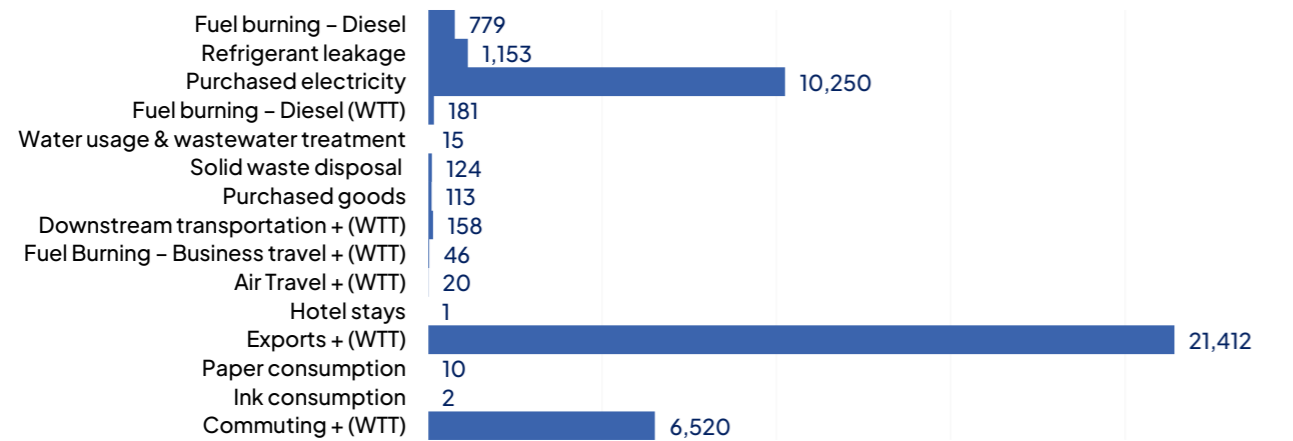
Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. EGYTECH's purchased goods totaled 36 ton in 2021, which resulted in 113 mtCO₂e.



TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	42,000
Number of employees	1,089
Scope 1 (mtCO ₂ e)	1,931
Scope 2 (mtCO ₂ e)	10,250
Scope 3 (mtCO ₂ e)	28,602
Scope 1,2 and 3 (mtCO ₂ e)	40,784
Production	39,611
Production unit	Ton
Scope 1 & 2: Carbon Intensity	0.308
mtCO ₂ e/ton	1.030



The majority of GHG emissions from Egytech factory is attributed to exporting activities with a percentage of 52.5%. This is a result of having a new export market to countries with longer transit time such as Latin America and USA.



EGYTECH'S EMISSIONS PER ACTIVITY Over the Years

SCOPE 1 - DIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning - Owned vehicles	129	150	271	520	-
Stationary Combustion	Fuel burning - Diesel	770	685	1,018	2,052	779
Fugitive Emissions	Refrigerant leakage	NA	NA	NA	1,184	1,153
Total Scope 1 (mtCO₂e)		898	835	1,289	3,756	1,931

SCOPE 2 - INDIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Purchased Energy	Purchased Electricity	22,441	21,679	17,493	8,031	10,250

SCOPE 1 - DIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	NA	NA	NA	143	-
	Fuel burning - Diesel (WTT)	NA	NA	NA	492	181
	Water usage & wastewater treatment	NA	NA	NA	7	15
Waste generated in operations	Solid waste disposal	16	10	10	63	124
	Purchased goods	NA	NA	NA	NA	113
Purchased goods and services	Paper consumption	71	11	81	40	10
	Ink consumption	-	-	-	-	2
	Packing materials	NA	NA	NA	NA	NA
Business Travel	Fuel Burning - Business travel + (WTT)	18	148	48	12	46
	Air Travel + (WTT)	NA	NA	NA	30	20
	Hotel Stays	NA	NA	NA	NA	1
Downstream transportation and distribution	Exports + (WTT)	NA	NA	NA	9,533	21,412
	Downstream transportation + (WTT)	NA	NA	NA	203	158
Employee Commuting	Commuting + (WTT)	206	213	217	5,540	6,520
Total Scope 3 (mtCO₂e)		310	382	357	16,063	28,602
Total Scope 1, 2 and 3 (mtCO₂e)		23,649	22,896	19,139	27,850	40,784

3

ISKRAEMECO - EGYPT FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 10,201 liters of diesel annually, which resulted in 28 mtCO₂e (Scope 1) and 6 mtCO₂e in WTT emissions (Scope 3).

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 direct emissions. Those vehicles are used mainly for the transportation of products.

The distance travelled by the factory's owned vehicles for the year 2021 was 731,000 km which resulted in 121 mtCO₂e and 29 mtCO₂e in WTT emissions (Scope 3).

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 indirect emissions. The emissions are associated with the transportation of the waste to recycling facilities. The waste generated for the year 2021 in ISKRAEMECO was about 126 tons of waste, which resulted in 3 mtCO₂e.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 (indirect emissions). Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance travelled by these trucks in the year 2021 was equal to 41,796 km, which resulted in 50 mtCO₂e including WTT emissions.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

The air flights in 2021 were equal to 130 international flights which covered 1,023,273 km. This resulted in 160 mtCO₂e including WTT emissions.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 4,099,284 kWh, which resulted in 1,783 mtCO₂e.

Electricity consumption is the second largest contributor to ISKRAEMECO's emissions at around 24% of total emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 67.4 kg of refrigerants (between R22 and A134) and 483,974.4 kg N in the factory which resulted in 330 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3, indirect emissions.

The factory's water consumption for the year 2021 was 45,050 m³, which resulted in 17 mtCO₂e in both water consumption and wastewater treatment emissions.

EXPORTS

The emissions resulting from marine and land shipping of our products were accounted for under Scope 3.

The products were exported to various cities all over the world by marine and land shipping. Marine ton-kilometers were equal to 16,038,960 ton.km. The total ton-kilometers were equal to 16,585,704 ton.km, which resulted in 440 mtCO₂e including WTT emissions.

INK CONSUMPTION

Emissions resulting from ink consumption fall under scope 3 (indirect emissions).

Ink is used for printing purposes within our facility. In the year 2021, we consumed 71 cartridge of ink which resulted in 0.34 mtCO₂e.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for under scope 3.

ISKRAEMECO's employees travelled 34,045,560 p.km in 2021, which resulted in 4,331 mtCO₂e including WTT emissions.

HOTEL STAYS

Hotel stays emissions fall under Scope 3 (indirect emissions).

ISKRAEMECO's hotel stays in 2021 was equal to 2,279 hotel nights. This resulted in 108 mtCO₂e.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 0.6 mtCO₂e from the use of 700 kg of paper.

PACKING MATERIAL

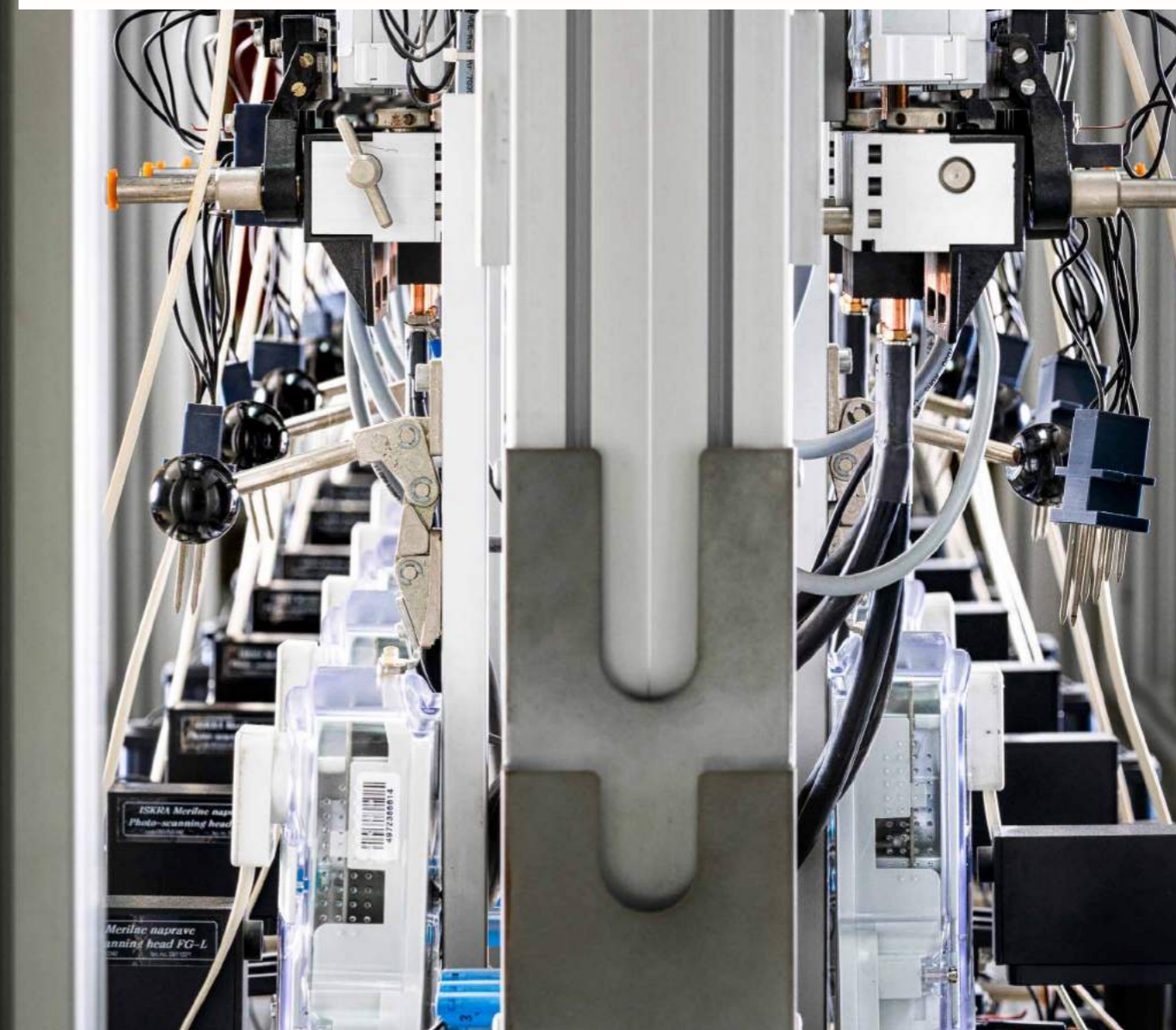
Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

ISKRAEMECO consumed 1,623 Ton of packing material in 2021, which resulted in 91 mtCO₂e.

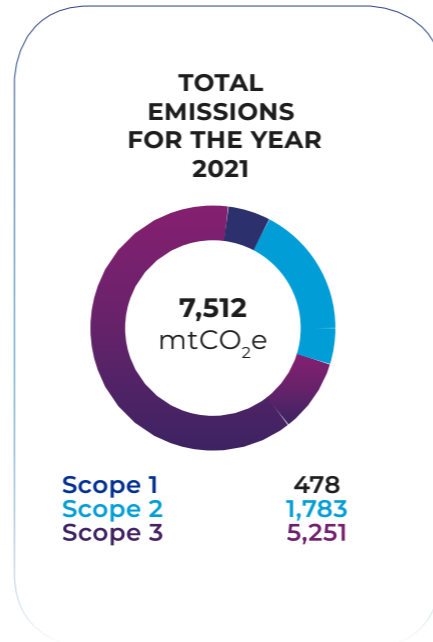
PURCHASED GOODS

For the factories the purchased goods consist of hygiene disposable items, such as gloves, head covers, and face masks. The resulting emissions fall under Scope 3.

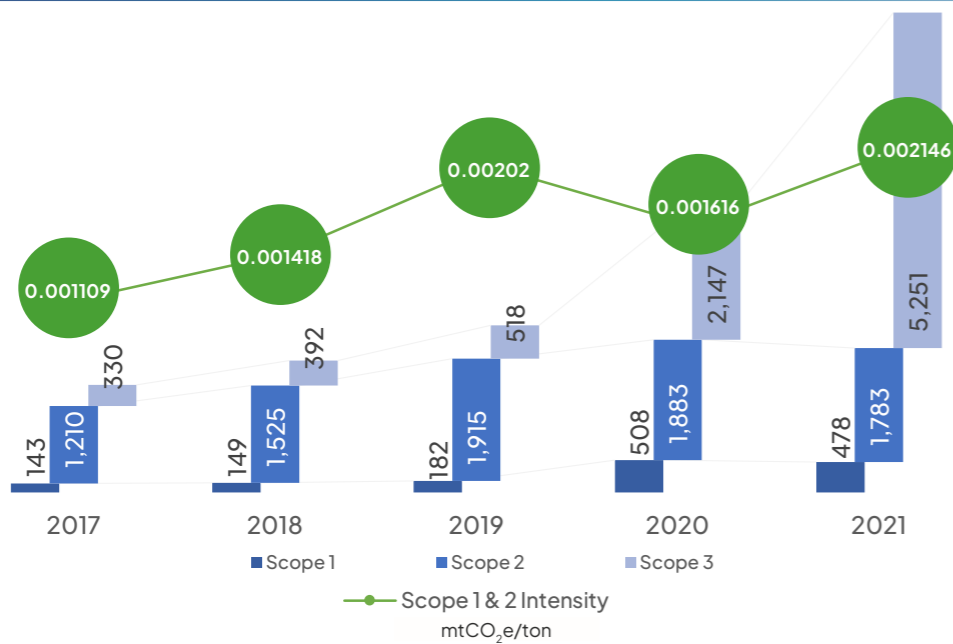
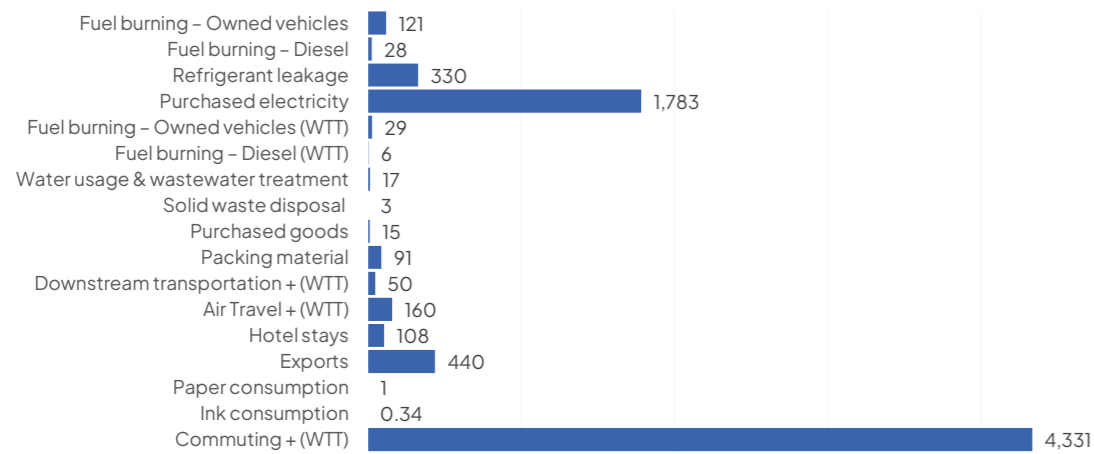
The factory has consumed about 36 tons of different consumables in the year 2021 which resulted in 15 mtCO₂e of indirect emissions.



TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	50,595.90
Number of employees	476
Scope 1 (mtCO ₂ e)	478
Scope 2 (mtCO ₂ e)	1,783
Scope 3 (mtCO ₂ e)	5,251
Scope 1,2 and 3 (mtCO ₂ e)	7,512
Production	1,053,797
Production unit	Electric Meters
Scope 1 & 2: Carbon Intensity	0.002
mtCO ₂ e/ electric meter	0.007



Employee commuting is the largest contributor to Iskraemeco – Egypt GHG emissions with a percentage of 57.6% followed by purchased electricity with a percentage of 24%.



IKSRAEMECO's EMISSIONS PER ACTIVITY Over the Years

SCOPE 1 – DIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning – Owned vehicles	129	132	162	161	121
Stationary Combustion	Fuel burning – Diesel	14	16	20	25	28
Fugitive Emissions	Refrigerant leakage	NA	NA	NA	322	330
Total Scope 1 (mtCO₂e)		143	149	182	508	478

SCOPE 2 – INDIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Purchased Energy	Purchased Electricity	1,210	1,525	1,915	1,883	1,783

SCOPE 1 – DIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	NA	NA	NA	35	29
	Fuel burning – Diesel (WTT)	NA	NA	NA	6	6
	Water usage & wastewater treatment	NA	NA	NA	1	17
Waste generated in operations	Solid waste disposal	2	1	2	3	3
	Purchased goods	NA	NA	NA	35	15
Purchased goods and services	Paper consumption	2	3	3	1	1
	Ink consumption	-	-	-	-	0.34
	Packing materials	NA	NA	NA	NA	91
Business Travel	Fuel Burning – Business travel + (WTT)	188	249	362	-	-
	Air Travel + (WTT)	NA	NA	NA	70	160
	Hotel Stays	NA	NA	NA	NA	108
Downstream transportation and distribution	Exports + (WTT)	NA	NA	NA	499	440
	Downstream transportation + (WTT)	NA	NA	NA	45	50
Employee Commuting	Commuting + (WTT)	140	138	151	1,452	4,331
Total Scope 3 (mtCO₂e)		330	392	518	2,147	5,251
Total Scope 1, 2 and 3 (mtCO₂e)		1,683	2,066	2,615	4,538	7,512

4 TRANSFORMERS FACTORY GHG EMISSIONS



DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 375,000 liters of diesel in the year 2021, which resulted in 1,015 mtCO₂e (Scope 1) and 236 mtCO₂e in WTT emissions (Scope 3).

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 10,319,000 kWh, which resulted in 4,488 mtCO₂e.

Electricity consumption is the second largest contributor to TRANSFORMERS' emissions at around 26% of total emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The distance travelled by the factory's owned vehicles for the year 2021 was 226,420 km, while fuel consumed in owned trucks was 1,080 liters which together resulted in 220 mtCO₂e and 63 mtCO₂e in WTT emissions (Scope 3).

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 372 kg of R-22 refrigerant in the factory which resulted in 673 mtCO₂e.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 indirect emissions. The emissions are associated with the transportation of the waste to recycling facilities. The waste generated for the year 2021 in TRANSFORMERS was about 10,043 tons of waste that was sent to recycling facilities, which resulted in 214 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 48,400 m³, which resulted in 18 mtCO₂e in both water consumption and in wastewater treatment.

PURCHASED GOODS

For the factories the purchased goods consist of hygiene disposable items, such as gloves, head covers, face masks in addition to office supplies such as ink, pens, block notes, etc. The resulting emissions fall under Scope 3.

The factory has consumed about 1 tons of different consumables in the year 2021 which resulted in 3 mtCO₂e of indirect emissions.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3. TRANSFORMERS' packing material totaled 19 tons in 2021, which resulted in 60 mtCO₂e.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 indirect emissions.

Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance travelled by these trucks in the year 2021 was equal to 14,447 km which resulted in 17 mtCO₂e including WTT emissions.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under scope 3. WTT emissions are also accounted for under Scope 3.

TRANSFORMERS's business trips totaled 25,527 p.km in 2021, which resulted in 36 mtCO₂e including WTT emissions.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

The air flights in 2021 were equal to 17 international flights which covered 95,810 km. This resulted in 15 mtCO₂e including WTT emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

TRANSFORMERS's employees travelled 71,139,460 p.km in 2021, which resulted in 9,050 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 7 mtCO₂e from the use of 7.2 tons of paper.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 (indirect emissions).

Ink is used for printing purposes within our facility. In 2021, we consumed 93 cartridge of ink which resulted in 0.45 mtCO₂e.

EXPORTS

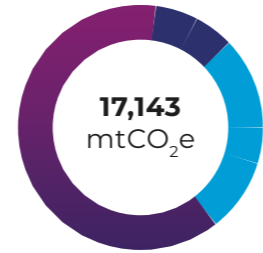
The emissions resulting from marine and land shipping of our products were accounted for under Scope 3.

The products were exported to 10 countries by marine and land shipping. Marine ton-kilometers were 27,489,221 ton.km. The total ton-kilometers including land shipping were equal to 29,638,757 ton.km which resulted in 1,028 mtCO₂e.

TOTAL EMISSIONS FOR THE YEAR 2021

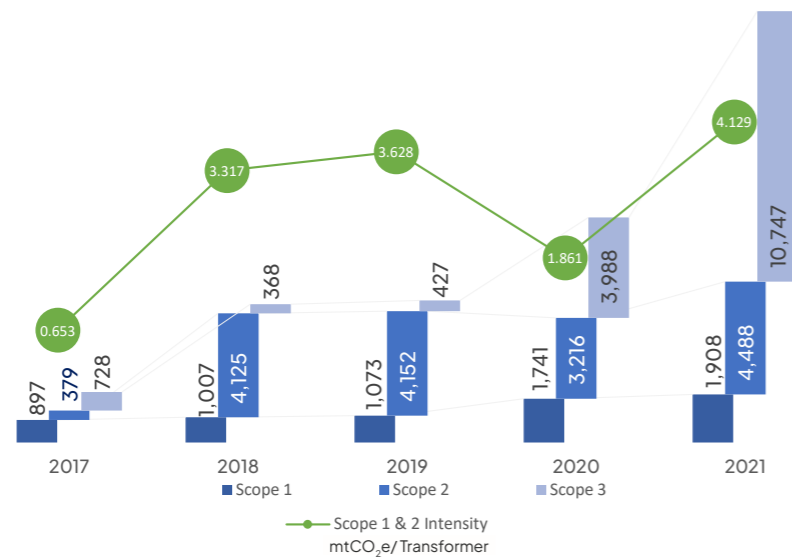
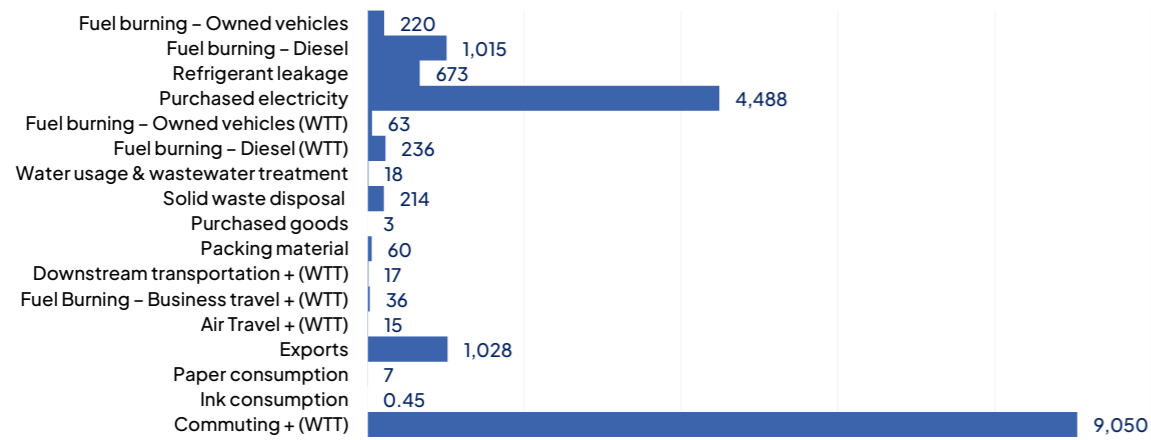
Total area (m ²)	138,188
Number of employees	1,035
Scope 1 (mtCO ₂ e)	1,908
Scope 2 (mtCO ₂ e)	4,488
Scope 3 (mtCO ₂ e)	10,747
Scope 1,2 and 3 (mtCO ₂ e)	17,143
Production	1,549
Production unit	Transformers
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ transformer	4.129
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ transformer	11.067

TOTAL EMISSIONS FOR THE YEAR 2021



Scope 1 1,908
Scope 2 4,488
Scope 3 10,747

Employee commuting is the largest contributor to Transformers GHG emissions with a percentage of 52.8%, followed by purchased electricity with a percentage of 26%.



TRANSFORMERS'S EMISSIONS PER ACTIVITY Over the Years

SCOPE 1 - DIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning - Owned vehicles	96	72	72	42	220
Stationary Combustion	Fuel burning - Diesel	801	935	1,001	891	1,015
Fugitive Emissions	Refrigerant leakage	NA	NA	NA	809	673
Total Scope 1 (mtCO₂e)		897	1,007	1,073	1,741	1,908

SCOPE 2 - INDIRECT EMISSIONS					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Purchased Energy	Purchased Electricity	3,784	4,125	4,152	3,216	4,488

Scope 3 - Indirect Emissions					mtCO ₂ e	
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	NA	NA	NA	10.02	63
	Fuel burning - Diesel (WTT)	NA	NA	NA	214	236
	Water usage & wastewater treatment	NA	NA	NA	6.45	18
Waste generated in operations	Solid waste disposal	12	23	22	134	214
	Purchased goods	NA	NA	NA	21	3
Purchased goods and services	Paper consumption	3	7	9	4	7
	Ink consumption	-	-	-	-	0.45
	Packing materials	-	-	-	-	60
Business Travel	Fuel Burning - Business travel + (WTT)	325	162	226	42	36
	Air Travel + (WTT)	NA	NA	NA	61	15
Downstream transportation and distribution	Exports + (WTT)	NA	NA	NA	504	1,028
	Downstream transportation + (WTT)	NA	NA	NA	82	17
Employee Commuting	Commuting + (WTT)	388	175	170	2,908	9,050
Total Scope 3 (mtCO₂e)		728	368	427	3,988	10,747
Total Scope 1, 2 and 3 (mtCO₂e)		5,409	5,500	5,652	8,945	17,143

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EGYPLAST FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands. The factory consumed 221,738 liters of diesel annually, which resulted in 600 mtCO₂e (Scope 1) and 139 mtCO₂e in WTT emissions (Scope 3).

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions). The electricity consumption for the year 2021 31,264,910 kWh, which resulted in 13,600 mtCO₂e. Electricity consumption is the largest contributor to EGYPLAST's emissions at around 92% of total emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used for the transportation of products and employees commuting. The fuel consumed by the factory's owned vehicles for the year 2021 was 138,898 liters which resulted in 332 mtCO₂e and 84 mtCO₂e in WTT emissions (Scope 3).

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions). The factory's water consumption for the year 2021 was 37,466 m³, which resulted in 14 mtCO₂e in both water consumption and wastewater treatment emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities. The waste generated for the year 2021 in EGYPLAST was about 452 tons of waste that was sent to recycling facilities, which resulted in 8 mtCO₂e.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 (indirect emissions). Ink is used for printing purposes within our facility. In 2021, we consumed 246 cartridge of ink which resulted in 1.2 mtCO₂e.

HOTEL STAYS

Hotel stays emissions fall under Scope 3 (indirect emissions). EGYPLAST hotel stays in 2021 was equal to 50 hotel nights. This resulted in 4 mtCO₂e.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. EGYPLAST's purchased goods totaled 1 ton in 2021, which resulted in 4 mtCO₂e.

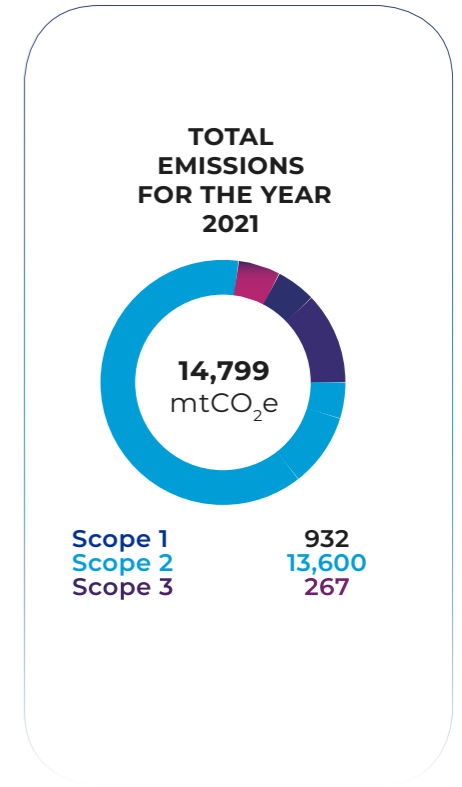
AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions). The air flights in 2021 were equal to 9 international flights which covered 41,886 km. This resulted in 7 mtCO₂e including WTT emissions.

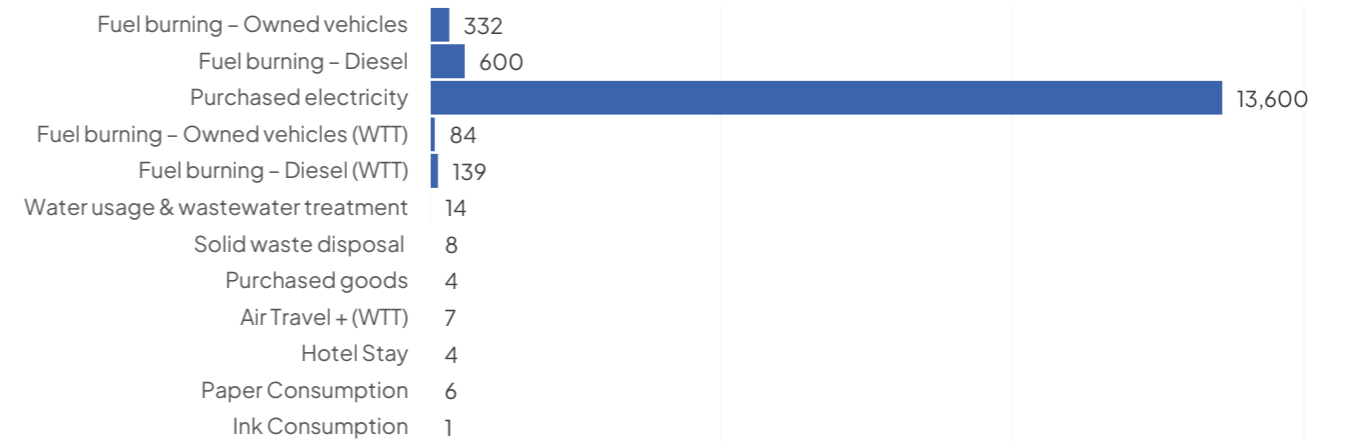
PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions). The emissions from paper consumption totaled 6 mtCO₂e from the use of 620 kg of paper.

TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	60,000
Number of employees	800
Scope 1 (mtCO ₂ e)	932
Scope 2 (mtCO ₂ e)	13,600
Scope 3 (mtCO ₂ e)	264
Scope 1,2 and 3 (mtCO ₂ e)	14,796
Production	116,251
Production unit	Ton
Scope 1 & 2: Carbon Intensity (mtCO ₂ e/ ton)	0.125
Scope 1, 2 & 3: Carbon Intensity (mtCO ₂ e/ ton)	0.127



Most of EGYPLAST GHG emissions results from purchased electricity with a percentage of 92% from total GHG emissions.



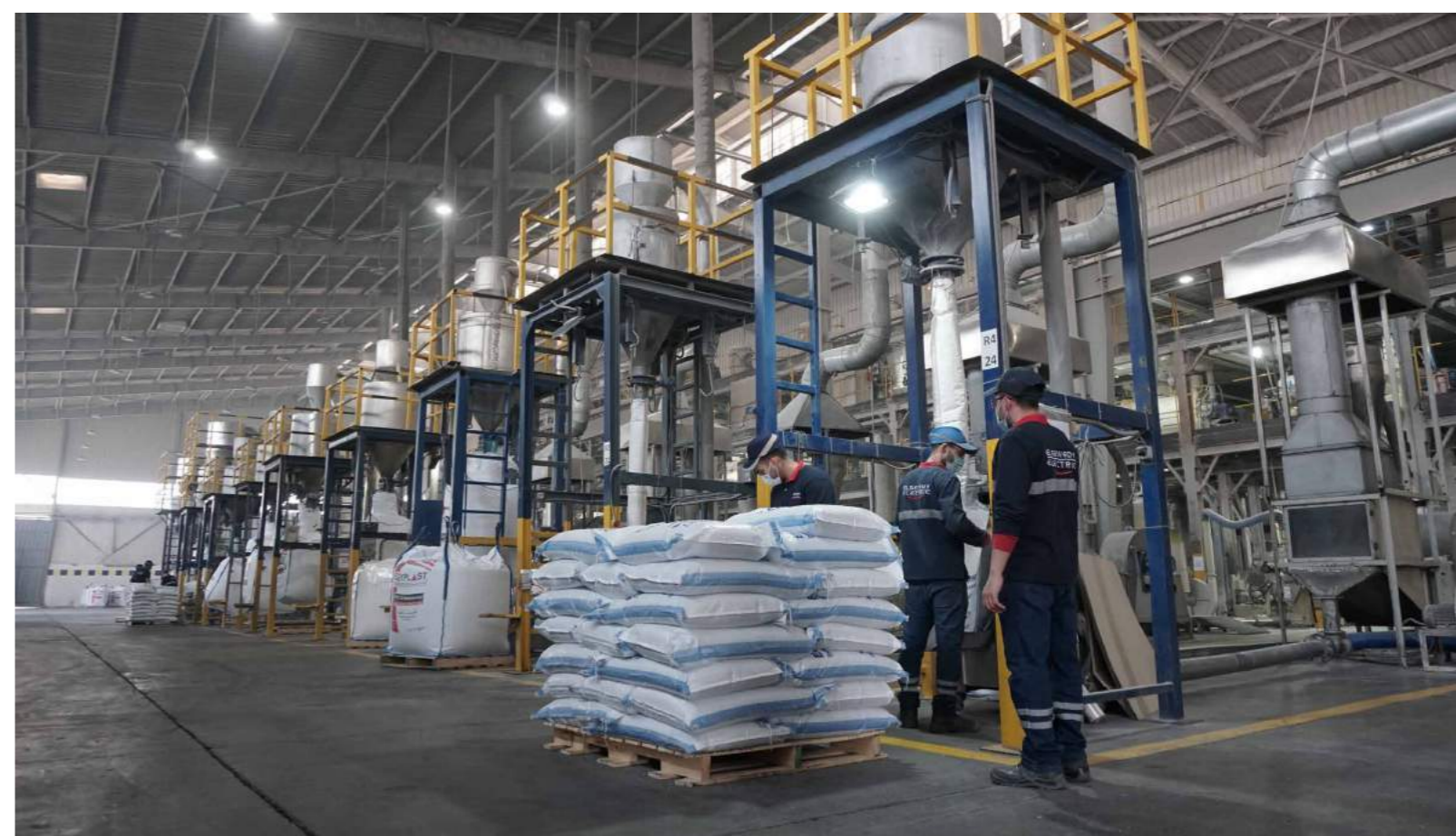
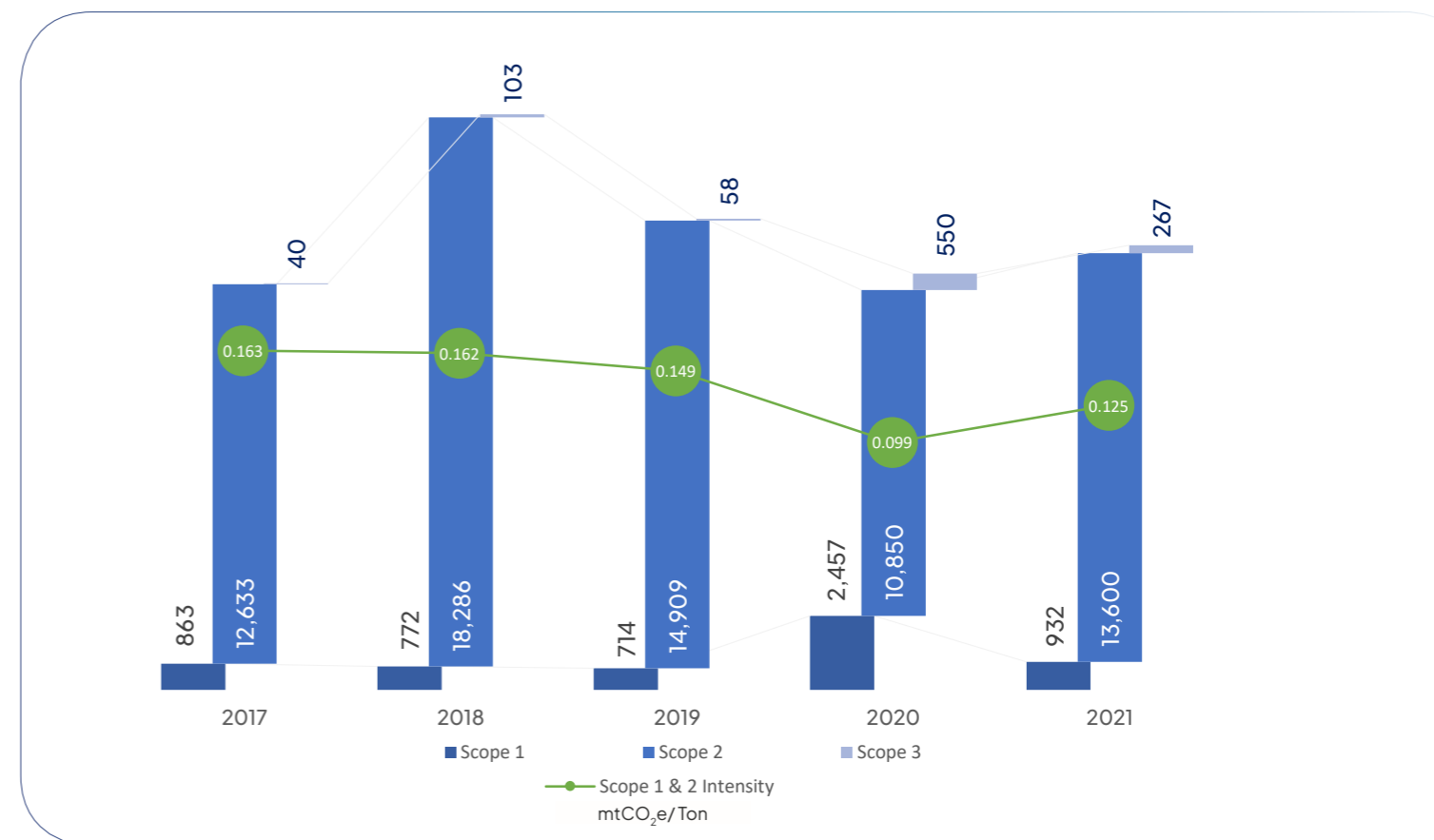
EGYPLAST'S EMISSIONS PER ACTIVITY OVER THE YEARS

SCOPE 1 – DIRECT EMISSIONS						mtCO ₂ e
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning – Owned vehicles	654	533	500	543	332
Stationary Combustion	Fuel burning – Diesel	210	239	214	597	600
Fugitive Emissions	Refrigerant leakage	NA	NA	NA	1,325	NA
Total Scope 1 (mtCO₂e)		863	772	714	2,457	932

SCOPE 2 – INDIRECT EMISSIONS						mtCO ₂ e
ACTIVITY		2017	2018	2019	2020	2021
Purchased Energy	Purchased Electricity	12,633	18,286	14,909	10,850	13,600

SCOPE 3 – INDIRECT EMISSIONS						mtCO ₂ e
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	-	-	-	131	84
	Fuel burning – Diesel (WTT)	-	-	-	143	139
	Water usage & wastewater treatment	-	-	-	20	14
Waste generated in operations	Solid waste disposal	23	26	12	6	8
Purchased goods and services	Purchased goods	-	-	-	-	4
	Paper consumption	7	7	5	3	6
	Ink consumption	-	-	-	-	1
Business Travel	Fuel Burning – Business travel + (WTT)	10	70	41	2	-
	Air Travel + (WTT)	NA	NA	NA	13	7
	Hotel Stays	-	-	-	-	4
Downstream transportation and distribution	Downstream transportation + (WTT)	-	-	-	159	-
Employee Commuting	Commuting + (WTT)	①	①	①	①	①
Total Scope 3 (mtCO₂e)		40	103	58	550	267
Total Scope 1, 2 and 3 (mtCO₂e)		13,536	19,161	15,681	13,857	14,799

① Emissions from employees commuting are included in the owned vehicles emissions as the employees used the company's owned vehicle for commuting purposes.



6 USW FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands. The factory consumed 50,251 liters of diesel in 2021, which resulted in 136 mtCO₂e (under Scope 1) and 32 mtCO₂e in WTT emissions (Scope 3).

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions). The electricity consumption for the year 2021 was 21,423,326 kWh, which resulted in 9,319 mtCO₂e. Electricity consumption is the largest contributor to USW's emissions at around 56% of total emissions.

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1. To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under scope 3 (indirect emissions) were included in the organization's emissions. USW factory consumed 2,158,163 m³ of natural gas in 2021, which resulted in 4,391 mtCO₂e and 747 mtCO₂e in WTT emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1. We have consumed 109 kg of refrigerants (between R22, R-12 and R-404) in the factory which resulted in 378 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions). The factory's water consumption for the year 2021 was 165,375 m³, which resulted in 61 mtCO₂e in water consumption and wastewater treatment emissions.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for. USW's business trips totaled 10,910 p.km in 2021, which resulted in 2 mtCO₂e including WTT emissions.

COMMUTING

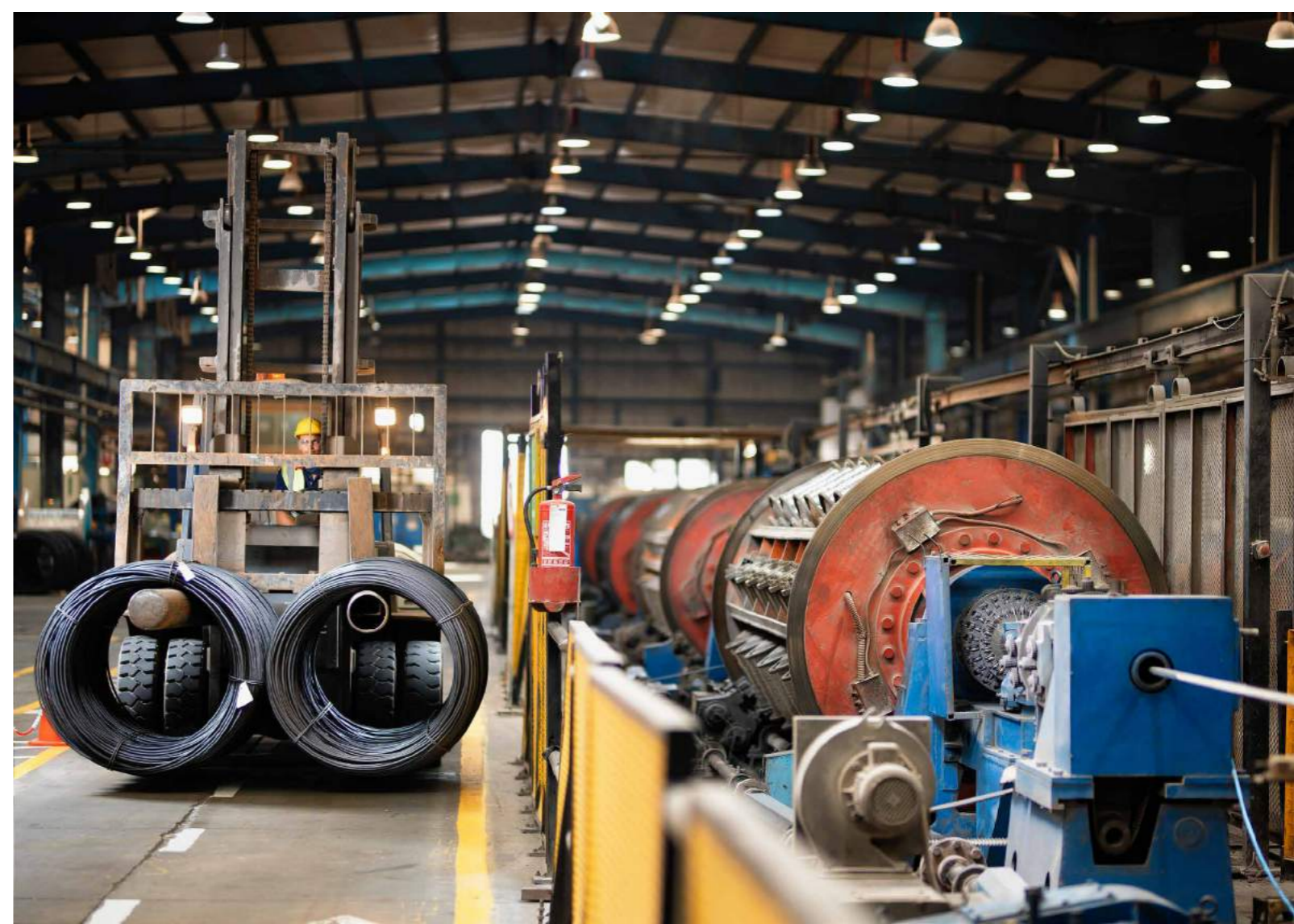
Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for under scope 3. USW's employees travelled 7,427,400 p.km in 2021, which resulted in 945 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

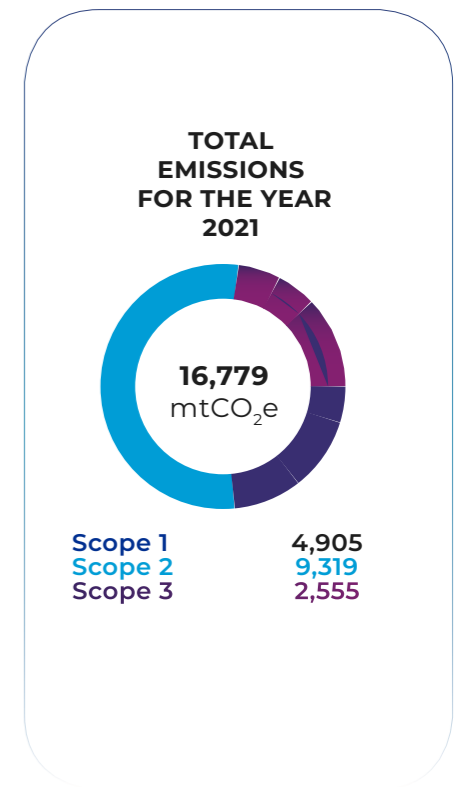
Paper consumption emissions fall under scope 3 (indirect emissions). The emissions from paper consumption totaled 1.4 mtCO₂e from the use of 1,500 kg of paper.

SOLID WASTE

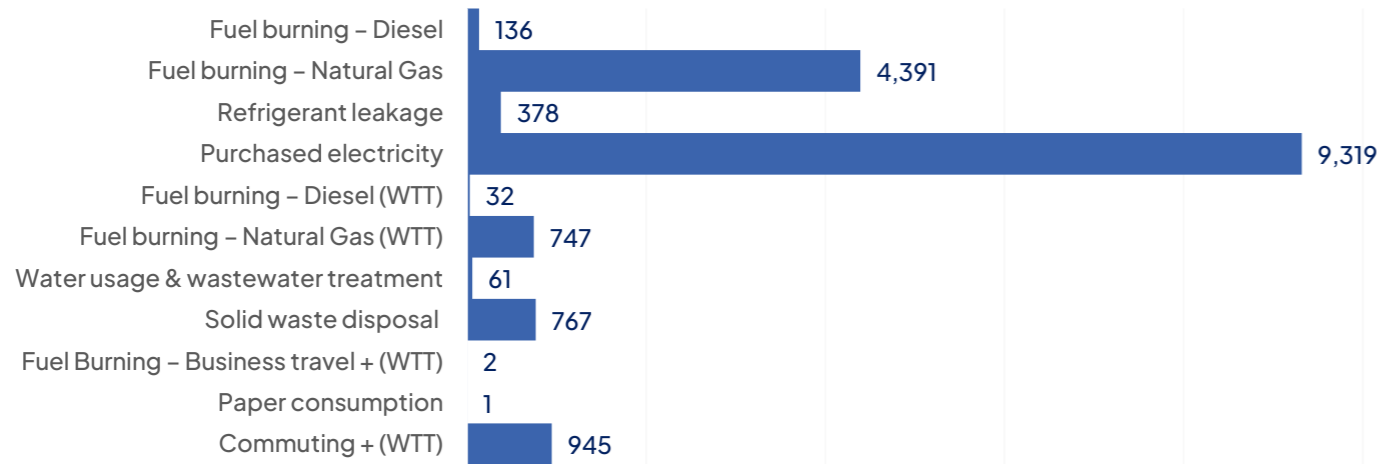
Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities. The waste generated for the year 2021 in USW was about 36,011 tons of waste which resulted in 767 mtCO₂e.



TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	35,000
Number of employees	324
Scope 1 (mtCO ₂ e)	4,905
Scope 2 (mtCO ₂ e)	9,319
Scope 3 (mtCO ₂ e)	2,555
Scope 1,2 and 3 (mtCO ₂ e)	16,779
Production	63,600
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.224
Scope 1, 2 & 3: Carbon Intensity mtCO ₂ e/ ton	0.264



The largest contributor to USW GHG emissions is purchased electricity with a percentage of 56%, followed by natural gas burning with a percentage of 26%.

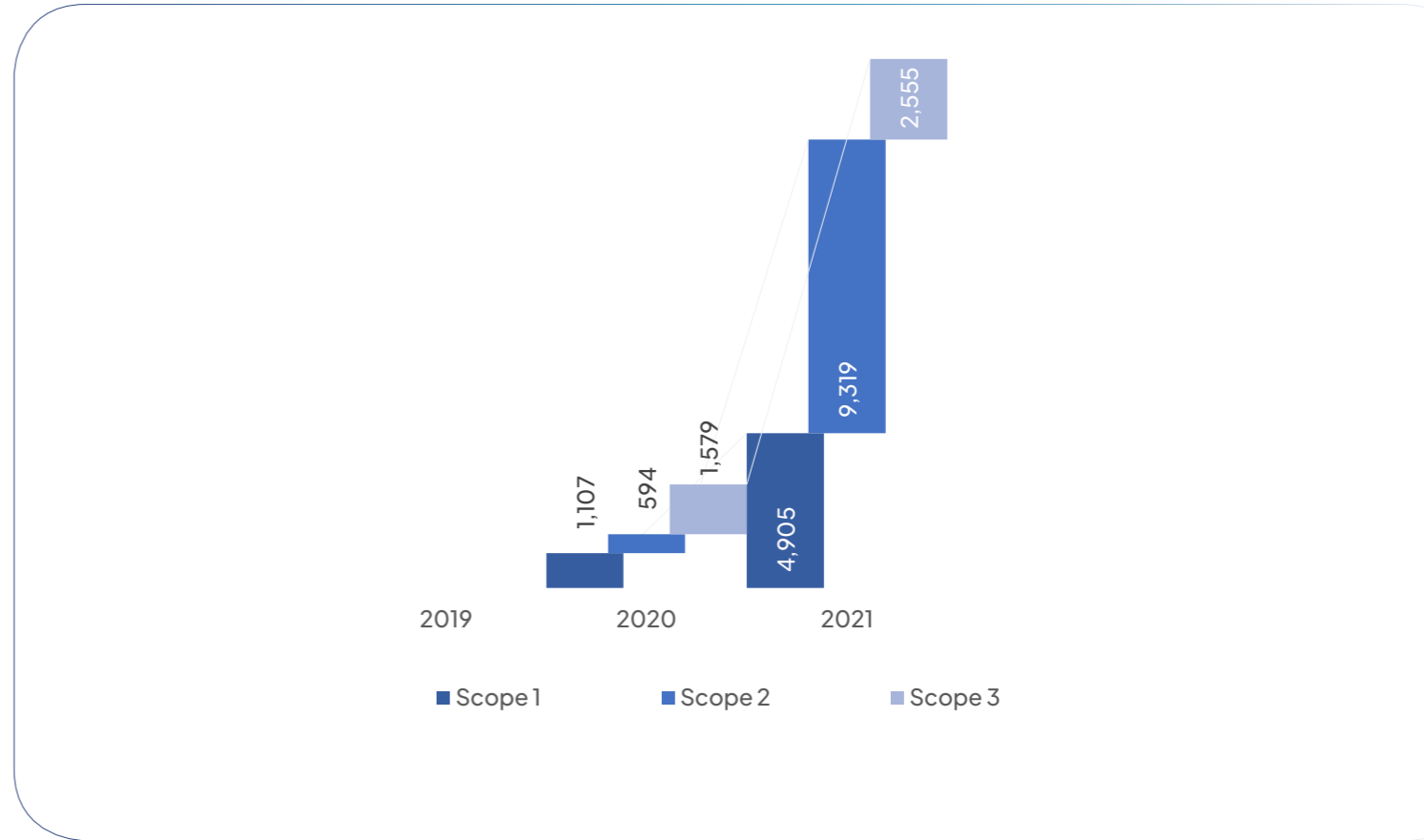


USW'S EMISSIONS PER ACTIVITY OVER THE YEARS

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e	
ACTIVITY		2020	2021
Mobile Combustion	Fuel burning - Diesel	-	136
Stationary Combustion	Fuel burning - Natural Gas	361	4,391
Fugitive Emissions	Refrigerant leakage	746	378
Total Scope 1 (mtCO₂e)		1,107	4,905

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e	
ACTIVITY		2020	2021
Purchased Energy	Purchased Electricity	594	9,319

Scope 3 - Indirect Emissions		mtCO ₂ e	
ACTIVITY		2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Diesel (WTT)	-	32
	Fuel burning - Natural Gas (WTT)	47	747
	Water usage & wastewater treatment	31	61
Waste generated in operations	Solid waste disposal	40	767
	Paper consumption	1	1.42
Purchased goods and services	Ink consumption	-	-
	Packing materials	-	-
Business Travel	Fuel Burning - Business travel + (WTT)	1	2.43
Downstream transportation and distribution	Exports + (WTT)	814	-
Employee Commuting	Commuting + (WTT)	646	945
Total Scope 3 (mtCO₂e)		3,280	2,555
Total Scope 1, 2 and 3 (mtCO₂e)		4,981	16,779



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ISKRAEMECO SLOVENIA FACTORY GHG EMISSIONS

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 3,980,743 kWh, which resulted in 867 mtCO₂e.

Electricity consumption is the largest contributor to ISKRAEMECO SLOVENIA's emissions at around 49% of total emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 7,562 Liter which resulted in 20 mtCO₂e and 5 mtCO₂e in WTT emissions (Scope 3).



NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

The factory consumed 297,933 m³ of natural gas annually. Which resulted in 606 mtCO₂e and 103 mtCO₂e in WTT emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in ISKRAEMECO SLOVENIA was about 223 tons of waste, which resulted in 8 mtCO₂e.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

ISKRAEMECO SLOVENIA's employees commuting resulted in 376,229 p.km in 2021, which resulted in 48 mtCO₂e including WTT emissions.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

ISKRAEMECO SLOVENIA consumed 0.4 tons of packing material in 2021, which resulted in 0.3 mtCO₂e.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

The distance traveled by air flights in 2021 were equal to 619,800 km. This resulted in 48 mtCO₂e including WTT emissions.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 (indirect emissions).

Ink is used for printing purposes within our facility. In 2021, we consumed 70 cartridge of ink which resulted in 0.34 mtCO₂e.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 5 mtCO₂e from the use of 4,880 kgs of paper.

WATER & WASTEWATER TREATMENT

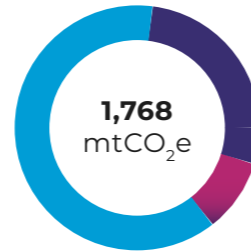
Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 156,874 m³, which resulted in 58 mtCO₂e in both water consumption and wastewater treatment emissions.

TOTAL EMISSIONS FOR THE YEAR 2021

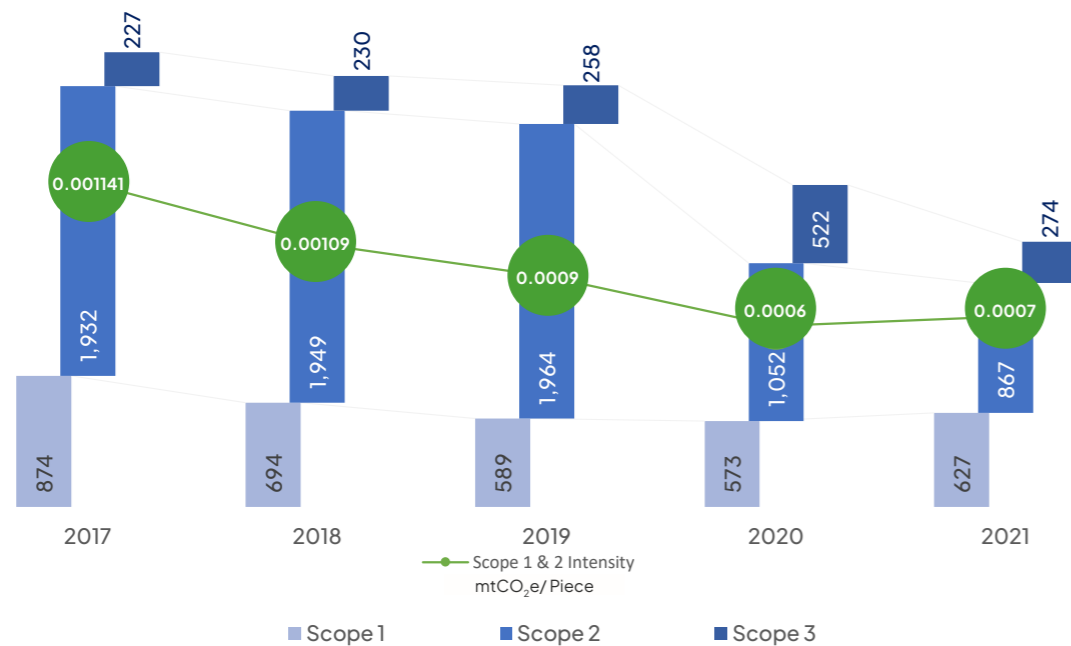
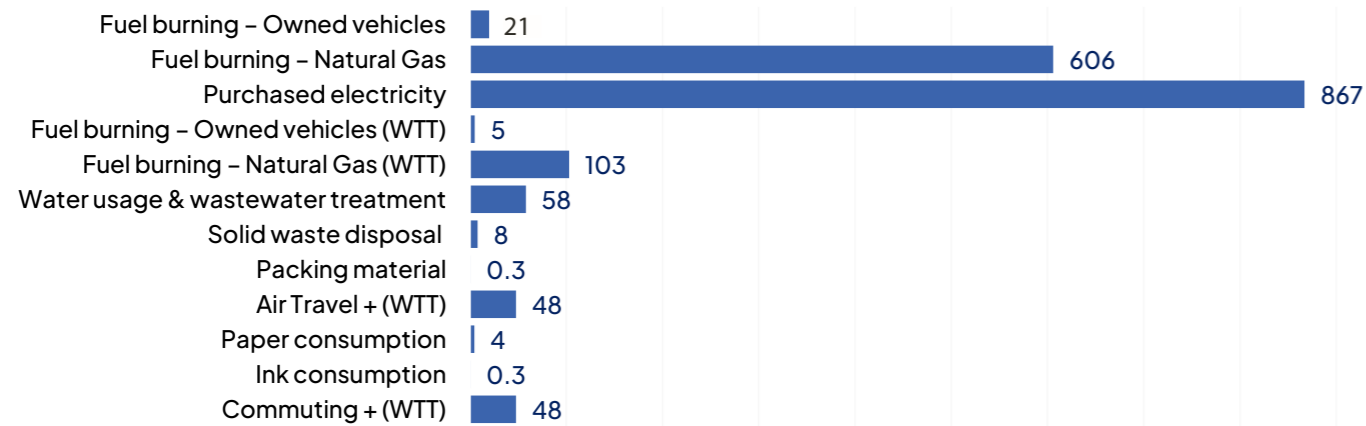
Total area (m ²)	34,670
Number of employees	1,462
Scope 1 (mtCO ₂ e)	627
Scope 2 (mtCO ₂ e)	867
Scope 3 (mtCO ₂ e)	274
Scope 1,2 and 3 (mtCO ₂ e)	1,768
Production	2,080,665
Production unit	Pieces
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ piece	0.00072
Scope 1, 2 & 3: Carbon Intensity mtCO ₂ e/ piece	0.00085

TOTAL EMISSIONS FOR THE YEAR 2021



Scope 1: 627
Scope 2: 867
Scope 3: 274

Purchased electricity is the major contributor to Iskraemeco Slovenia GHG emissions with a percentage of 49%, followed by natural gas burning with a percentage of 34%.



ISKRAEMECO SLOVENIA'S EMISSIONS PER ACTIVITY OVER THE YEARS

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e				
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning - Owned vehicles	40	49	40	18	21
	Fuel burning - Diesel	-	-	-	18	-
Stationary Combustion	Fuel burning - Natural Gas	834	645	549	536	606
	Refrigerant leakage	NA	NA	NA	0	0
Total Scope 1 (mtCO₂e)		874	694	589	573	627

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e				
ACTIVITY		2017	2018	2019	2020	2021
Purchased Energy	Purchased electricity	1,932	1,949	1,964	1,052	867

SCOPE 3 - INDIRECT EMISSIONS		mtCO ₂ e				
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	-	-	-	4	5
	Fuel burning - Diesel (WTT)	-	-	-	4	-
	Fuel burning - Natural Gas (WTT)	-	-	-	70	103
	Water usage & wastewater treatment	-	-	-	115	58
Waste generated in operations	Solid waste disposal	10	11	17	11	8
	Purchased goods	-	-	-	264	-
Purchased goods and services	Paper consumption	9	9	11	5	4
	Ink consumption	-	-	-	-	0.3
	Packing materials	-	-	-	-	0.3
Business Travel	Fuel Burning - Business travel + (WTT)	-	-	-	-	-
	Air Travel + (WTT)	-	-	-	49	48
	Hotel Stays	-	-	-	-	-
Downstream transportation and distribution	Exports + (WTT)	-	-	-	-	-
	Downstream transportation + (WTT)	-	-	-	-	-
Employee Commuting	Commuting + (WTT)	-	-	-	-	48
Total Scope 3 (mtCO₂e)		227	230	258	522	274
Total Scope 1, 2 and 3 (mtCO₂e)		3,033	2,873	2,811	2,147	1,768

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UNITED METALS FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands. The factory consumed 120 liters of diesel annually. Which resulted in 0.3 mtCO₂e (Scope 1) and 0.08 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1. To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions. United Metals factory consumed 5,667,280 m³ of natural gas in 2021, which resulted in 11,531 mtCO₂e and 1,960 mtCO₂e in WTT emissions. United Metals factory consumed 5,667,280 m³ of natural gas in 2021, which resulted in 11,531 mtCO₂e and 1,960 mtCO₂e in WTT emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 direct emissions. Those vehicles are used mainly for the transportation of products. The fuel consumed by the factory's owned vehicles for the year 2021 was 17,600 liters which resulted in 48 mtCO₂e and 11 mtCO₂e in WTT emissions (Scope 3).

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 (indirect emissions). Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets. Fuel consumed by these trucks in the year 2021 was equal to 38,400 liters which resulted in 128 mtCO₂e WTT emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1. We have consumed 14 kg of R-410 refrigerants and 526 kg N in the factory which resulted in 29 mtCO₂e.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions). The electricity consumption for the year 2021 was 9,904,500 kWh, which resulted in 4,308 mtCO₂e. Electricity consumption is the second largest contributor to United Metals' emissions at around 22% of total emissions.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions). The factory's water consumption for the year 2021 was 129,483 m³, which resulted in 47 mtCO₂e in both water consumption and wastewater treatment emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 indirect emissions. The emissions are associated with the transportation of the waste to recycling facilities. The waste generated for the year 2021 in United Metals was about 2,682 tons of waste that was sent to recycling facilities, which resulted in 57 mtCO₂e.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for. United Metals' business trips totaled 349,440 p.km in 2021, which resulted in 49 mtCO₂e WTT emissions.

HOTEL STAYS

Hotel stays emissions fall under Scope 3 (indirect emissions). United Metals' hotel stays in 2021 was equal to 3 hotel nights. This resulted in 0.14 mtCO₂e.

AIR TRAVEL

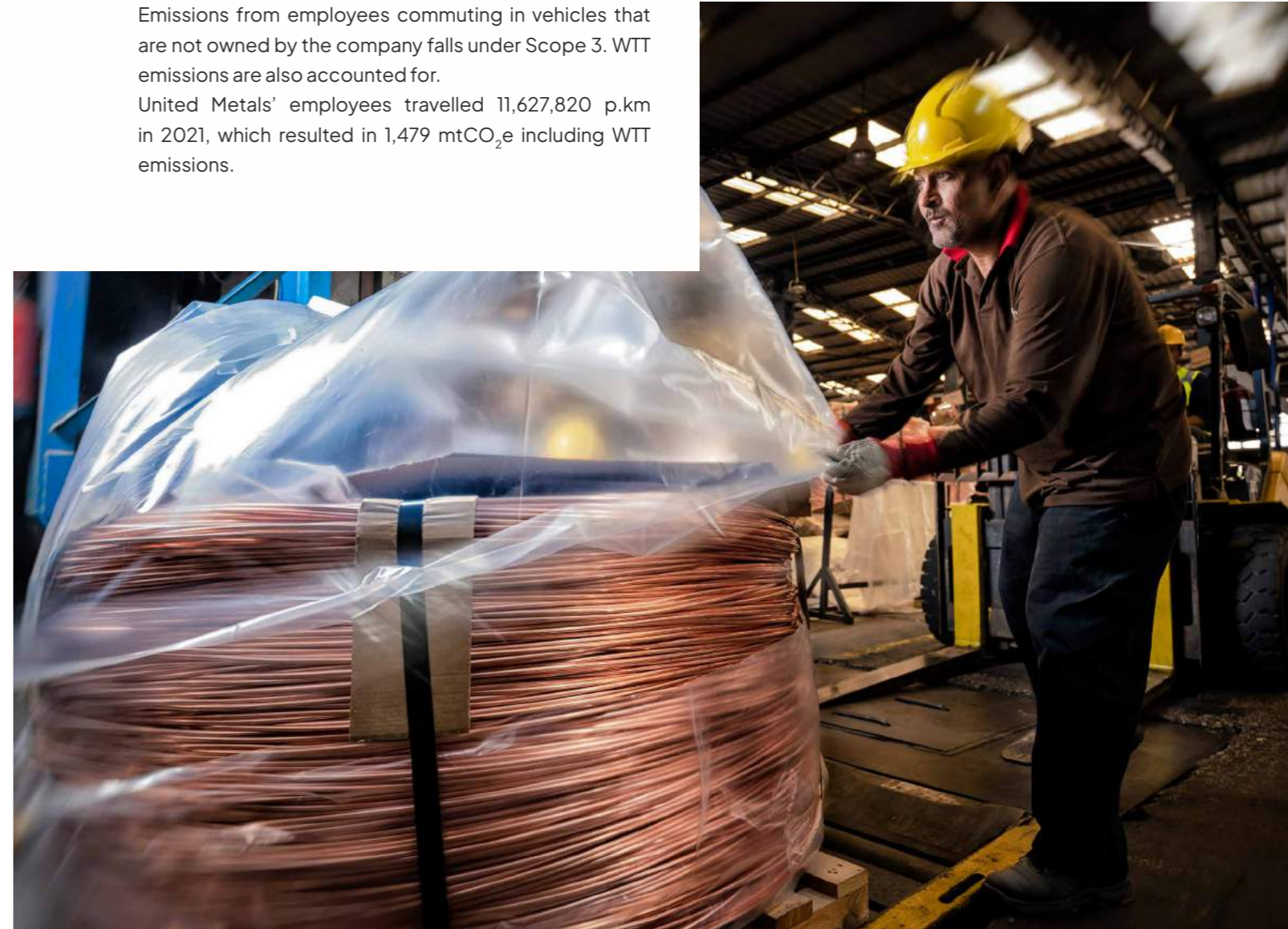
Aerial transportation emissions fall under Scope 3 (indirect emissions). The air flights in 2021 covered 7,192 km. This resulted in 1.12 mtCO₂e including WTT emissions.

COMMUTING

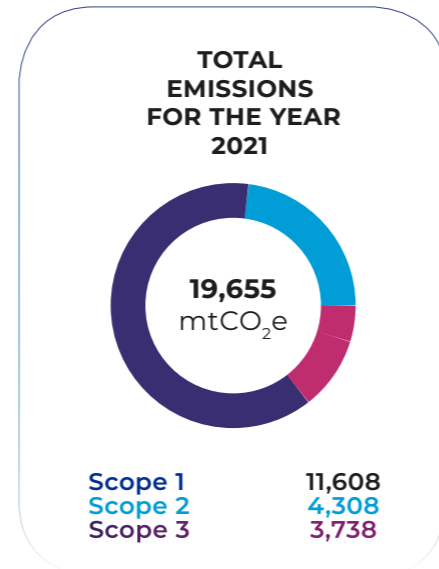
Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for. United Metals' employees travelled 11,627,820 p.km in 2021, which resulted in 1,479 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

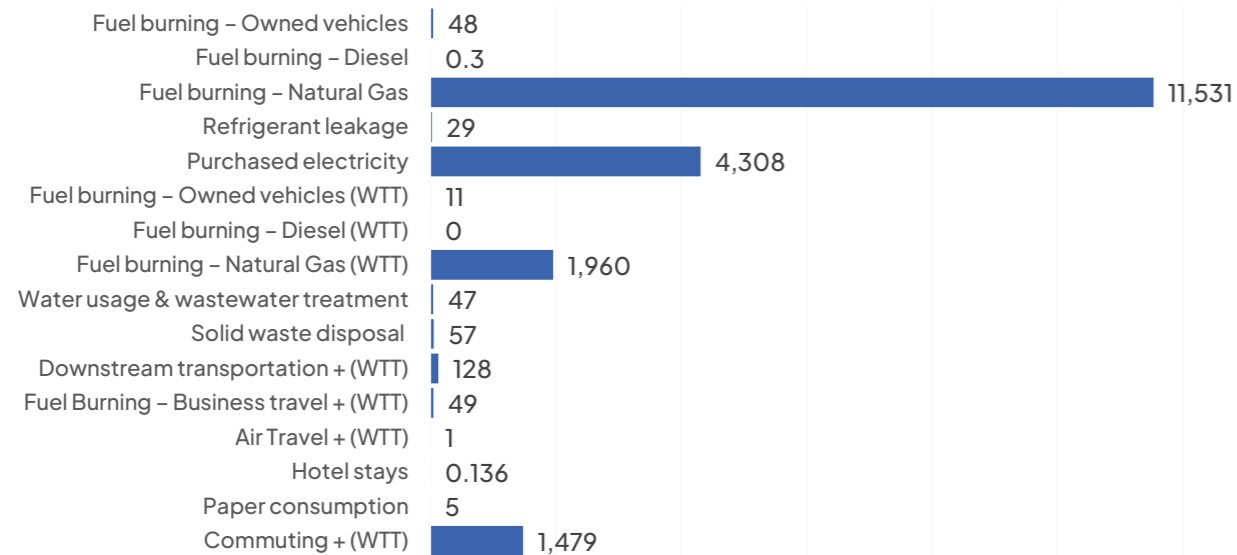
Paper consumption emissions fall under Scope 3 (indirect emissions). The emissions from paper consumption totaled 5 mtCO₂e from the use of 5 tons of paper.



TOTAL EMISSIONS FOR THE YEAR 2021	
Scope 1 (mtCO ₂ e)	11,608
Scope 2 (mtCO ₂ e)	4,309
Scope 3 (mtCO ₂ e)	3,738
Scope 1,2 and 3 (mtCO ₂ e)	19,655
Production	123,953
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.128
Scope 1, 2 & 3: Carbon Intensity/Product	0.159



The largest contributor to United Metals GHG emissions is natural gas burning with a percentage of 58.7%, followed by purchased electricity with a percentage of 22%.



UNITED METALS' EMISSIONS PER ACTIVITY

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning - Owned vehicles	48
Stationary Combustion	Fuel burning - Diesel	0.3
	Fuel burning - Natural Gas	11,531
Fugitive Emissions	Refrigerant leakage	29
Total Scope 1 (mtCO₂e)		11,608

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased Energy	Purchased electricity	4,308

SCOPE 3 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related actives (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	11
	Fuel burning - Diesel (WTT)	0.075
	Fuel burning - Natural Gas (WTT)	1,960
	Water usage & wastewater treatment	47
Waste generated in operations	Solid waste disposal	57
Purchased goods and services	Paper consumption	5
	Fuel Burning - Business travel + (WTT)	49
Business Travel	Air Travel + (WTT)	1
	Hotel Stays	0.137
Downstream transportation and distribution	Downstream transportation + (WTT)	128
Employee Commuting	Commuting + (WTT)	1,479
Total Scope 3 (mtCO₂e)		3,738
Total Scope 1, 2 and 3 (mtCO₂e)		19,655



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SEDCO FACTORY GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands. The factory consumed 1,984 liters of diesel annually. Which resulted in 5 mtCO₂e (Scope 1) and 1 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1. To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under scope 3 (indirect emissions) were included in the organization's emissions. SEDCO factory consumed 7,200 m³ of natural gas in 2021, which resulted in 15 mtCO₂e and 2 mtCO₂e in WTT emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products. The fuel consumed by the factory's owned vehicles for the year 2021 was 9,500 liters which resulted in 26 mtCO₂e and 6 mtCO₂e in WTT emissions (Scope 3).

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for. SEDCO's employees commuting consumed 5,800 liters in 2021, which resulted in 19 mtCO₂e including WTT emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1. We have consumed 27 kg of R-22 refrigerants in the factory which resulted in 49 mtCO₂e.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions). The electricity consumption for the year 2021 was 6,489,390 kWh, which resulted in 2,823 mtCO₂e. Electricity consumption is the largest contributor to SEDCO's emissions at around 67% of total emissions.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions). The factory's water consumption for the year 2021 was 36,178 m³, which resulted in 13 mtCO₂e in both water consumption and wastewater treatment emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities. The waste generated for the year 2021 in SEDCO was about 9 tons of waste that was sent to recycling facilities, which resulted in 0.2 mtCO₂e.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3. Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets. The distance traveled by these trucks in the year 2021 was equal to 513,822 km which resulted in 611 mtCO₂e with its WTT emissions.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. SEDCO's purchased goods totaled 4 ton in 2021, which resulted in 47 mtCO₂e.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3. SEDCO's packing material totaled 563 ton in 2021, which resulted in 557 mtCO₂e.

AIR TRAVEL

Aerial transportation emissions fall under scope 3 (indirect emissions). The air flights in 2021 covered a distance of 21,404 km. This resulted in 43 mtCO₂e including WTT emissions.

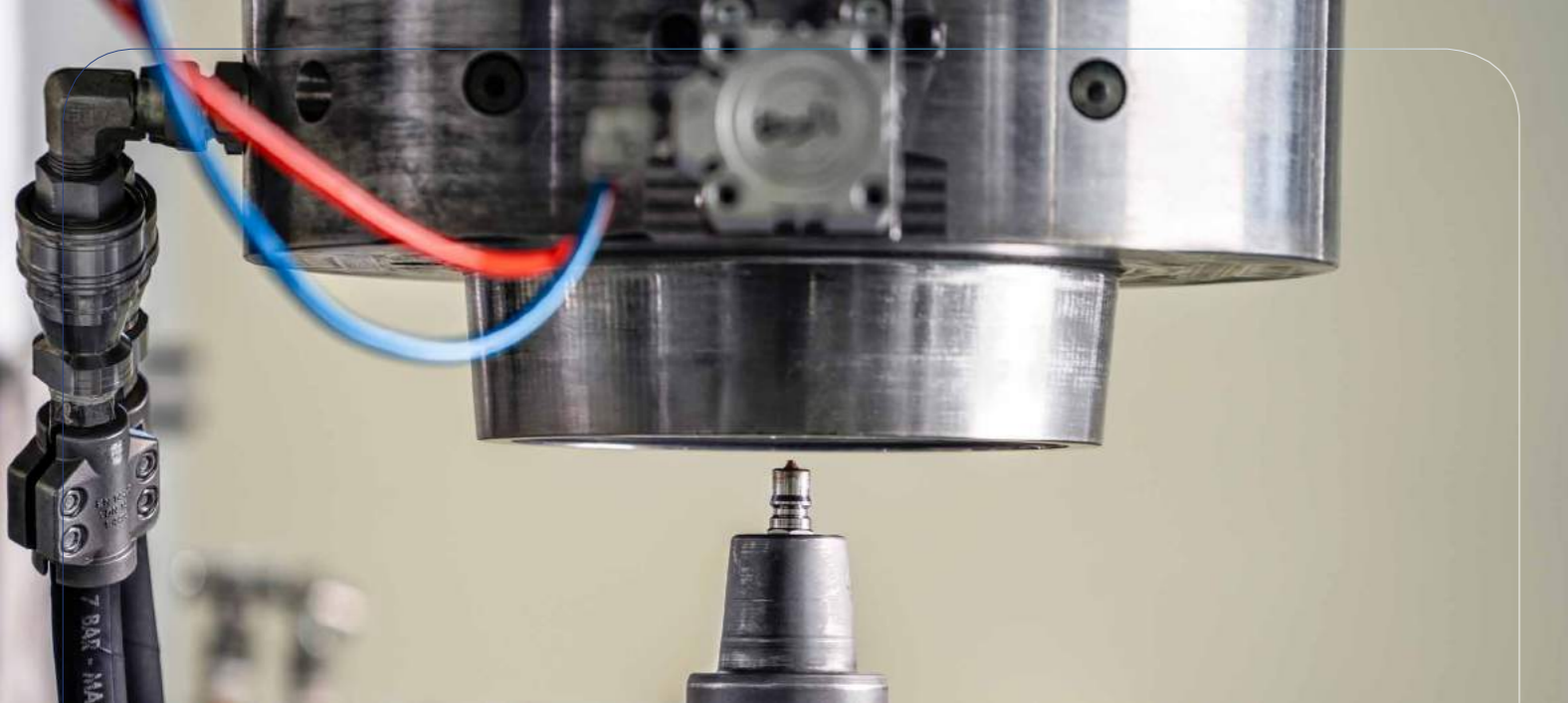
INK CONSUMPTION

Emissions resulting from ink consumption fall under scope 3. Ink is used for printing purposes within our facility. In 2021, we consumed 415 cartridge of ink which resulted in 2 mtCO₂e.

PAPER CONSUMPTION

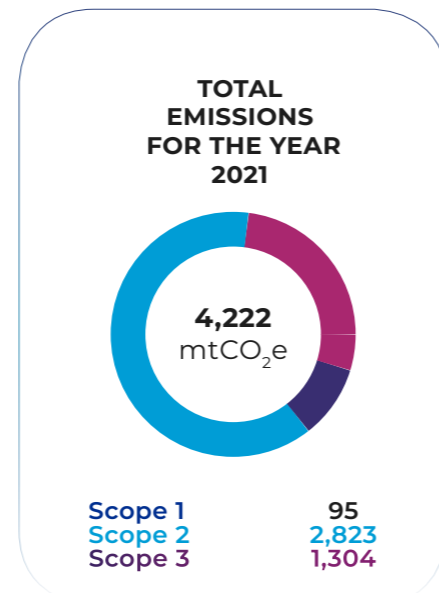
Paper consumption emissions fall under scope 3 (indirect emissions). The emissions from paper consumption totaled 0.9 mtCO₂e from the use of 940 kg of paper.



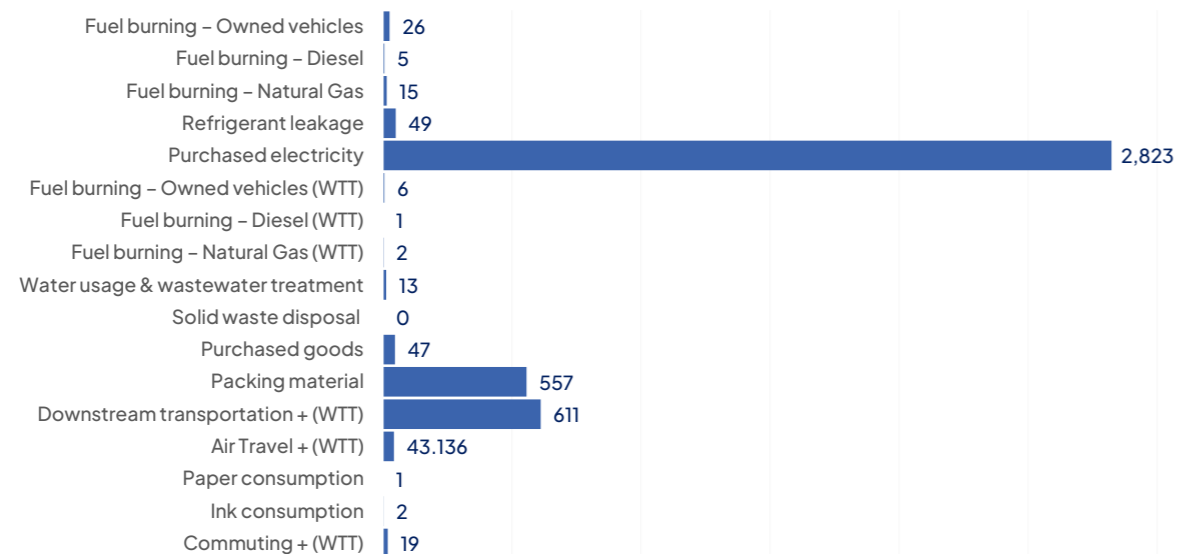


TOTAL EMISSIONS FOR THE YEAR 2021

Number of employees	725
Scope 1 (mtCO ₂ e)	95
Scope 2 (mtCO ₂ e)	2,823
Scope 3 (mtCO ₂ e)	1,304
Scope 1,2 and 3 (mtCO ₂ e)	4,222
Production	337,418
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.009
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.013



The largest contributor to United Metals GHG emissions is natural gas burning with a percentage of 58.7%, followed by purchased electricity with a percentage of 22%.



SEDCO'S EMISSIONS PER ACTIVITY

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning - Owned vehicles	26
Stationary Combustion	Fuel burning - Diesel	5
	Fuel burning - Natural Gas	15
Fugitive Emissions	Refrigerant leakage	49
Total Scope 1 (mtCO₂e)		95

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased Energy	Purchased electricity	2,823

SCOPE 3 - INDIRECT EMISSIONS		2021
ACTIVITY		2021
Fuel and energy-related actives (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	6
	Fuel burning - Diesel (WTT)	1
	Fuel burning - Natural Gas (WTT)	2
	Water usage & wastewater treatment	13
Waste generated in operations	Solid waste disposal	0.2
	Purchased goods	47
Purchased goods and services	Paper consumption	1
	Ink consumption	2
	Packing materials	557
	Fuel Burning - Business travel + (WTT)	-
Business Travel	Air Travel + (WTT)	43
	Hotel Stays	-
Downstream transportation and distribution	Exports + (WTT)	-
	Downstream transportation + (WTT)	611
Employee Commuting	Commuting + (WTT)	19
Total Scope 3 (mtCO₂e)		1,304
Total Scope 1, 2 and 3 (mtCO₂e)		4,222

10 ECMEI GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 22,000 liters of diesel annually. Which resulted in 60 mtCO₂e (Scope 1) and 14 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

ECMEI factory consumed 1,105,929 m³ of natural gas annually, which resulted in 2,250 mtCO₂e and 383 mtCO₂e in WTT emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 direct emissions. Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 35,226 liters which resulted in 88 mtCO₂e and 22 mtCO₂e in WTT emissions (Scope 3).

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 82 kg of refrigerants (R-22 and A-134) refrigerants in the factory which resulted in 138 mtCO₂e.



SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in ECMEI was about 242 tons of waste that was sent to recycling facilities, which resulted in 1 mtCO₂e.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 1,760,400 kWh, which resulted in 766 mtCO₂e.

Electricity consumption is the third largest contributor to ECMEI's emissions at around 12% of total emissions.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 51,790 m³, which resulted in 19 mtCO₂e in both water consumption and wastewater treatment emissions.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. ECMEI's purchased goods totaled 1 ton in 2021, which resulted in 3 mtCO₂e.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

ECMEI's employees commuting resulted in 20,785,242 p.km in 2021, which resulted in 2,644 mtCO₂e including WTT emissions.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 (indirect emissions). Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance traveled by these trucks in the year 2021 was equal to 74,279 km which resulted in 88 mtCO₂e with its WTT emissions.

AIR TRAVEL

Aerial transportation emissions fall under scope 3 (indirect emissions).

The air flights in 2021 covered a distance of 8,220 km. This resulted in 1 mtCO₂e including WTT emissions.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 (indirect emissions).

Ink is used for printing purposes within our facility. In 2021, we consumed 38 cartridge of ink which resulted in 0.2 mtCO₂e.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 0.6 mtCO₂e from the use of 659 kg of paper.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

ECMEI's business trips totaled 30,513 km in 2021, which resulted in 8 mtCO₂e including WTT emissions.

HOTEL STAYS

Hotel stays emissions fall under Scope 3 (indirect emissions). ECMEI hotel stays in 2021 was equal to 20 hotel nights. This resulted in 1 mtCO₂e.

EXPORTS

The emissions resulting from marine and land shipping of our products were accounted for under Scope 3.

ECMEI's export its products to several cities by land and marine shipping. Shipping Marine ton-kilometers in 2021 were equal to 2,796,890 ton.km. Total ton-kilometers were 2,856,750 ton.km for both marine and land travel, which resulted in 69 mtCO₂e including WTT emissions.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

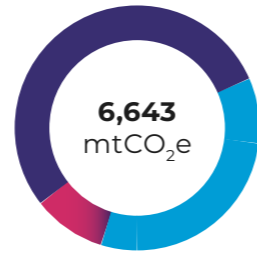
ECMEI's packing material totaled 33 ton in 2021, which resulted in 89 mtCO₂e.



TOTAL EMISSIONS FOR THE YEAR 2021

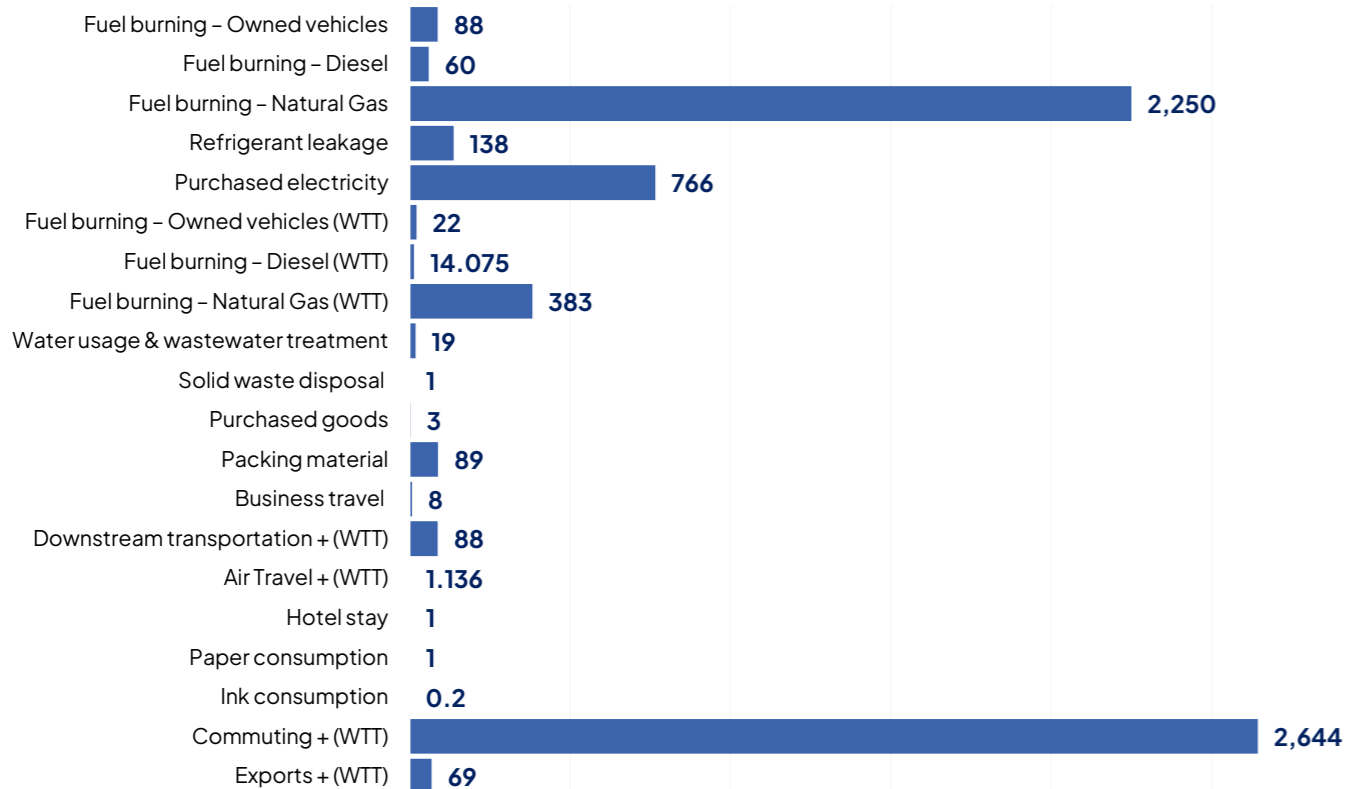
Total area (m ²)	70,199
Number of employees	376
Scope 1 (mtCO ₂ e)	2,535
Scope 2 (mtCO ₂ e)	766
Scope 3 (mtCO ₂ e)	3,342
Scope 1,2 and 3 (mtCO ₂ e)	6,643
Production	607,097
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.005
Scope 1, 2 & 3: Carbon Intensity mtCO ₂ e/ ton	0.011

TOTAL EMISSIONS FOR THE YEAR 2021



Scope 1 2,535
Scope 2 766
Scope 3 3,342

The largest contributor to ECMEI GHG emissions is employee commuting with a percentage of 39.8%, followed by natural gas burning with a percentage of 33.8%.



ECMEI's EMISSIONS PER ACTIVITY

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning - Owned vehicles	88
Stationary Combustion	Fuel burning - Diesel	60
	Fuel burning - Natural Gas	2,250
Fugitive Emissions	Refrigerant leakage	138
Total Scope 1 (mtCO₂e)		2,535

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased electricity		766

SCOPE 3 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	22
	Fuel burning - Diesel (WTT)	14
	Fuel burning - Natural Gas (WTT)	383
	Water usage & wastewater treatment	19
Waste generated in operations	Solid waste disposal	1
	Purchased goods	3
Purchased goods and services	Paper consumption	0.6
	Ink consumption	0.2
	Packing materials	89
	Fuel Burning - Business travel + (WTT)	8
Business Travel	Air Travel + (WTT)	1
	Hotel Stays	1
Downstream transportation and distribution	Exports + (WTT)	69
	Downstream transportation + (WTT)	88
Employee Commuting	Commuting + (WTT)	2,644
Total Scope 3 (mtCO₂e)		3,342
Total Scope 1, 2 and 3 (mtCO₂e)		6,643

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GIAD ELSEWEDY - SUDAN GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands. The factory consumed 23,288 liters of diesel annually. Which resulted in 63 mtCO₂e (Scope 1) and 15 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

GIAD Elsewedy factory consumed 17,222 m³ of natural gas in 2021, which resulted in 35 mtCO₂e and 6 mtCO₂e in WTT emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 1,035 liters which resulted in 2 mtCO₂e and 1 mtCO₂e in WTT emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 14 kg of R-22 refrigerants in the factory, which resulted in 25 mtCO₂e.



SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in GIAD Elsewedy was about 9 tons of waste that was sent to recycling facilities, which resulted in 0.2 mtCO₂e.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 2,438,724 kWh, which resulted in 1,293 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 11,165 m³, which resulted in 4 mtCO₂e in both water consumption and wastewater treatment emissions.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

The air flights in 2021 covered a distance of 78,606 km. This resulted in 12 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 0.1 mtCO₂e from the use of 94 kg of paper.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

GIAD Elsewedy's business trips totaled 250 p.km in 2021, which resulted in 0.1 mtCO₂e including WTT emissions.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under scope 3 (indirect emissions). Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance traveled by these trucks in the year 2021 was equal to 7,495 km which resulted in 9 mtCO₂e with its WTT emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

GIAD Elsewedy's employees commuting resulted in 112,773,968 p.km in 2021, which resulted in 14,346 mtCO₂e including WTT emissions.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. GIAD Elsewedy's purchased goods totaled 3 ton in 2021, which resulted in 46 mtCO₂e.

PACKING MATERIAL

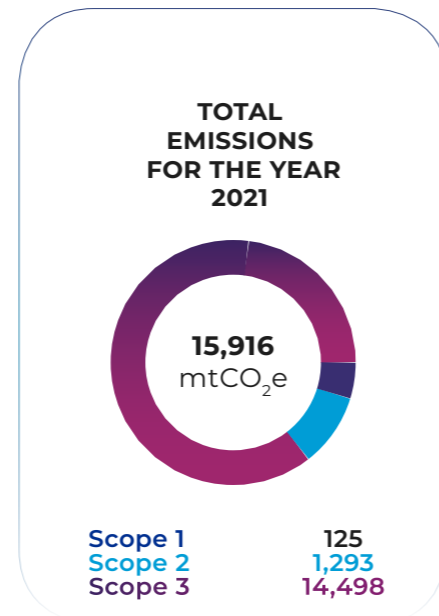
Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

GIAD Elsewedy's packing material totaled 91 ton in 2021, which resulted in 59 mtCO₂e.



TOTAL EMISSIONS FOR THE YEAR 2021

Number of employees	241
Scope 1 (mtCO ₂ e)	125
Scope 2 (mtCO ₂ e)	1,293
Scope 3 (mtCO ₂ e)	14,498
Scope 1,2 and 3 (mtCO ₂ e)	15,916
Production	132,604
Production unit	Pieces (Cables + Lamps)
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ unit of production	0.011
Scope 1, 2 & 3: Carbon Intensity mtCO ₂ e/ unit of production	0.120



Almost 90% of GIAD Elsewedy GHG emissions are attributed to employee commuting.

Fuel burning – Owned vehicles	2
Fuel burning – Diesel	0.325
Fuel burning – Natural Gas	35
Refrigerant leakage	25
Purchased electricity	1,293
Fuel burning – Owned vehicles (WTT)	1
Fuel burning – Diesel (WTT)	15
Fuel burning – Natural Gas (WTT)	6
Water usage & wastewater treatment	4
Solid waste disposal	0
Purchased goods	0.1
Packing material	59
Business travel	0
Downstream transportation + (WTT)	9
Air Travel + (WTT)	12.136
Paper consumption	0.1
Commuting + (WTT)	14,346

GIAD EI-SEWEDY's EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning – Owned vehicles	2
Stationary Combustion	Fuel burning – Diesel	63
	Fuel burning – Natural Gas	35
Fugitive Emissions	Refrigerant leakage	25
Total Scope 1 (mtCO₂e)		125

SCOPE 2 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased Energy	Purchased Electricity	1,293

SCOPE 3 – INDIRECT EMISSIONS		2021
ACTIVITY		
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	1
	Fuel burning – Diesel (WTT)	15
	Fuel burning – Natural Gas (WTT)	6
	Water usage & wastewater treatment	4
Waste generated in operations	Solid waste disposal	0.2
	Purchased goods	46
Purchased goods and services	Paper consumption	0.1
	Packing materials	59
	Fuel Burning – Business travel + (WTT)	0.1
Business Travel	Air Travel + (WTT)	12
	Downstream transportation and distribution	Downstream transportation + (WTT)
Employee Commuting	Commuting + (WTT)	14,346
Total Scope 3 (mtCO₂e)		14,498
Total Scope 1, 2 and 3 (mtCO₂e)		15,915

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 159,996 liters of diesel annually. Which resulted in 433 mtCO₂e (Scope 1) and 101 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

Yanbu Al-Sinaiyah factory consumed 350 m³ of natural gas annually. Which resulted in 0.712 mtCO₂e and 0.121 mtCO₂e in WTT emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 9,858 liters which resulted in 23 mtCO₂e and 6 mtCO₂e in WTT emissions (Scope 3).

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 584.8 kg of R-22 refrigerant and 56,402.5 kg N in the factory which resulted in 1,058 mtCO₂e.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. Yanbu Al-Sinaiyah's purchased goods totaled 1.48 ton in 2021, which resulted in 12 mtCO₂e.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 20,963,941 kWh, which resulted in 13,626 mtCO₂e.

Electricity consumption is the largest contributor to Yanbu Al-Sinaiyah's emissions at around 53% of total emissions.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 22,025 m³, which resulted in 8 mtCO₂e in both water consumption and wastewater treatment emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

Yanbu Al-Sinaiyah's employees commuting resulted in 2,096,640 p.km in 2021, which resulted in 267 mtCO₂e including WTT emissions.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

Yanbu Al-Sinaiyah's packing material totaled 2,247 ton in 2021, which resulted in 7,388 mtCO₂e.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 (indirect emissions).

Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance traveled by these trucks in the year 2021 was equal to 2,245,000 km which resulted in 2,671 mtCO₂e with its WTT emissions.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 indirect emissions.

Ink is used for printing purposes within our facility.

In 2021, we consumed 49 cartridge of ink which resulted in 0.2 mtCO₂e.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

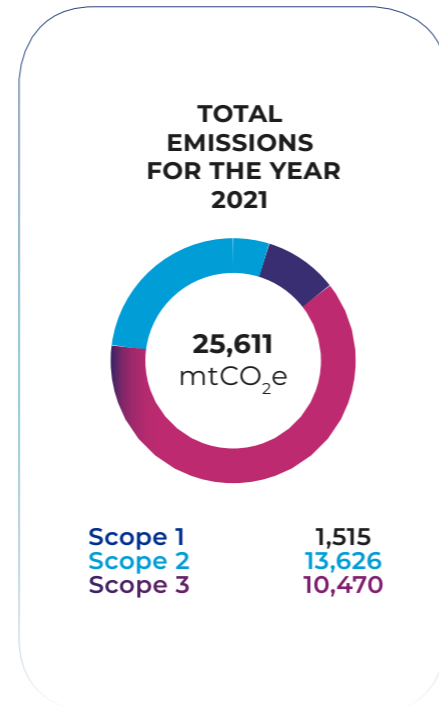
The emissions from paper consumption totaled 1.8 mtCO₂e from the use of 1,913 kg of paper.

SOLID WASTE

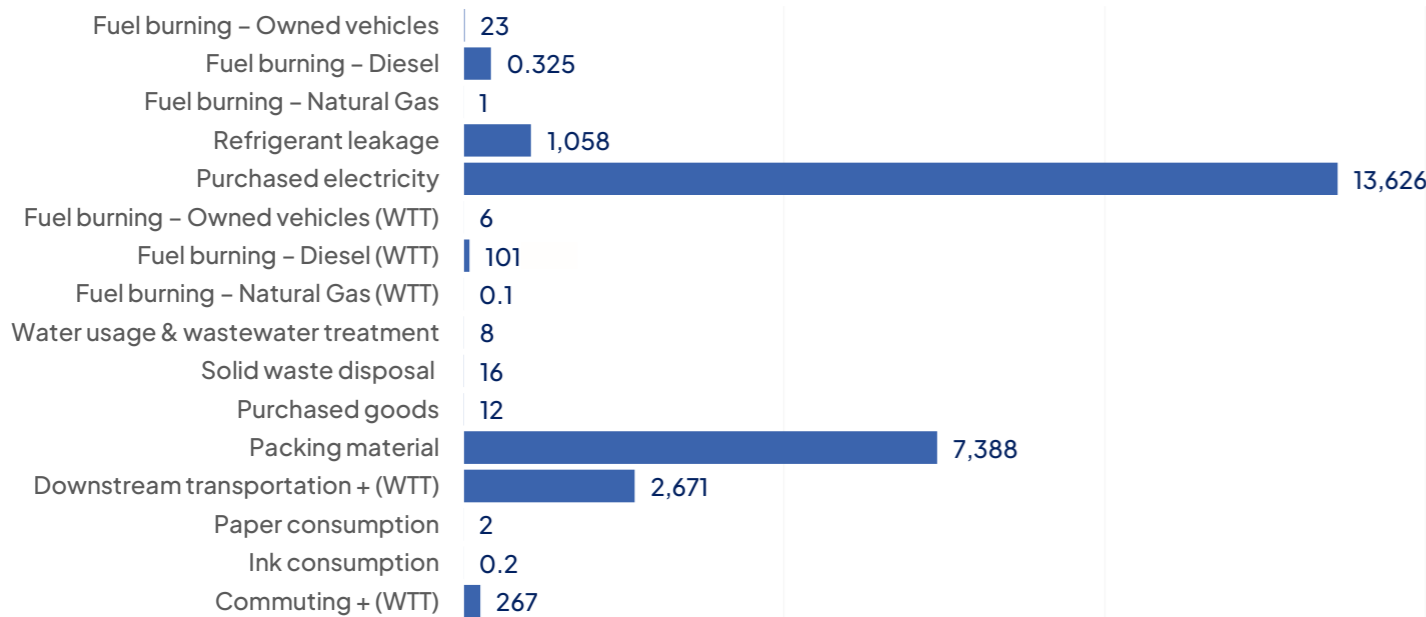
Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in Yanbu Al-Sinaiyah was about 766 tons of waste that was sent to recycling facilities, which resulted in 16 mtCO₂e.

TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	104,000
Number of employees	365
Scope 1 (mtCO ₂ e)	1,515
Scope 2 (mtCO ₂ e)	13,626
Scope 3 (mtCO ₂ e)	10,470
Scope 1,2 and 3 (mtCO ₂ e)	25,611
Production	21,866
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.692
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ ton	1.171



Purchased electricity is the largest contributor to Yanbu Al-Sinaiyah GHG emissions with a percentage of 53%, followed by packing materials with a percentage of 29%.



YANBU AL-SINAIYAH'S EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning – Owned vehicles	23
Stationary Combustion	Fuel burning – Diesel	433
	Fuel burning – Natural Gas	1
Fugitive Emissions	Refrigerant leakage	1,058
Total Scope 1 (mtCO₂e)		1,515

SCOPE 2 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased electricity		13,626

SCOPE 3 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	6
	Fuel burning – Diesel (WTT)	101
	Fuel burning – Natural Gas (WTT)	0.1
	Water usage & wastewater treatment	8
Waste generated in operations	Solid waste disposal	16
	Purchased goods	12
Purchased goods and services	Paper consumption	2
	Ink consumption	0.2
	Packing materials	7,388
Business Travel	Fuel Burning – Business travel + (WTT)	-
	Air Travel + (WTT)	-
	Hotel Stays	-
Downstream transportation and distribution	Exports + (WTT)	-
	Downstream transportation + (WTT)	2,671
Employee Commuting	Commuting + (WTT)	267
Total Scope 3 (mtCO₂e)		10,470
Total Scope 1, 2 and 3 (mtCO₂e)		25,611

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 54,000 liters of diesel annually. Which resulted in 146 mtCO₂e (Scope 1) and 34 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 38,162 liters which resulted in 90 mtCO₂e and 24 mtCO₂e in WTT emissions (Scope 3).

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 18,144,000 kWh, which resulted in 9,036 mtCO₂e.

Electricity consumption is the largest contributor to Elsewedy Cables - Algeria emissions at around 89% of total emissions.

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 55 kg of refrigerants in the factory which resulted in 100 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 572 m³, which resulted in 0.2 mtCO₂e in both water consumption and wastewater treatment emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

Elsewedy Cables - Algeria's employees commuting resulted in 5,296,086 p.km in 2021, which resulted in 675 mtCO₂e including WTT emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in Elsewedy Cables - Algeria was about 370 tons of waste that was sent to recycling facilities, which resulted in 8 mtCO₂e.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. Elsewedy Cables - Algeria's purchased goods totaled 0.002 ton in 2021, which resulted in 0.01 mtCO₂e.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

The air flights in 2021 covered a distance of 5,422 km. This resulted in 19 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 0.2 mtCO₂e from the use of 196 kg of paper.





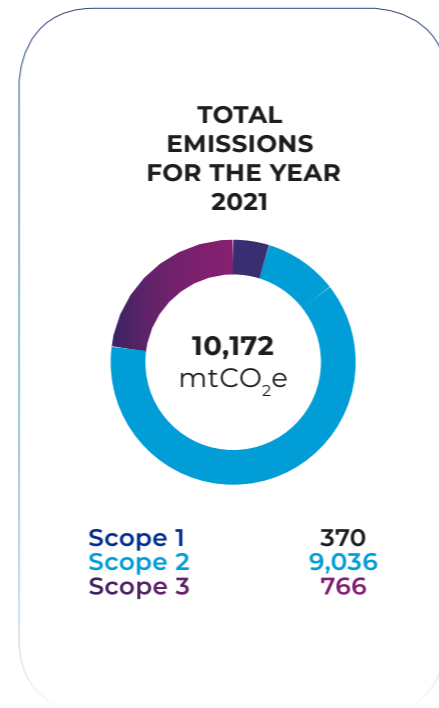
ELSEWEDY CABLES - ALGERIA'S EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning – Owned vehicles	90
Stationary Combustion	Fuel burning – Diesel	146
	Fuel burning – Natural Gas	34
Fugitive Emissions	Refrigerant leakage	100
Total Scope 1 (mtCO₂e)		370

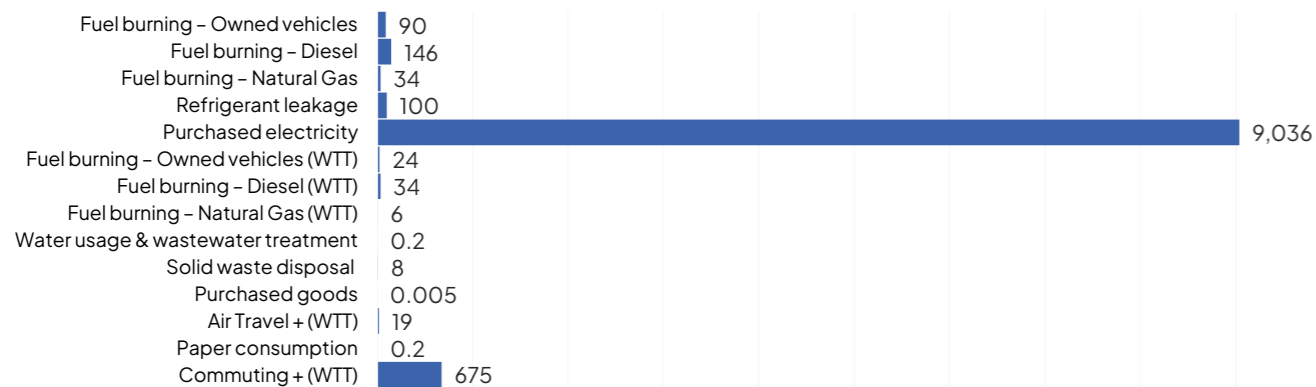
SCOPE 2 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased electricity		9,036

SCOPE 3 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	24
	Fuel burning – Diesel (WTT)	34
	Fuel burning – Natural Gas (WTT)	6
	Water usage & wastewater treatment	0.2
Waste generated in operations	Solid waste disposal	8
	Purchased goods	0.005
Purchased goods and services	Paper consumption	0.2
	Ink consumption	-
	Packing materials	-
Business Travel	Fuel Burning – Business travel + (WTT)	-
	Air Travel + (WTT)	19
	Hotel Stays	-
Downstream transportation and distribution	Exports + (WTT)	-
	Downstream transportation + (WTT)	-
Employee Commuting	Commuting + (WTT)	675
Total Scope 3 (mtCO₂e)		766
Total Scope 1, 2 and 3 (mtCO₂e)		10,172

TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	64,419
Number of employees	365
Scope 1 (mtCO ₂ e)	370
Scope 2 (mtCO ₂ e)	9,036
Scope 3 (mtCO ₂ e)	766
Scope 1,2 and 3 (mtCO ₂ e)	10,172
Production	9,600
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.980
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ ton	1.060



Almost 89% from Elsewedy Cables – Algeria GHG emissions are coming from purchased electricity.



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ELSEWEDY CABLES – ETHIOPIA GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 4,800 liters of diesel annually. Which resulted in 13 mtCO₂e (Scope 1) and 3 mtCO₂e in WTT emissions (Scope 3).

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 1,880 liters which resulted in 5 mtCO₂e and 1 mtCO₂e in WTT emissions.

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (indirect emissions).

The electricity consumption for the year 2021 was 27,591 kWh, which resulted in 0.4 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 22 m³, which resulted in 0.01 mtCO₂e in both water consumption and wastewater treatment emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

Esewedy Cables – Ethiopia's employees commuting resulted in 1,771,104 p.km in 2021, which resulted in 225 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 2 mtCO₂e from the use of 2,300 kg of paper.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in Elsewedy Cables – Ethiopia was about 2 tons of waste that was sent to recycling facilities, which resulted in 0.3 mtCO₂e.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. Elsewedy Cables – Ethiopia's purchased goods totaled 1 ton in 2021, which resulted in 40 mtCO₂e.

BUSINESS TRAVEL

Emissions from business related trips in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

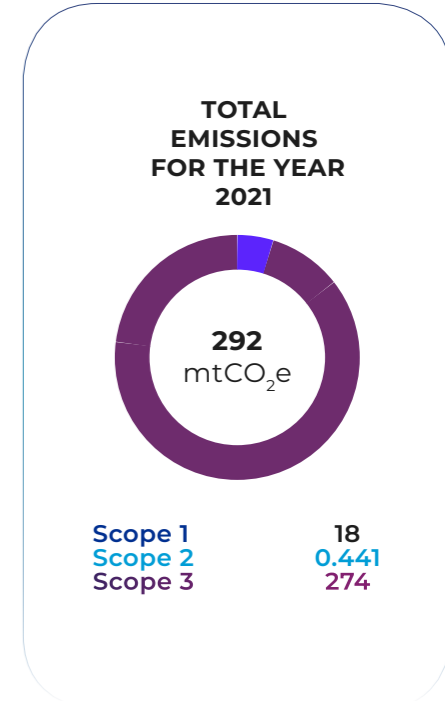
Esewedy Electric – Ethiopia's business trips totaled 4,948 p.km in 2021, which resulted in 2 mtCO₂e including WTT emissions.

INK CONSUMPTION

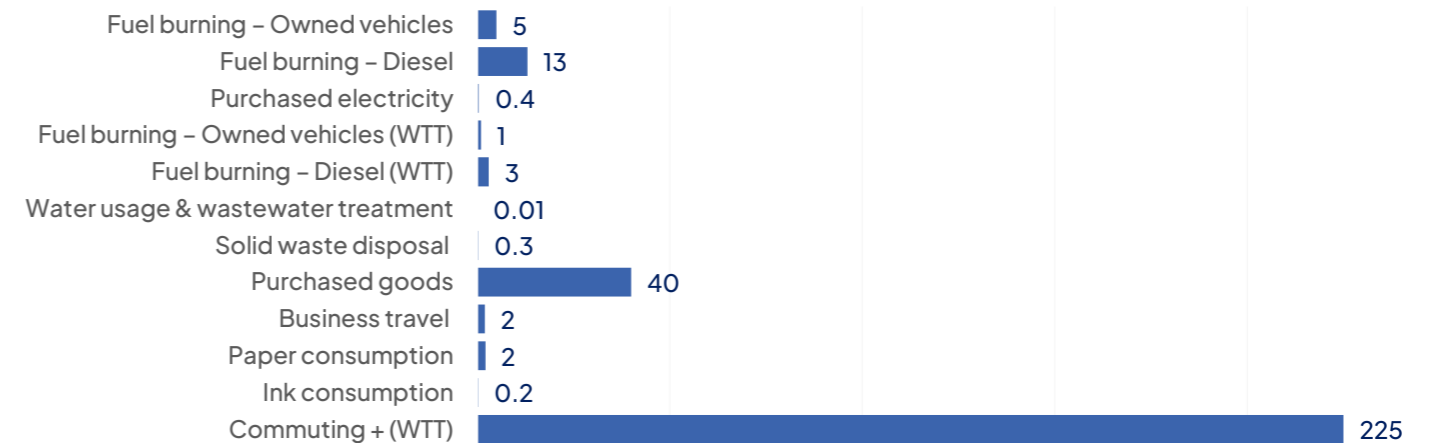
Emissions resulting from ink consumption fall under Scope 3 (indirect emissions).

Ink is used for printing purposes within our facility. In 2021, we consumed 52 cartridge of ink which resulted in 0.3 mtCO₂e.

TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	39,325
Number of employees	161
Scope 1 (mtCO ₂ e)	18
Scope 2 (mtCO ₂ e)	0.441
Scope 3 (mtCO ₂ e)	274
Scope 1,2 and 3 (mtCO ₂ e)	292
Production	461
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.039
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ ton	0.633



Employee commuting is the major contributor to Elsewedy cables – Ethiopia GHG emissions with a percentage of 77%.



ELSEWEDY CABLES ETHIOPIA'S EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning – Owned vehicles	5
Fugitive Emissions	Fuel burning – Diesel	13
Total Scope 1 (mtCO₂e)		18

SCOPE 2 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased Energy	Purchased Electricity	0.4

SCOPE 3 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	1
	Fuel burning – Diesel (WTT)	3
	Water usage & wastewater treatment	0.01
Waste generated in operations	Solid waste disposal	0.3
	Purchased goods	40
Purchased goods and services	Paper consumption	2.1
	Ink consumption	0.3
Business Travel	Fuel Burning – Business travel + (WTT)	2
Employee Commuting	Commuting + (WTT)	225
Total Scope 3 (mtCO₂e)		274
Total Scope 1, 2 and 3 (mtCO₂e)		292



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DOHA CABLES GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 180,000 liters of diesel annually. Which resulted in 487 mtCO₂e (Scope 1) and 113 mtCO₂e in WTT emissions (Scope 3).

NATURAL GAS

Since it is directly used by the owner, the emissions resulting from the consumption of natural gas were accounted for under Scope 1.

To capture the maximum climate impacts of fuel burning, the Well-To-Tank (WTT) emissions which fall under Scope 3 (indirect emissions) were included in the organization's emissions.

Doha Cables factory consumed 482 m³ of natural gas annually. Which resulted in 1 mtCO₂e and 0.167 mtCO₂e in WTT emissions.

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 direct emissions. Those vehicles are used mainly for the transportation of products.

The fuel consumed by the factory's owned vehicles for the year 2021 was 209,014 liters which resulted in 534 mtCO₂e and 129 mtCO₂e in WTT emissions (Scope 3).

REFRIGERANTS LEAKAGE

Refrigerants are fluids used in refrigeration cycles to cool a space. The emissions corresponding to refrigerant leakage were accounted for under Scope 1.

We have consumed 245 kg of A-134, 41 kg R-22, and 136 R-410 refrigerants in the factory which resulted in 627 mtCO₂e.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 14,116 m³, which resulted in 5 mtCO₂e in both water consumption and wastewater treatment emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

Doha Cables' employees commuting resulted in 190,122,044 p.km in 2021, which resulted in 24,289 mtCO₂e including WTT emissions.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in Doha Cables was about 804 tons of waste that was sent to recycling facilities, which resulted in 17 mtCO₂e.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. Doha Cables' purchased goods totaled 0.001 ton in 2021, which resulted in 3 mtCO₂e.



PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (Indirect emissions).

The electricity consumption for the year 2021 was 21,720,239 kWh, which resulted in 9,209 mtCO₂e.

Electricity consumption is the second largest contributor to Doha cables' emissions at around 25% of total emissions.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

Doha cables' packing material totaled 2,599 ton in 2021, which resulted in 1,536 mtCO₂e.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 (indirect emissions).

Ink is used for printing purposes within our facility. In 2021, we consumed 162 cartridge of ink which resulted in 0.8 mtCO₂e.

AIR TRAVEL

Aerial transportation emissions fall under Scope 3 (indirect emissions).

The air flights in 2021 covered a distance of 37,038 km. This resulted in 365 mtCO₂e including WTT emissions.

PAPER CONSUMPTION

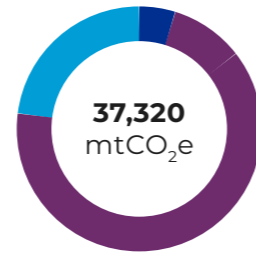
Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 3 mtCO₂e from the use of 2,940 tons of paper.

TOTAL EMISSIONS FOR THE YEAR 2021

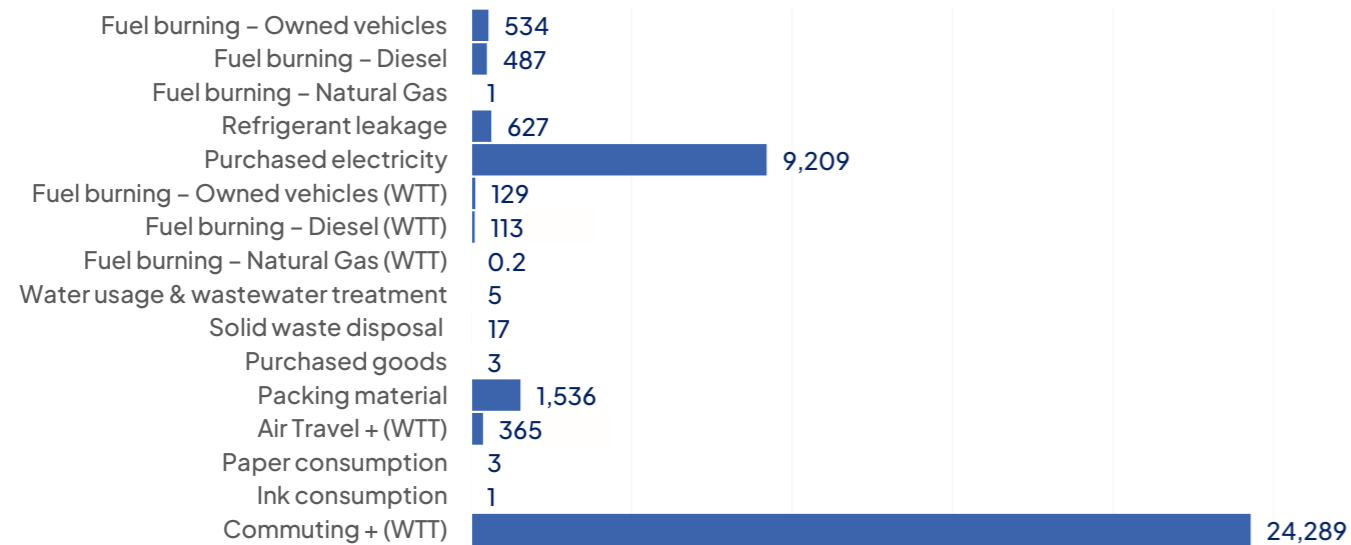
Total area (m ²)	70,199
Number of employees	376
Scope 1 (mtCO ₂ e)	1,649
Scope 2 (mtCO ₂ e)	9,209
Scope 3 (mtCO ₂ e)	26,461
Scope 1,2 and 3 (mtCO ₂ e)	37,320
Production	53,275
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.204
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ ton	0.701

TOTAL EMISSIONS FOR THE YEAR 2021



Scope 1 1,649
Scope 2 9,209
Scope 3 26,461

Employee commuting is the largest contributor to Doha Cables' emissions with a percentage of 65%, followed by purchased electricity with a percentage of 25%.



DOHA CABLES' EMISSIONS PER ACTIVITY

SCOPE 1 - DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning - Owned vehicles	534
Stationary Combustion	Fuel burning - Diesel	487
	Fuel burning - Natural Gas	1
Fugitive Emissions	Refrigerant leakage	627
Total Scope 1 (mtCO₂e)		1,649

SCOPE 2 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased Energy	Purchased Electricity	9,209

SCOPE 3 - INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning - Owned vehicles (WTT)	129
	Fuel burning - Diesel (WTT)	113
	Fuel burning - Natural Gas (WTT)	0.2
Waste generated in operations	Water usage & wastewater treatment	5
	Solid waste disposal	17
Purchased goods and services	Purchased goods	3
	Paper consumption	3
	Ink consumption	1
	Packing materials	1,536
Business Travel	Fuel Burning - Business travel + (WTT)	-
	Air Travel + (WTT)	365
Employee Commuting	Commuting + (WTT)	24,289
Total Scope 3 (mtCO₂e)		26,461
Total Scope 1, 2 and 3 (mtCO₂e)		37,320

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ISKRAEMECO – BOSNIA'S GHG EMISSIONS

OWNED VEHICLES

Emissions resulting from our owned vehicles fall under Scope 1 (direct emissions). Those vehicles are used mainly for the transportation of products.

The distance traveled by the factory's owned vehicles for the year 2021 was 83,345 km which resulted in 21 mtCO₂e and 5 mtCO₂e in WTT emissions (Scope 3).

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (indirect emissions).

The electricity consumption for the year 2021 was 397,394 kWh, which resulted in 489 mtCO₂e.

Electricity consumption is the second largest contributor to Iskraemeco-Bosnia's emissions at around 42% of total emissions.

WATER & WASTEWATER TREATMENT

Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 2,062 m³, which resulted in 1 mtCO₂e in both water consumption and wastewater treatment emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

Iskraemeco - Bosnia's employees commuting resulted in 4,901,300 p.km in 2021, which resulted in 623 mtCO₂e including WTT emissions.

PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3.

Iskraemeco - Bosnia's purchased goods totaled 0.01 ton in 2021, which resulted in 0.02 mtCO₂e.

PACKING MATERIAL

Emissions from packing material such as cello-tape, cartoons, plastic rolls, etc. fall under Scope 3.

Iskraemeco - Bosnia's packing material totaled 0.01 ton in 2021, which resulted in 6 mtCO₂e.

PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 0.2 mtCO₂e from the use of 245 kg of paper.

INK CONSUMPTION

Emissions resulting from ink consumption fall under Scope 3 (indirect emissions).

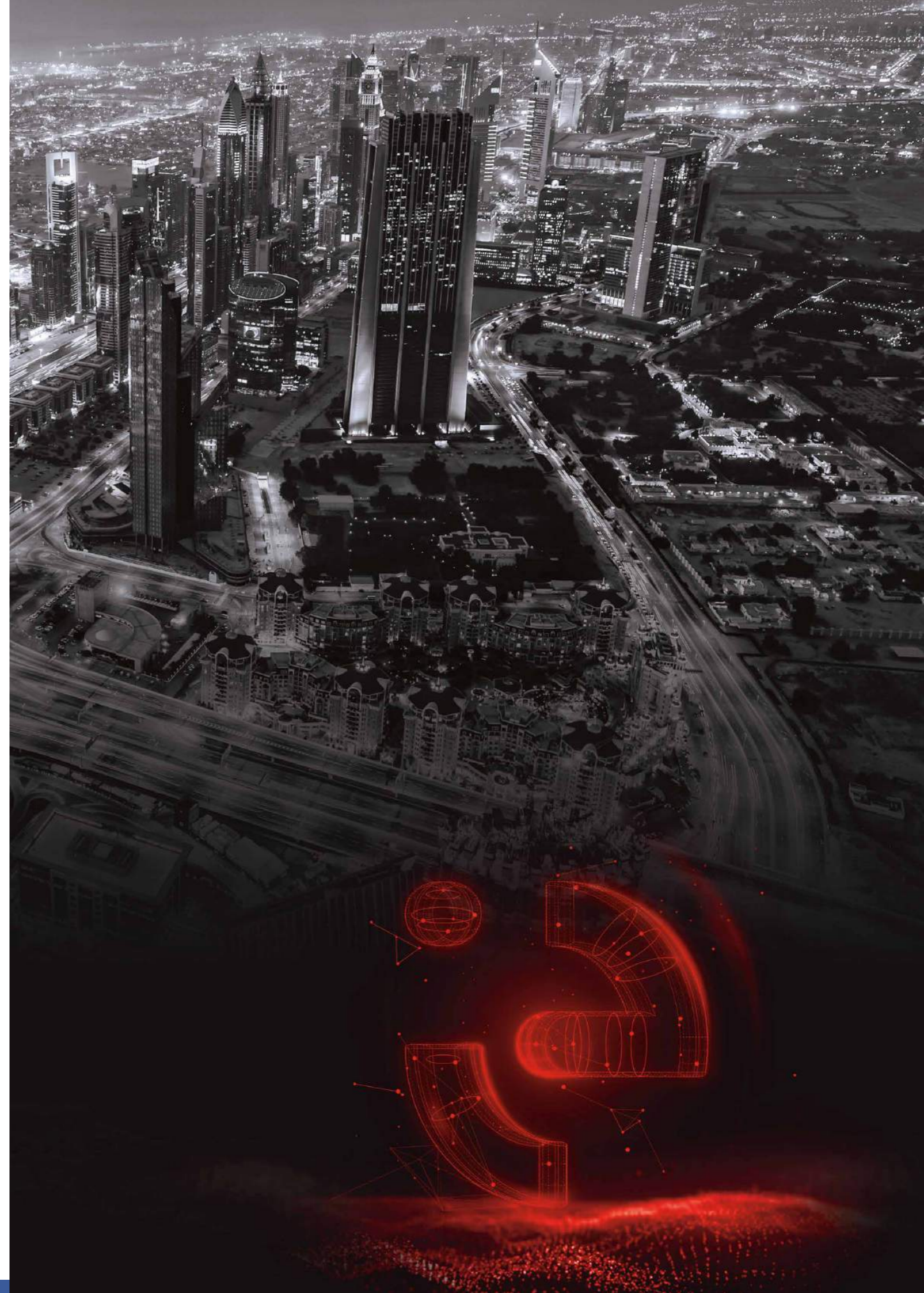
Ink is used for printing purposes within our facility. In 2021, we consumed 12 cartridge of ink which resulted in 0.1 mtCO₂e.

DOWNSTREAM TRANSPORTATION

Emissions resulting from vehicles that are not owned by the company fall under Scope 3 (indirect emissions).

Those vehicles are used for the transportation of products from factories to distribution centers and finally to outlets.

The distance traveled by these trucks in the year 2021 was equal to 9,049 km which resulted in 11 mtCO₂e with its WTT emissions.



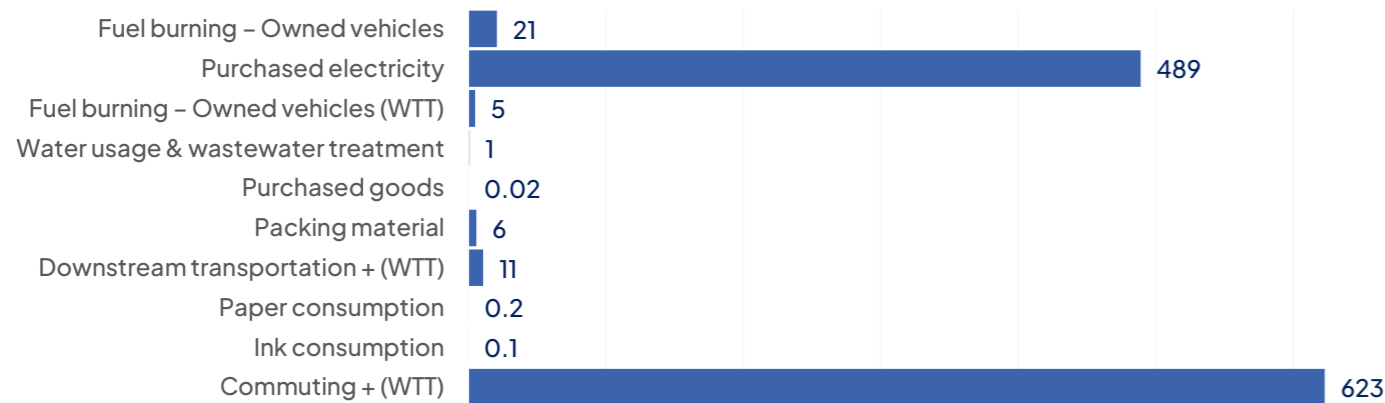
ISKRAEMECO - BOSNIA'S EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Mobile Combustion	Fuel burning – Owned vehicles	21

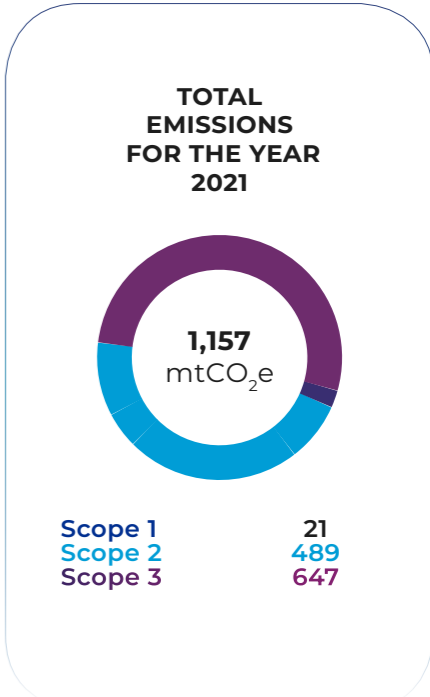
SCOPE 2 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased Energy	Purchased electricity	489

SCOPE 3 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Fuel and energy-related actives (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	5
	Water usage & wastewater treatment	1
Purchased goods and services	Purchased goods	0.02
	Paper consumption	0.2
	Ink consumption	0.1
	Packing materials	6
Downstream Transportation and Distribution	Downstream transportation + (WTT)	11
Employee Commuting	Commuting + (WTT)	623
Total Scope 3 (mtCO₂e)		647
Total Scope 1, 2 and 3 (mtCO₂e)		1,157

Employee commuting is the largest contributor to Iskraemeco Bosnia GHG emissions with a percentage of 54%, followed by purchased electricity with a percentage of 42%.



TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	1,570
Number of employees	47
Scope 1 (mtCO ₂ e)	21
Scope 2 (mtCO ₂ e)	489
Scope 3 (mtCO ₂ e)	647
Scope 1,2 and 3 (mtCO ₂ e)	1,157
Production	67,959
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.008
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ ton	0.017



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ELSEWEDY ELECTRIC INFRASTRUCTURE GHG EMISSIONS

DIESEL

Emissions resulting from diesel fuel burning on site fall under Scope 1 (direct emissions). Diesel fuel is used to operate mobile machinery and by the generators that supply a part of our electricity demands.

The factory consumed 108,000 liters of diesel annually. Which resulted in 292 mtCO₂e (Scope 1) and 68 mtCO₂e in WTT emissions (Scope 3).

PURCHASED ELECTRICITY

Purchased Electricity falls under Scope 2 (indirect emissions).

The electricity consumption for the year 2021 was 4,395,000 kWh, which resulted in 1,912 mtCO₂e.

Electricity consumption is the largest contributor to Elsewedy Electric Infrastructure's emissions at around 48% of total emissions.

WATER & WASTEWATER TREATMENT

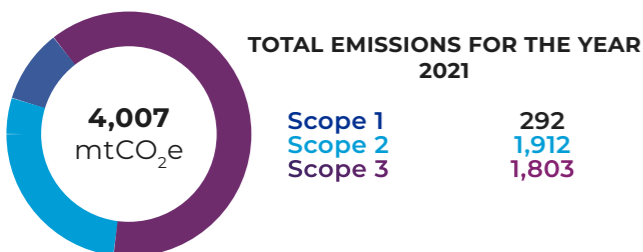
Water supply and wastewater treatment emissions are linked to the electricity consumed to supply and treat the water and fall under Scope 3 (indirect emissions).

The factory's water consumption for the year 2021 was 17,520 m³, which resulted in 6 mtCO₂e in both water consumption and wastewater treatment emissions.

COMMUTING

Emissions from employees commuting in vehicles that are not owned by the company falls under Scope 3. WTT emissions are also accounted for.

Elsewedy Electric Infrastructure's employees commuting resulted in 13,545,240 p.km in 2021, which resulted in 1,723 mtCO₂e including WTT emissions.



PURCHASED GOODS

Emissions from consumable purchased goods such as face masks, gloves, safety shoes, etc. fall under Scope 3. Elsewedy Electric Infrastructure's purchased goods totaled 0.01 ton in 2021, which resulted in 0.05 mtCO₂e.

SOLID WASTE

Waste disposal emissions were accounted for under Scope 3 (indirect emissions). The emissions are associated with the transportation of the waste to recycling facilities.

The waste generated for the year 2021 in Elsewedy Electric Infrastructure was about 378 tons of waste, which resulted in 4 mtCO₂e.

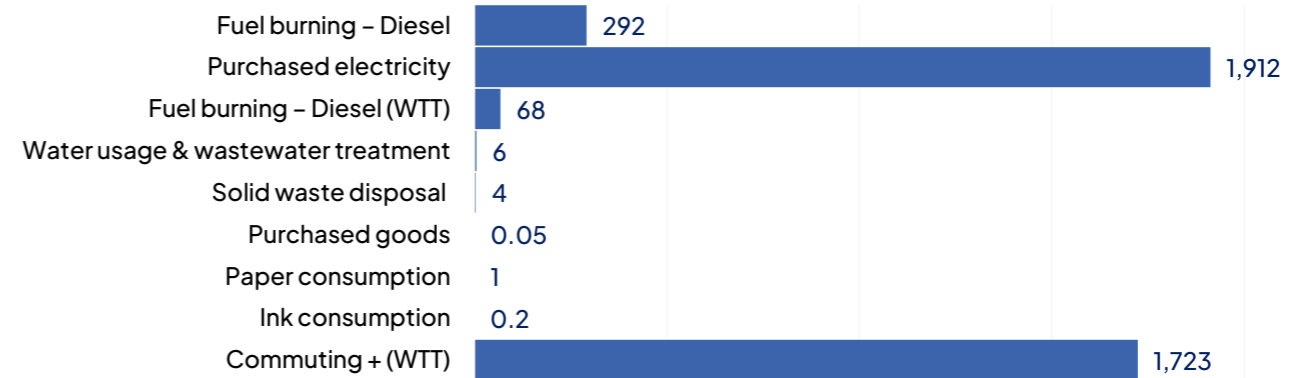
PAPER CONSUMPTION

Paper consumption emissions fall under Scope 3 (indirect emissions).

The emissions from paper consumption totaled 0.8 mtCO₂e from the use of 865 kg of paper.

TOTAL EMISSIONS FOR THE YEAR 2021	
Total area (m ²)	7,800
Number of employees	300
Scope 1 (mtCO ₂ e)	292
Scope 2 (mtCO ₂ e)	1,912
Scope 3 (mtCO ₂ e)	1,803
Scope 1, 2 and 3 (mtCO ₂ e)	4,007
Production	8,331,467
Production unit	Ton
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ ton	0.000265
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ ton	0.00048

The largest contributor to Elsewedy Electric Infrastructure GHG emissions is purchased electricity with a percentage of 48%, followed by employee commuting with a percentage of 43%.

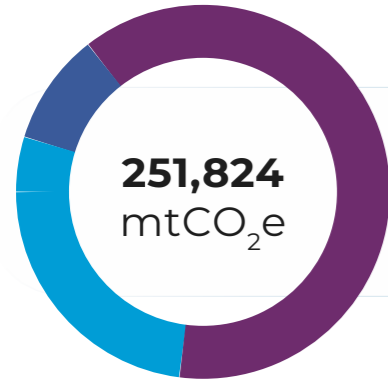


ELSEWEDY ELECTRIC INFRASTRUCTURE'S EMISSIONS PER ACTIVITY

SCOPE 1 – DIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Stationary Combustion	Fuel burning – Diesel	292
SCOPE 2 – INDIRECT EMISSIONS		mtCO ₂ e
ACTIVITY		2021
Purchased electricity		1,912
SCOPE 3 – INDIRECT EMISSIONS		
ACTIVITY		2021
Fuel and energy-related actives (not included in scope 1 and 2)	Fuel burning – Diesel (WTT)	68
	Water usage & wastewater treatment	6
Waste generated in operations	Solid waste disposal	4
Purchased goods and services	Purchased goods	0.05
	Paper consumption	0.8
Employee Commuting	Commuting + (WTT)	1,723
Total Scope 3 (mtCO₂e)		1,803
Total Scope 1, 2 and 3 (mtCO₂e)		4,007



RESULTS SUMMARY



TOTAL EMISSIONS FOR THE YEAR 2021

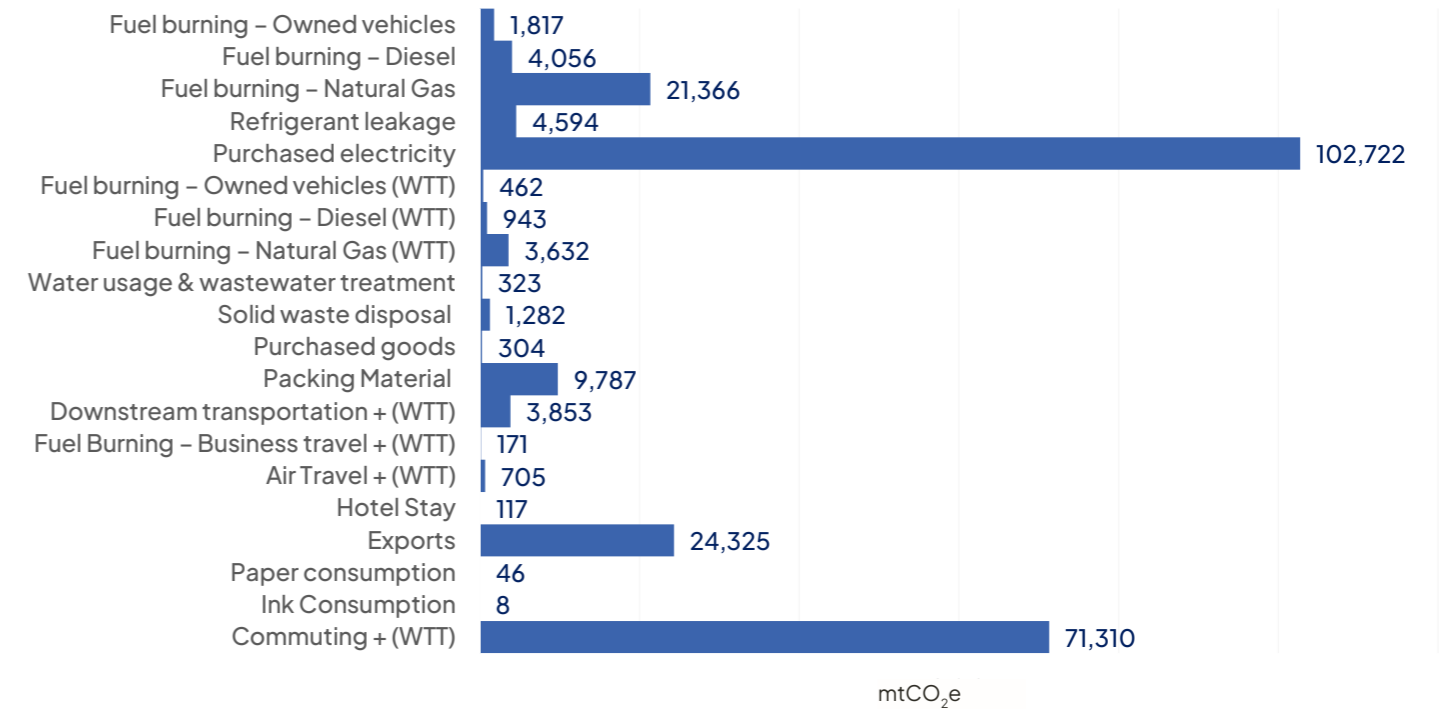
Scope 1	31,832
Scope 2	102,722
Scope 3	117,271

TOTAL EMISSIONS FOR THE YEAR 2021

Total area (m ²)	696,054
Number of employees	8,507
Scope 1 (mtCO ₂ e)	31,832
Scope 2 (mtCO ₂ e)	102,722
Scope 3 (mtCO ₂ e)	117,271
Scope 1,2 and 3 (mtCO ₂ e)	251,824
Revenue	42.2 billion EGP
Scope 1 & 2: Carbon Intensity mtCO ₂ e/ Thousand EGP	0.00319
Scope 1, 2 & 3: Carbon Intensity/ mtCO ₂ e/ Thousand EGP	0.00596
Reduction Target (Below 1.5 degrees scenario (Scope 1 and 2))	33.6%
Target Year	2028



Across the 17 reporting facilities, purchased electricity is the major source of GHG emissions with a percentage of 40.8%, followed by employee commuting with a percentage of 28.3%.

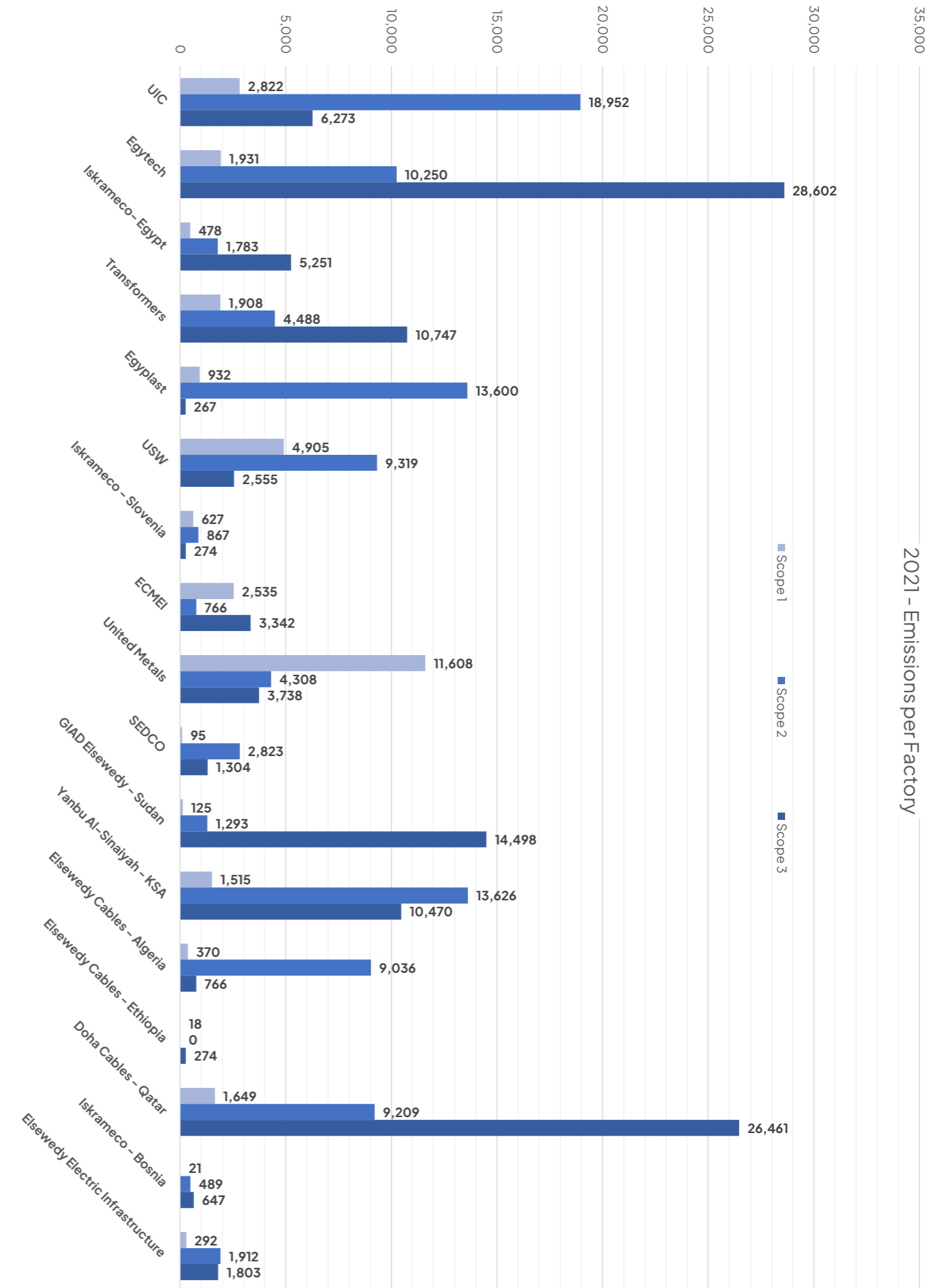


EMISSIONS PER ACTIVITY OVER THE YEARS

SCOPE 1 – DIRECT EMISSIONS						mtCO ₂ e
ACTIVITY		2017	2018	2019	2020	2021
Mobile Combustion	Fuel burning – Owned vehicles	1,184	1,052	1,179	1,411	1,817
Stationary Combustion	Fuel burning – Diesel	2,179	2,259	2,637	3,715	4,056
	Fuel burning – Natural gas	2,290	2,203	1,468	3,534	21,366
Fugitive Emissions	Refrigerant leakage	-	-	-	4,535	4,594
Total Scope 1 (mtCO₂e)		5,652	5,515	5,285	13,195	31,832

SCOPE 2 – INDIRECT EMISSIONS						mtCO ₂ e
ACTIVITY		2017	2018	2019	2020	2021
Purchased electricity		54,977	59,701	51,563	41,443	102,722

SCOPE 3 - INDIRECT EMISSIONS						mtCO ₂ e
ACTIVITY		2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in scope 1 and 2)	Fuel burning – Owned vehicles (WTT)	-	-	-	358	462
	Fuel burning – Diesel (WTT)	-	-	-	890	943
	Fuel burning – Natural Gas (WTT)	-	-	-	460	3,632
	Water usage & wastewater treatment	-	-	-	272	323
Waste generated in operations	Solid waste disposal	125	110	102	561	1,282
Purchased goods and services	Purchased goods	-	-	-	321	304
	Paper consumption	96	45	115	58	46
	Ink consumption	-	-	-	-	8
	Packing materials	-	-	-	-	9,787
Business Travel	Fuel Burning – Business travel + (WTT)	558	661	719	84	171
	Air Travel + (WTT)	-	-	-	257	705
	Hotel Stays	-	-	-	-	117
Downstream transportation and distribution	Exports + (WTT)	-	-	-	11,351	24,325
	Downstream transportation + (WTT)	-	-	-	723	3,853
Employee Commuting	Commuting + (WTT)	913	681	701	14,485	71,310
Total Scope 3 (mtCO₂e)		1,898	1,708	1,867	29,819	117,271
Total Scope 1, 2 and 3 (mtCO₂e)		62,529	66,923	58,714	84,457	251,824



BASE YEAR (BY) & CARBON INTENSITY

A base year (BY) is a reference point in the past with against which current emissions can be compared. The base year for Elsewedy Electric's carbon emissions is 2017, as this is the first year when Elsewedy first started calculating the emissions for all its operations. In the following table, GHG emissions for the years 2017, 2018, 2019, and 2020 are compared. As a result of the expansion in our reporting boundaries, the year 2021 will be our new base year to which upcoming years will be compared to.

Starting this year (2021) we decided to expand our boundaries for more accurate calculations. This included the following scope 3 activities in our calculations:

- Hotel stays
- Packing Material
- Ink Consumption

We also included 10 new factories to our reporting boundaries. This change in boundaries is the main reason for the significant increase in the emissions.

2021 emissions cannot be compared to base year (2017) emissions due to the difference in reporting boundaries and activities. Therefore, a modified emissions inventory is used to measure our performance progress in 2021 as compared to 2017. This inventory excludes the aforementioned activities/ facilities, so we can compare on a like to like basis.

Scope	BY - 2017	2018	2019	2020 Actual	2020 Modified*	Difference	2021 Actual	2021 Modified*	Difference
Scope 1 - mtCO ₂ e	5,652	5,515	5,285	13,195	8,660	+53%	8,698	6,509	+15%
Scope 2 - mtCO ₂ e	54,977	59,701	51,563	41,443	41,443	-24%	49,941	49,941	-10%
Scope 1 + 2 - mtCO ₂ e	60,629	65,215	56,847	54,638	50,103	-17%	58,639	56,450	-7%
Scope 3 - mtCO ₂ e	1,899	1,708	1,867	29,819	12,724	-	117,268	24,627	-
Total - mtCO₂e	62,529	66,923	58,714	84,457	62,827	+0.5%	251,822	81,077	+30%

* 2017 is considered the old base year to which the years 2018 to 2020 are compared to.

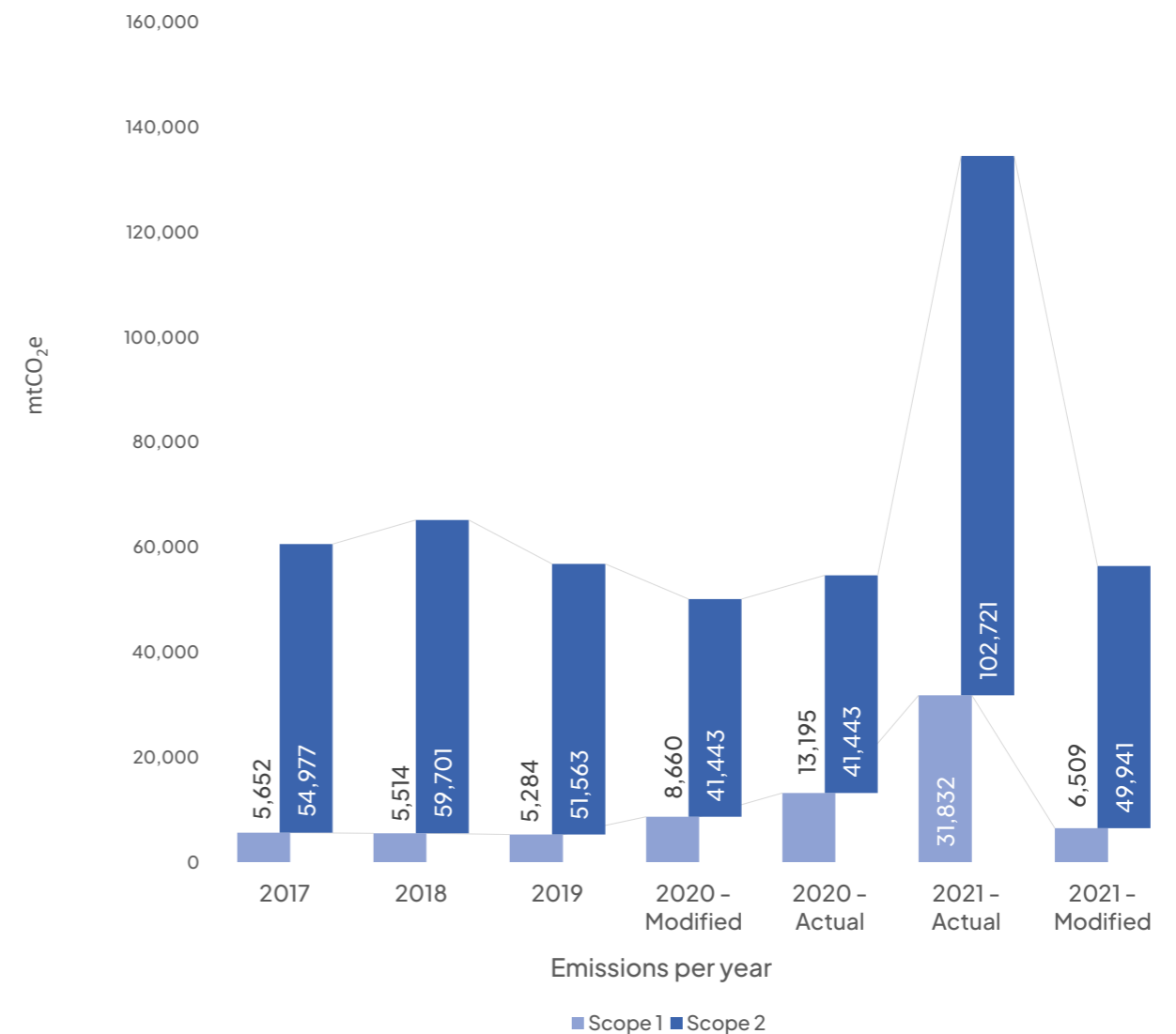
Scope 1 emissions resulting from refrigerants leakage were removed as it was not accounted for in the previous year.

Scope 3 emissions resulting from the following activities were removed in order to compare the emissions accurately:

- Well-to-Tank emissions for all fuel burning activities
- Water and wastewater treatment
- Purchased goods
- Downstream transportation
- Exports
- Ink consumption
- Hotel Stay
- Packing material



ELSEWEDY ELECTRIC EMISSIONS PER YEAR



CARBON INTENSITY

Intensity per unit of product

A carbon intensity is the emission rate of a given pollutant relative to the intensity of a specific activity, or an industrial production process. An example of emission intensity is the ratio of GHG emissions produced to the unit of product of each factory. This would help in understanding and analyzing the performance of each factory when compared to the base year intensity.

	2017				2018			
	Production	Production Unit	Emissions	Intensity	Production	Production Unit	Emissions	Intensity
UIC	17,495.50	Ton	14,954	0.855	18,497.79	Ton	15,071	0.82
Egytech	40,160.49	Ton	23,330	0.581	36,011.82	Ton	22,514	0.63
Iskrameco	1,219,887	Electric Meter	1,353	0.001	1,180,214	Electric Meter	1,674	0.00
Transformers	1,955.00	Transformer	1,276	0.653	1,547.00	Transformer	5,132	3.32
Egyplast	82,674	Ton	13,496	0.163	117,859	Ton	19,058	0.16
USW	18,702	Ton	0	0	22,299	Ton	0	0.00
Iskraemeco Slovenia	1,977,000	Smart meter & converters	2,806	0.0014	2,404,000	Smart meter & converters	2,643	0.00

	2019				2020			
	Production	Production Unit	Emissions	Intensity	Production	Production Unit	Emissions	Intensity
UIC	20,107.19	Ton	13,340	0.66	22,310.29	Ton	18,713.84	0.84
Egytech	32,306.81	Ton	18,782	0.58	28,276.82	Ton	10,603.08	0.38
Iskrameco	1,034,908	Electric Meter	2,097	0.00	1,280,159	Electric Meter	2,069.30	0.00
Transformers	1,440	Transformer	5,225	3.63	2,229	Transformer	4,148.30	1.86
Egyplast	104,635	Ton	15,623	0.15	98,591	Ton	9,769.68	0.10
USW	27,252	Ton	0	0.00	47,666	Ton	11,457.38	0.24
Iskraemeco Slovenia	2,741,000	Smart meter & converters	2,553	0.00	2,420,000	Smart meter & converters	1,625.00	0.00

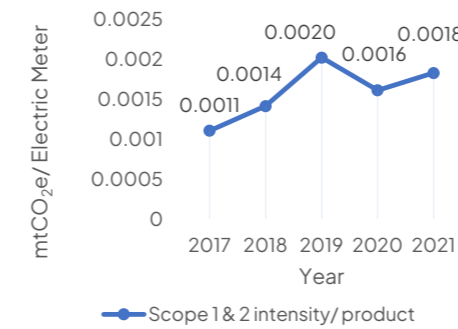
	2021			
	Production	Production Unit	Emissions	Intensity
UIC	22,586.00	Ton	21,741.61	0.96
Egytech	39,611.28	Ton	11,028.80	0.28
Iskrameco	1,053,797	Electric Meter	1,931.37	0.00
Transformers	1,549	Transformer	5,722.60	3.69
Egyplast	116,250.82	Ton	14,532.22	0.13
USW	63,600	Ton	13,846.00	0.22
Iskraemeco Slovenia	2,080,665	Smart meter & converters	1,493.46	0.00

SCOPE 1 & 2 CARBON INTENSITY (mtCO₂e/ UNIT OF PRODUCT) *

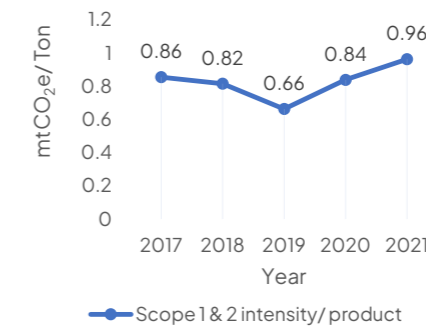
The following table and charts show the difference in emissions/ unit of product for the years 2017, 2018, 2019, 2020* and 2021*:

Scope 1 & 2 – Carbon Intensity mtCO ₂ e/ unit of product						
Scope	2017	2018	2019	2020*	2021*	Difference
UIC	0.8547	0.8147	0.6634	0.8388	0.963	+13%
EGYTECH	0.5809	0.6252	0.5814	0.3750	0.278	-52%
ISKRAMECO (EGYPT)	0.0011	0.0014	0.0020	0.0016	0.002	+65%
TRANSFORMERS	0.6527	3.3174	3.6285	1.8611	3.694	+466%
EGYPLAST	0.1632	0.1617	0.1493	0.0991	0.125	-23%
USW**	-	-	-	0.2400	0.218	-9%
ISKRAEMECO SLOVENIA	0.0014	0.0011	0.0009	0.0007	0.0007	-49%

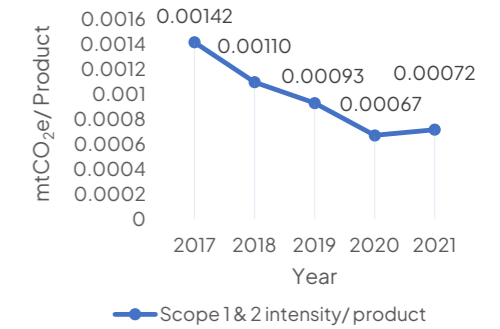
ISKRAEMECO EGYPT



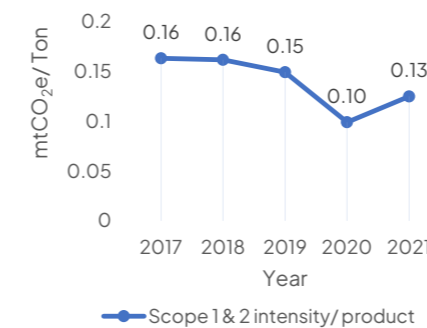
UIC



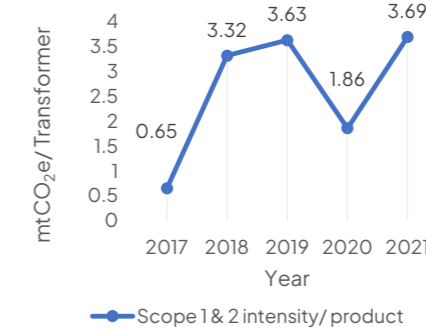
ISKRAEMECO SLOVENIA



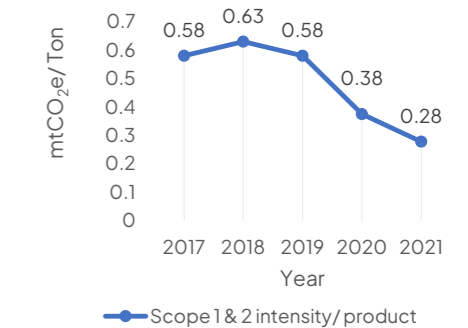
EGYPLAST



TRANSFORMERS



EGYTECH

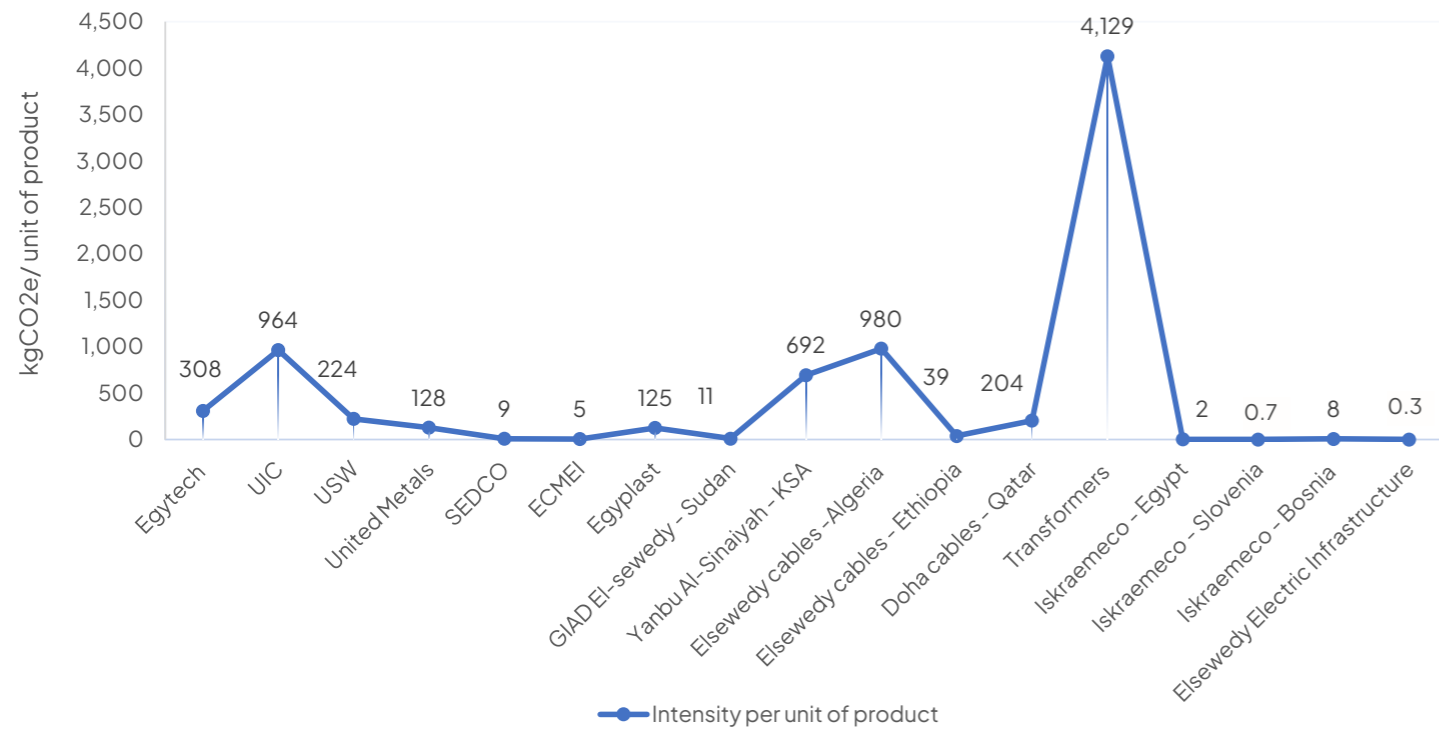


USW



* 2017 is considered the old base year to which the years 2018 to 2020 are compared to.
 Scope 1 emissions resulting from refrigerants leakage and additional scope 3 activities were removed as it was not accounted for in the 2017."
 **USW 2020 intensity has been recalculated in 2021

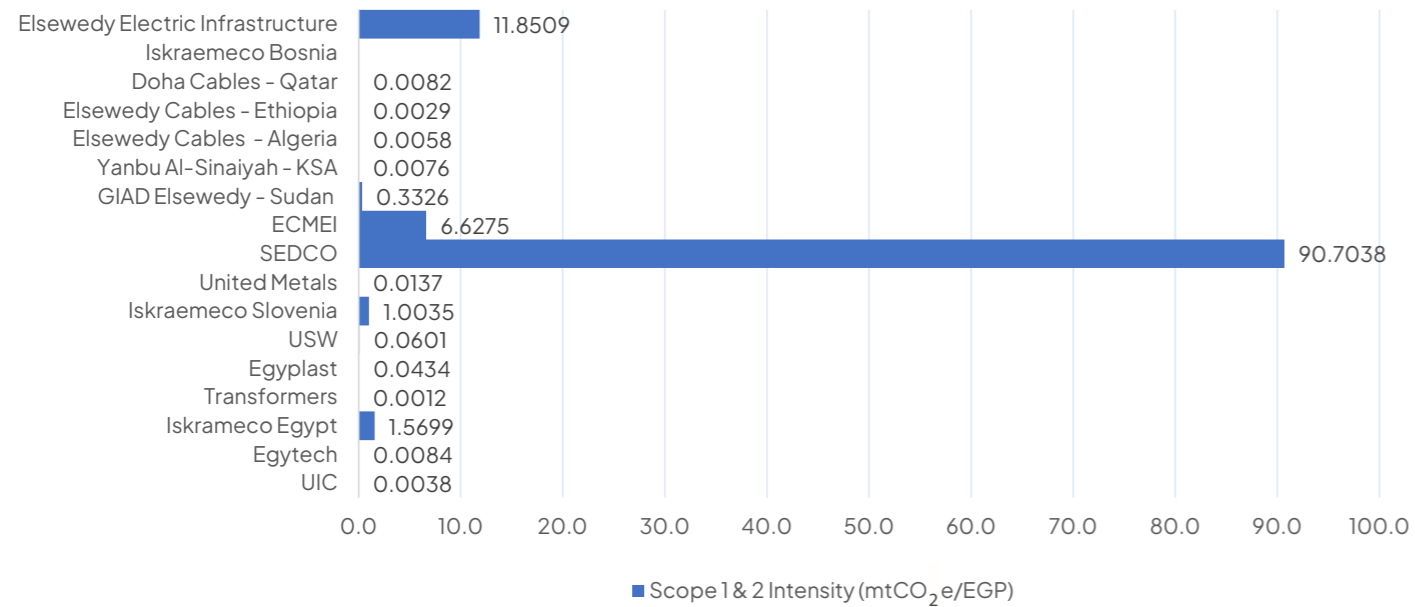
2021 Scope 1 and 2 carbon intensity (KgCO₂e/ unit of product)



Intensity per unit of product

Starting this year, Elsewedy is introducing a new carbon intensity unit. This would help in understanding and analyzing the performance of each factory when compared to the base year intensity in the upcoming years.

Elsewedy Electric's Carbon Emissions Intensity Scope 1 & 2 emissions/Revenue (mtCO₂e/EGP)



TARGETS

In Paris in 2015 we had a historic and unprecedented moment of international consensus. Nearly 200 countries signed up to an ambitious agreement to keep global warming well below 2°C above pre-industrial levels. In 2018, the Intergovernmental Panel on Climate Change (IPCC) warned that global warming must not exceed 1.5°C to avoid the catastrophic impacts of climate change.

Targets provide a clearly defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth.



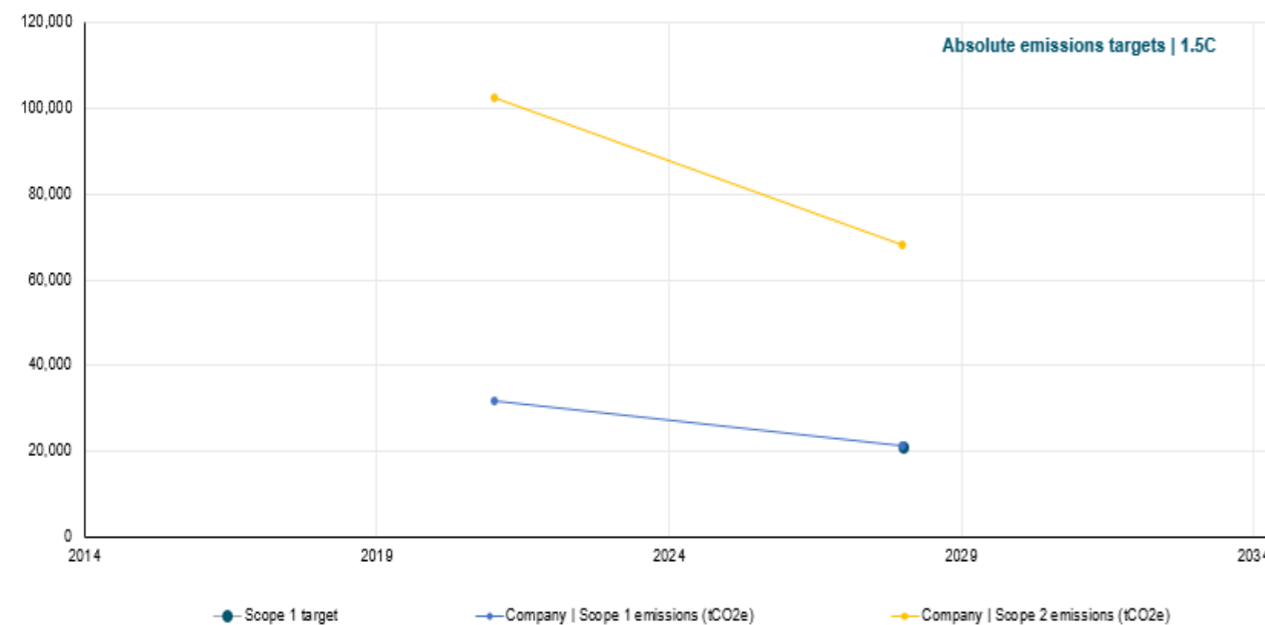
Climate scenario aligned with a 1.5 Degree temperature goal - New Targets

The GHG reduction targets have been set for Scope 1 and 2 emissions to prevent global climate change and an increase of no more than 1.5 degrees Celsius. All targets are set in line with the Absolute contraction approach of a 1.5 degrees Celsius future, to be achieved by 2028.

Scope	Base year 2021	Target Year 2028	% Reduction	Status
Scope 1 - mtCO ₂ e	31,832	21,136	33.6%	-
Scope 2 - mtCO ₂ e	102,722	68,207	33.6%	-
Scope 1 + 2 - mtCO ₂ e	134,554	89,344	33.6%	-

Climate scenario aligned with a 1.5 Degree temperature goal - Old Targets Evaluation

Scope	Base year 2017	Reporting year 2021*	Target Year 2025	% Reduction	Status
Scope 1 - mtCO ₂ e	5,652	6,509	3,753	33.6%	0% Achieved
Scope 2 - mtCO ₂ e	54,977	49,941	36,505	33.6%	9.5% out of 33.6% achieved (27% achieved)
Scope 1 + 2 - mtCO ₂ e	60,629	56,450	40,258	33.6%	6.9% out of 33.6% achieved (21% achieved)



* 2017 is considered the old base year to which the years 2018 to 2020 are compared to. Scope 1 emissions resulting from refrigerants leakage were removed as it was not accounted for in the base year.

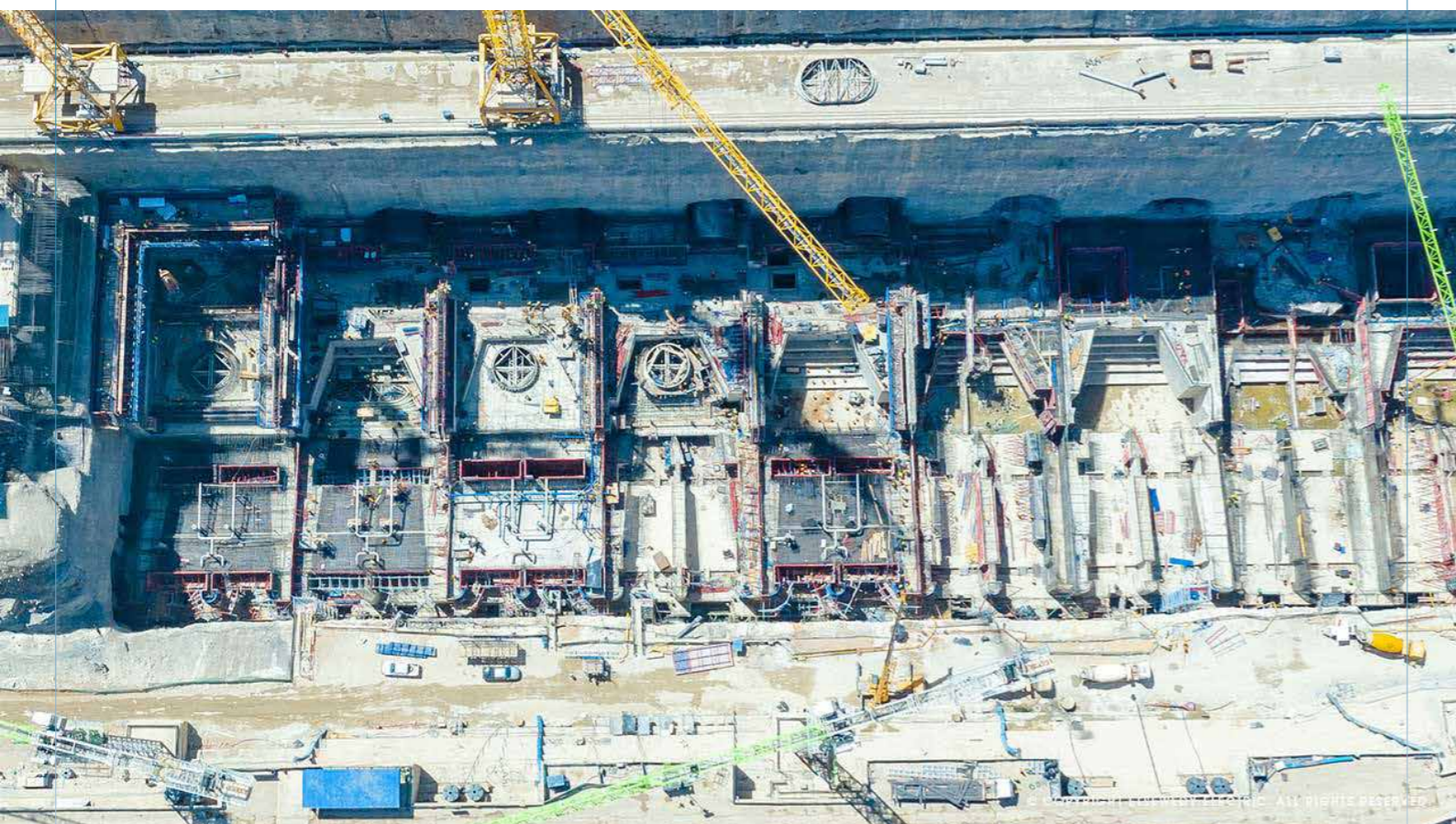
OUR CLIMATE STRATEGY AND DECARBONIZATION ROADMAP

In response to the call for immediate action to address the global climate catastrophe, Elsewedy Electric issued its [2020-2023 Sustainability Strategy](#), which includes a commitment to net-zero emissions by 2030 along with interim targets and action plans to achieve that goal. We intend to push our efforts and align with the 1.5°C criteria.

We are aware that in order to achieve net-zero, we must first reduce our own direct emissions before addressing any additional indirect emissions generated throughout our value chain. To assure transparency, strengthen purpose-driven partnerships, and uphold win-win relationships while accomplishing a greener transition, we must actively engage with our suppliers.

In the event that we are unable to further reduce our direct or indirect emissions, Elsewedy Electric will make up for the emissions that could not be avoided by funding environmental and renewable energy initiatives. This will assist to balance our overall carbon footprint by reducing future emissions.

In our Sustainability Strategy as well as our new [Climate](#) and [Water](#) policies, we have identified our key areas for action that will speed up our transition to a net-zero company. We anticipate that once we start implementing our new policies and re-calibrate our targets in light of a group-level analysis of our GHG emissions in subsequent reports, our action plans will have been further improved.



Action Area	Target	Status as of year 2021
Sustainability and GHG Data Management	Conduct a group wide comprehensive GHG emissions assessment of all operations and subsidiaries by 2023	In Progress 17 production facilities included representing 65.7% of total corporate revenues
	Adopt 100% Digital Sustainability Management and GHG Accounting Systems by 2025	Planning Phase
Energy Consumption	100% coverage by ISO 50001 for all sites by 2025	In Progress 2 sites are certified (UIC and Iskrameco Slovenia factory)
	100 % of the new buildings certified green	Planning Phase
	Appoint a corporate energy manager by 2023	In Progress
	Achieve a 20% of energy consumption from self-supply renewable energy systems by 2030	Planning Phase
	Reduce energy consumption by 20% for all office-buildings and factories by 2030 via energy efficiency and energy management measures	In Progress Facilities are adopting and implementing energy management systems (2 are certified to ISO 50001). Egyplast is in the preparation phase.
	Double our investments in renewable energy, climate and water projects by 2025	Clean revenues represent 35% of total corporate revenues
Water Consumption	Reduce water consumption by 40% for all office-buildings and factories by 2030 via water efficiency and water management measures	In Progress
	Achieve zero Wastewater across operations by 2030 through implementing wastewater reuse, and water recycling systems	Water treatment plants for irrigation purposes are planned for installation at our production facilities in 2021

Transportation and Distribution	Electrify 50% of our operational fleet by 2030, this also includes greening our employees' modes of transportation by implementing a Employee Transport Policy that encourages low-carbon commuting modes.	Planning Phase
Action Area	Target	Status as of year 2021
Products and Materials	Embed Life Cycle Assessment as a standard procedure for 100% of the Group products by 2023	In progress Carbon neutral cables
	100% of our products to have EPDs/ Green Labels by 2030	In progress
	90% of sourced materials by volume are renewable, recycled or recyclable by 2030	Planning Phase
Waste and Recycling	Conduct a group-wide waste management audit by 2022, as well as develop and implement tailored waste management plans across all subsidiaries by 2023	Planning Phase
	Achieve Zero Waste to Landfill by 2030	In Progress
Corporate Sustainability Culture	Train 100% of employees and suppliers on ESG and sustainability topics by 2023	In Progress
	Conduct communication campaigns to share best practices across the organization and to encourage employees to undertake sustainability practices in both their private and work lives	In Progress



ELSEWEDY ELECTRIC CLIMATE MITIGATION PROJECTS

As a group operating in the energy sector, we understand the tremendous responsibility we have towards combatting climate change. Investing in renewable energy projects is critical to meet the everincreasing demand and lessen the reliance on fossil fuels as a source for meeting this demand.

Elsewedy Electric has been a key player in the region when it comes to renewables, we currently have several projects in operation, and are aiming to widen the scope and increase our reach and potentials to the max possible limit.

Elsewedy Electric has established its subsidiary Elsewedy Energy in 2020, which acts as an arm to the group when it comes to contributing to climate protection through renewable energy projects. As of the first half of 2021 Elsewedy Energy has managed to maintain a portfolio of 194 MW of operating assets split between 130 MW Solar PV Plants in BENBAN Egypt, 61 MW Wind Farms and 3 MW mini-Hydro both in Greece.

Elsewedy Electric has mandated Elsewedy Energy to invest up to USD 400 million in the next 5 years focusing on opportunities in late-stage development or early stage of operations. Elsewedy Energy is currently looking at a pipeline of 1.5 GW with approximately 500 MW in advanced negotiation stages.

ELSEWEDY ELECTRIC'S RENEWABLE ENERGY PROJECTS IN OPERATION DURING 2021

Two renewable energy projects operated by Elsewedy Electric in two different countries during 2021 acted as carbon offset projects by avoiding emissions that may have been produced if the same amount of power had been generated by the burning of fossil fuels.

Egypt: BENBAN PV Solar Park

Elsewedy Electric, jointly with Électricité De France's EDF Renewables, has successfully developed, financed, and built its two solar PV power plants (each of 65 MWp) in BENBAN, Aswan, Egypt, which have commenced operations in August 2019, and continue to operate till date.

The solar PV plants were developed as part of Egypt's Round II of the Renewable Energies Feed-in-Tariff (FIT) program for solar and wind energy projects launched by the Government of Egypt.

The project generates an estimated 297 GWh of electricity, powering more than 140,000 households, with an annual offset potential of 120,000 metric tons of CO₂e.

- 140K Households** → 140,000 HOUSEHOLDS CONNECTED
- 79.11%** → PERFORMANCE ROTATION
- 46.8%** → GROUND COVERAGE RATIO (GCR)
- 120K mtCO₂e Saved** → 120,000 TONS OF CO₂ SAVED/YEAR
- 297 GWh/Year** → 297 GWh/YEAR EXPECTED ANNUAL ENERGY YIELD
- 140M USD** → USD 140 MILLION, PROJECT VALUE
- 2,497 MWh/MWp/Year** → 2,497 MWh/MWp/YEAR SPECIFIC YEILD

The total annual possible CO₂e emissions offsets as a result of our operating renewable energy projects are:

Egypt: BENBAN Solar PV Project	120,000 mtCO ₂ e
Greece: Wind and Hydro Assets	102,000 mtCO ₂ e
Total Avoided Emissions	222,000 mtCO₂e

Greece: Elsewedy Electric 64MW of Wind and Hydro Assets

Elsewedy electric acquired three operating wind farms and two operating hydroelectric energy assets in Greece in June 2019, which are in operation till date.

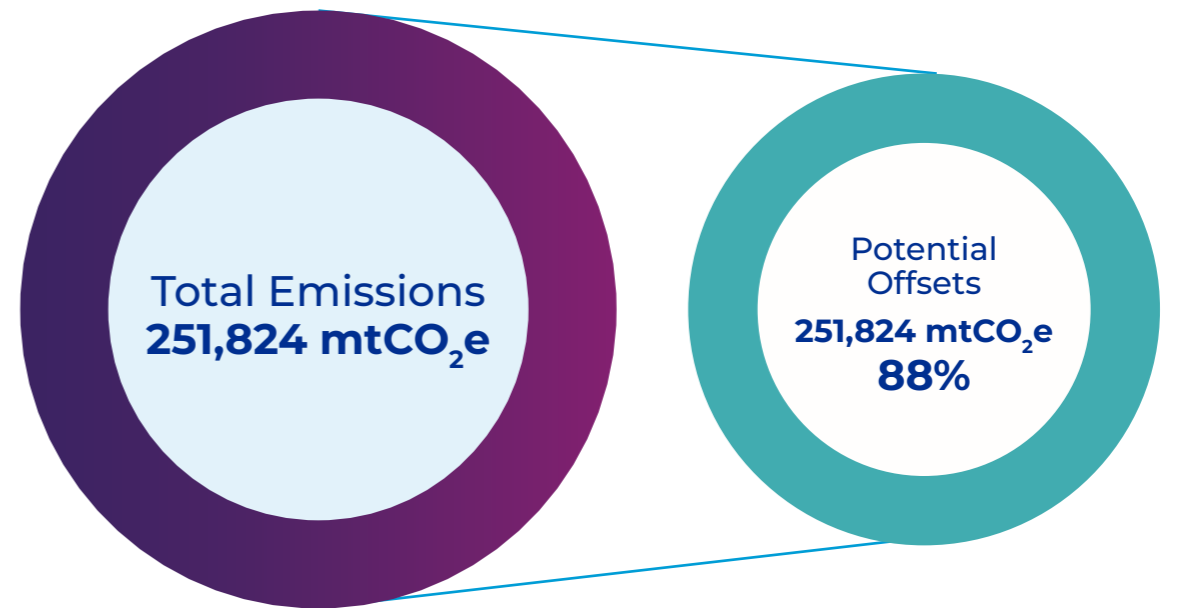
The five assets have an aggregate capacity of 64 MW, with three wind parks; "Aioliki Kilindrias SA" (10MW), "Kallisti Energeiaki SA" (15MW), Aioliki Aderes SA" (35.4 MW), and 2 Small Hydro Power Plants "Hydroelectriki Achaias SA" (2.6MW and 1.0MW) at Kerinitis river. The assets generate enough energy to power approximately 34,000 homes which could offset 102,000 metric tons of CO₂e per year.

- 34k Households** → 34,000 HOUSEHOLDS
- 64 MW** → 64 MW CAPACITY
- 102K CO₂ Saved / Year** → 102,000 TONS OF CO₂ SAVED/ YEAR



Based on the aforementioned data, Elsewedy Electric offset **88%** of its GHG emissions in 2021, and currently, its yearly emissions account for **12% (29,824 mtCO₂e)** of the total emissions.

Elsewedy Electric Potential Carbon Offsetting



LIMITED ASSURANCE STATEMENT

Independent auditors' report on Elsewedy Electric Sustainability Report 2021 To Elsewedy Electric's Board of Directors

We have been appointed to perform a limited assurance engagement on Elsewedy Electric Sustainability Report 2021 for a reporting period covering from the **1st of January, to the 31st of December 2021.**

Quality Assurance Statement

To Elsewedy Electric Board of Directors', We have been appointed by Elsewedy Electric to conduct GHG calculations pertaining to Elsewedy Electric's operational activities for the period from 1st of January 2021 to the 31st of December 2021. The scope covered Elsewedy Electric's operations in 17 factories across the entire business's geographical locations.

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 ISO 14064-1:2019 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 Elsewedy Electric. 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 the Elsewedy Electric's raw data used in the carbon footprint calculations have not been thoroughly collected, verified and truly represent Elsewedy Electric'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 Elsewedy Electric's for the provided assurance and conclusion.

Dr. Abdelhamid Beshara
Founder & Chief Executive Officer

Cairo, November 25th, 2021
MASADER, ENVIRONMENTAL & ENERGY SERVICES
S.A.E CAIRO, September 21st, 2022



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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