CREATING VALUE TOGETHER

CARBON FOOTPRINT REPORT 2020

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Juhayna Food Industries is one of the leading dairy and juice producers in Egypt, a position which we take earnestly. We strive to lead by example and set the pathway for operating the business while taking sustainability into ultimate consideration
01.06.2022

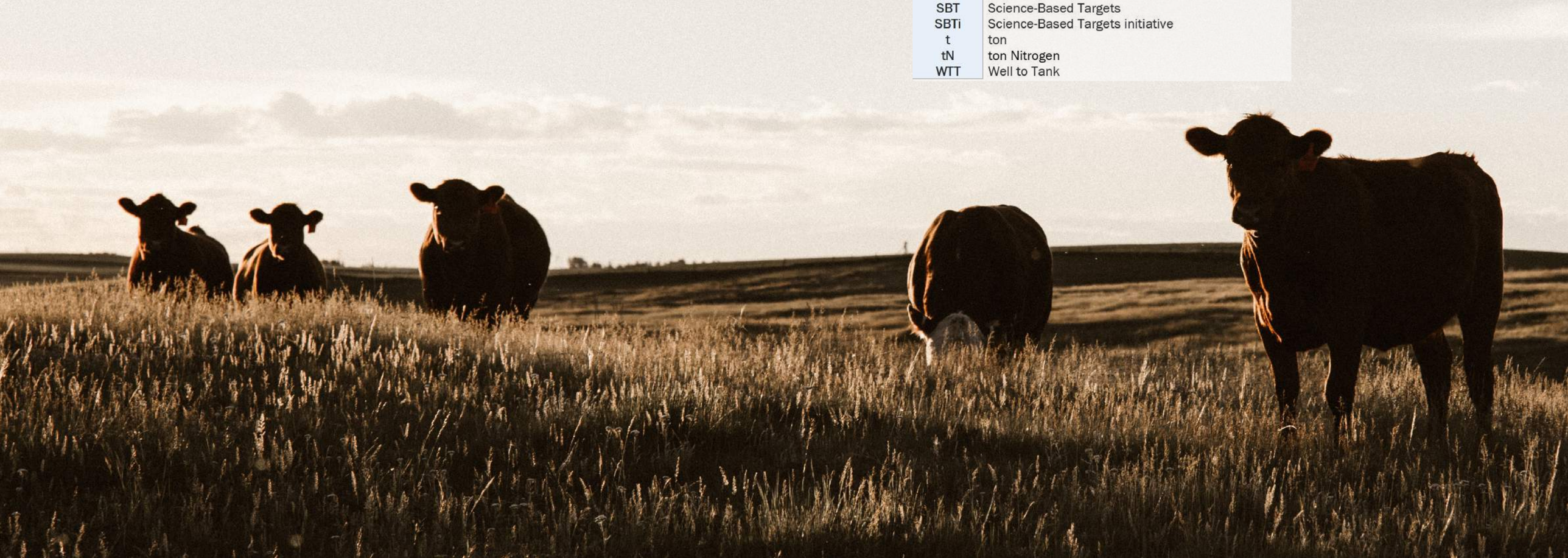
2020

CARBON FOOTPRINT REPORT

WE CAN TOGETHER

ABREVIATIONS & ACRONYMS

AC	Air Conditioner
AFOLU	Agriculture, Forestry, and Other Land Use
BY	Base Year
CDP	Carbon Disclosure Project
CFP	Carbon Footprint
CH_4	Methane
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DEFRA	Department for Environment, Food & Rural Affairs
EBIT	Earnings Before Interests and Taxes
EF	Emission Factor
FMCG	Fast-Moving Consumer Goods
GHG	Greenhouse Gas
GWP	Global Warming Potential
HQ	Headquarters
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standard Organization
kWh	Kilowatt hour
L	Litre
LUC	Land Use Change
m^2	Square meter
m^3	Cubic meter
mt	Metric tons
$mtCO_2e$	Metric tons Carbon Dioxide equivalent
MWh	Megawatt hour
p.km	Passenger kilometre
SBT	Science-Based Targets
SBTi	Science-Based Targets initiative
t	ton
tN	ton Nitrogen
WTT	Well to Tank



EXECUTIVE SUMMARY

Juhayna Food Industries is one of the leading dairy and juice producers in Egypt, a position which we take earnestly. We strive to lead by example and set the pathway for operating the business while taking sustainability into ultimate consideration. The year 2020 has been challenging in many ways, largely due to the pandemic. However, we have been able to keep delivering our products of highest quality in even more flexible ways than before and discovered new ways to sustain our business. Despite the pandemic, we have been able to increase our production compared to the previous year.

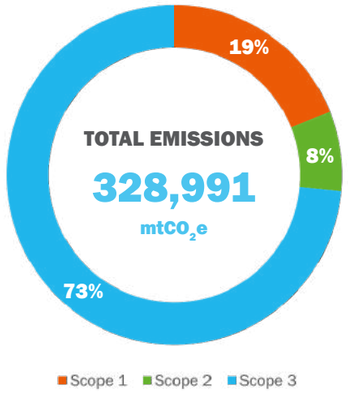
For the second year, we are reporting on the GHG emissions, and this report is presenting our carbon footprint assessment of 2020, reporting period 1st of January to the 31st of December 2020.

Alike last year, we have accounted for all our business lines, starting at the farms, manufacturing, all the way to distribution and headquarters. The calculation methodologies are based on the Greenhouse Gas Protocol (GHG Protocol), the Intergovernmental Panel on Climate Change (IPCC) Guidelines for Greenhouse Gas Inventories, and the report complies with ISO 14064-1:2018 standards. We have assessed our main activities, embracing Scope 1 direct emissions from controlled equipment and assets, Scope 2 emissions from purchased electricity, and selected Scope 3 indirect emissions resulting from our operations.

EMISSION RESULTS

Our carbon footprint and total GHG emissions of our business as of 2020 were 328,991 $mtCO_2e$, including:

- Scope 1: 62,350 $mtCO_2e$
- Scope 2 : 24,957 $mtCO_2e$
- Scope 3: 241,684 $mtCO_2e$

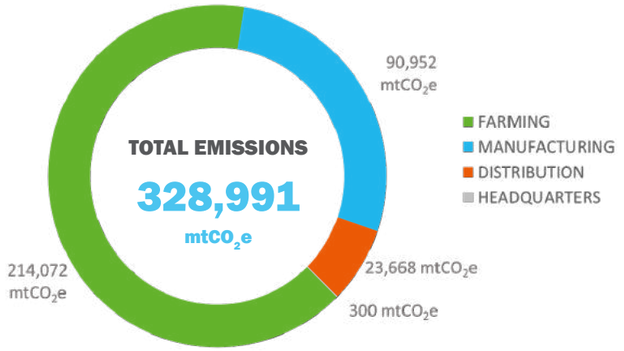


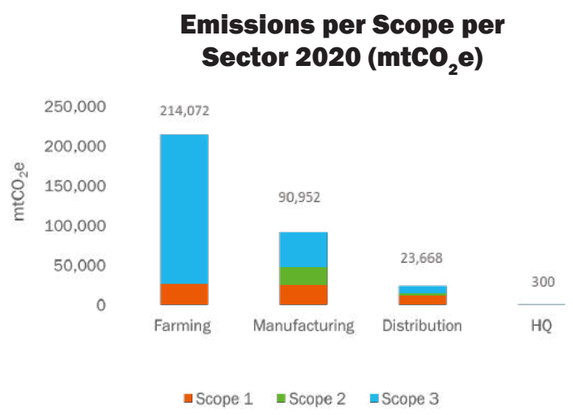
The Biogenic Carbon consisted of CO_2 sequestration from the trees at our farm while the avoided emissions are associated with the usage of our solar PV system at Enmaa Farm.

Biogenic Carbon
553 $mtCO_2e$

Avoided Emissions
465 $mtCO_2e$

SECTOR	EMISSIONS 2019 ($mtCO_2e$)	SHARE (%)	EMISSIONS 2020 ($mtCO_2e$)	SHARE (%)
FARMING	156,878	55.4%	214,072	65.1%
MANUFACTURING	97,848	34.5%	90,952	27.7%
DISTRIBUTION	27,895	9.8%	23,668	7.2%
HQ	623	0.3%	300	0.1%
TOTAL EMISSIONS	**283,245**	**100%**	**328,991**	**100%**





The farming sector, including operations across Juhayna's owned farms and local outsourced farms, have the largest impact on our carbon footprint, **65%** followed by manufacturing with **28%.** Our distribution centers and HQ together account for less than **10%** of our carbon footprint, indicating the need to enhance our farming practices and improving on our manufacturing efficiency further.

BASELINE COMPARISON AND CARBON INTENSITIES

This year, we have also been able to compare our business' performance in relation the base year to assess our progress. No changes in operational and organizational boundaries have been done in comparison to the base year. However, we managed to improve the methodology and data quality related to the accounting of scope 3 emissions resulting from the local outsourced farms, as compared to the previous year. We were able to gather accurate scope 1 and 2 data of over 10% of our local outsourced farms by milk quantity; hence, improving the accuracy of the GHG calculations associated with their operations. We are currently working on engaging all our suppliers and aiming to cover 100% of the farms in later reports.

Operational Boundaries Included in the 2020 carbon footprint assessment compared to the baseline assessment

ORGANIZATIONAL BOUNDARIES	2019 (BY)	2020	INDICATOR
OWNED FARMS	2	2	No change
OUTSOURCED LOCAL FARMS	110	152	38% increase
FACTORIES	4	4	No change
DISTRIBUTION CENTRES	29	29	No change

Juhayna's Carbon Emissions Intensity 2020 (Scope 1 & 2 emissions)

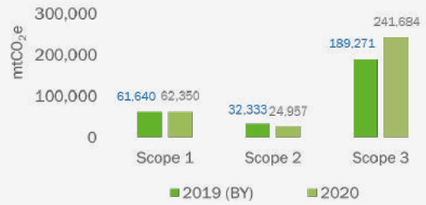
SALES	EBIT*	OUTPUT
11.4 $mtCO_2e$/M.EGP	**99.1** $mtCO_2e$/M.EGP	**0.163** $mtCO_2e$/ton of product
180.1 $mtCO_2e$/M.$	**1,561.6** $mtCO_2e$/M.$	
	* Earnings before Interest and Taxes	

		2019 (BY)	2020	INDICATOR	
EMISSIONS INTENSITY* ($mtCO_2e$/M.EGP)	**REVENUE**	12.3	11.4	-7.2%	Reduction
	EBIT	115.6	99.1	-14.3%	Reduction
EMISSIONS INTENSITY* ($mtCO_2e$/M.$) Per	**REVENUE**	193.2	180.1	-6.8%	Reduction
	EBIT	1,813.9	1,561.6	-13.9%	Reduction
ABSOLUTE EMISSIONS ($mtCO_2e$)	**Scope 1**	61,640	62,350	1.2%	Increase
	Scope 2	32,333	24,957	-22.8%	Reduction
	Scope 1+2	93,973	87,307	-7.1%	Reduction
	Scope 3	189,271	241,684	27.7%	Increase
	Total	**283,245**	**328,991**	**16.2%**	Increase
EMISSIONS INTENSITY ($mtCO_2e$/ton of product)	**Scope 1**	0.118	0.116	-1.2%	Reduction
	Scope 2	0.062	0.047	-24.7%	Reduction
	Scope 1+2	0.179	0.163	-9.3%	Reduction
	Scope 3	0.361	0.451	24.7%	Increase
	Total	**0.720**	**0.776**	**7.8%**	Increase

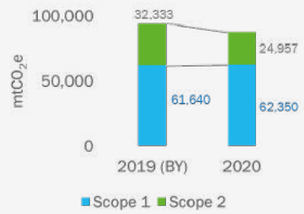
** Scope 1 and 2 emissions*

The emission intensity has reduced in all aspects, both when looking at the revenue, EBIT and output, as well as per million EGP and million USD. The reduction is around **7 percent** for the emissions per revenue and around **14 percent** for the EBIT. As for the metric emissions/ton of product, the reduction is around **9 percent.**

Emissions per Scope and Year ($mtCO_2e$)

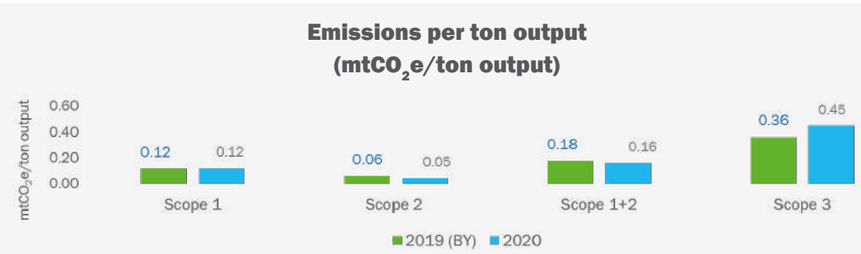


Scope 1 and 2 emissions/ year - ($mtCO_2e$)

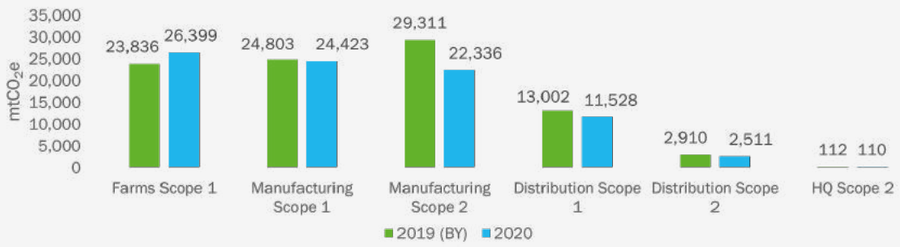


Our total absolute emissions in mtCO2e decreased for Scope 1 and 2, while the absolute Scope 3 emissions increased by around **28 percent.** It is desired to account for all indirect Scope 3 emissions as a result of operating the business. This year, we have strived to collect and include more precise data of our Scope 3 emissions, resulting in an increase in this Scope.

Emissions per ton output ($mtCO_2e$/ton output)



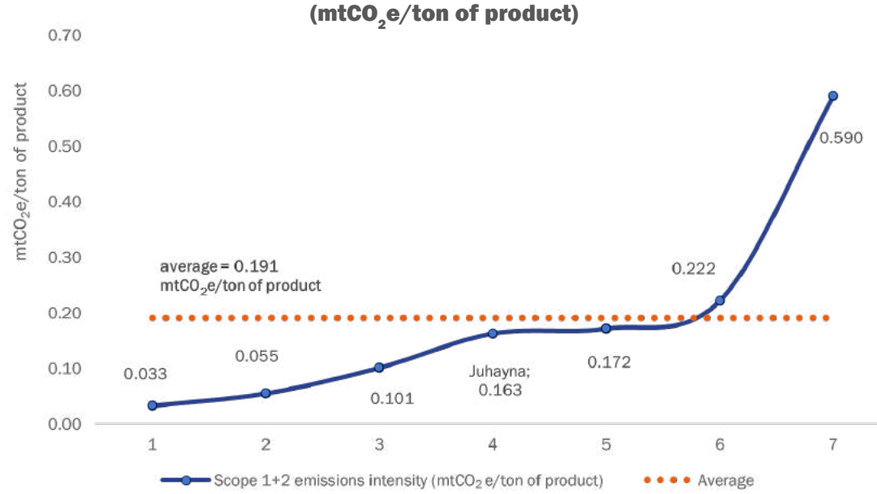
Emissions per scope and sector ($mtCO_2e$)



EXTERNAL BENCHMARKING

We have benchmarked our performance against other dairy companies worldwide. For the external benchmarking, only Scope 1 and 2 emissions are considered, and the businesses are compared as carbon intensity $mtCO_2e$/ton of product. Out of the dairy companies that have been assessed, the lowest value is 0.033 $mtCO_2e$/ton of product, and the highest value is 0.590 $mtCO_2e$/ton of product. Juhayna has an emissions intensity of **0.163** $mtCO_2e$/ton of product, below the average value of **0.191** $mtCO_2e$/ton of product.

External benchmarking for the year 2020 Scope 1 and 2 emissions intensity ($mtCO_2e$/ton of product)



Science-Based targets (SBT), 1.5 degree Scenario

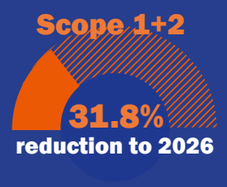
We have also set new targets (Science-Based targets) to reduce our emissions in alignment with the global efforts required to meet a 1.5˚C scenario, to be achieved by 2026. Our target is to reduce total Scope 1 and 2 emissions by 31.8% within this timeframe, where we will follow up, report, and evaluate our progress using these targets.

The details of the set SBT are presented below.

SCIENCE-BASED TARGETS

SBT to be achieved by 2026

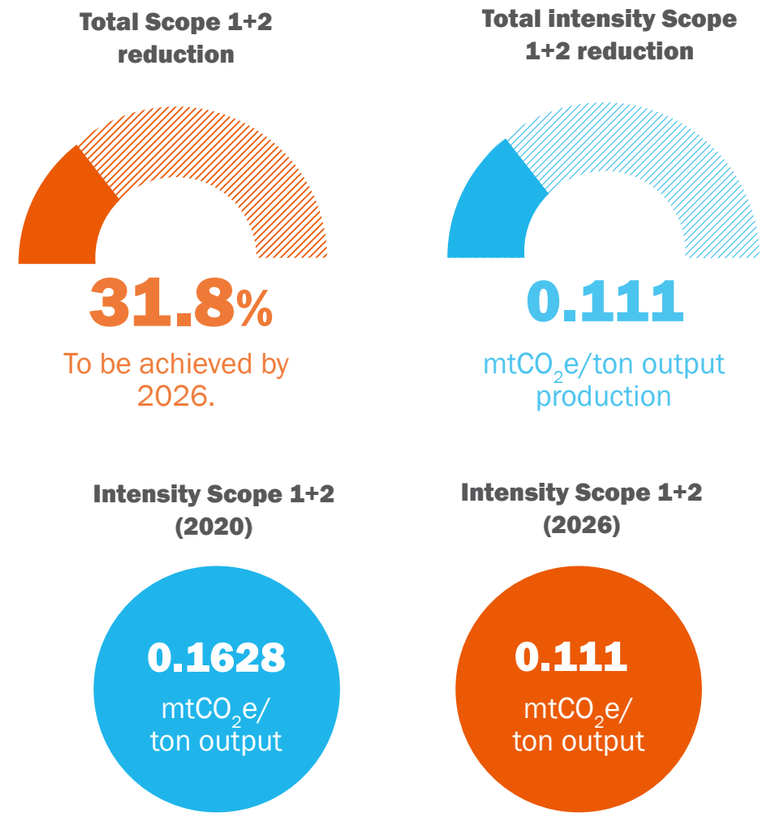
Emissions	Base year 2019 ($mtCO_2e$)	Most recent year 2020 ($mtCO_2e$)	Target year 2026 ($mtCO_2e$)	SBT Reduction (%)
Scope 1	61,640	62,350	43,518	29.4%
Scope 2	32,333	24,957	20,612	36.3%
Scope 1+2	**93,973**	**87,307**	**64,130**	**31.8%**



The table below is indicating the progress of the set targets in alignment with the SBTi.

Absolute Emissions	2019 (BY) ($mtCO_2e$)	2020 ($mtCO_2e$)	SBT Reduction by 2026 (%)	Status of Targets
Scope 1	61,640	62,350	29.4%	0.0% Achieved
Scope 2	32,333	24,957	36.3%	62.8% Achieved
Scope 1+2	**93,973**	**87,307**	**31.8%**	**22.3% Achieved**

JUHAYNA'S OVERALL SBT



DECARBONIZATION PLAN

Moreover, we have studied our environmental performance and set a way forward with a decarbonization plan for our business with different opportunities of investments to manage and decrease our GHG emissions and carbon footprint.

- Energy and water efficiency audit (and management system)
- Waste Management Plan and Operating System
- Supply Chain Decarbonization and Climate Resilience Program
- Green building guidelines
- Climate-related issues incentive program development
- Design, adopt and implement a refrigerant leakage reduction program
- Company fleet vehicle efficiency
- Analysis of Employee Commuting
- ESG Data Management System
- Corporate culture
- Sustainability Policies
- Low-carbon business travel policy

EMISSIONS SUMMARY

19%

8%

73%

	2019	2020
Scope 1. Direct Emissions	**61,641 $mtCO_2e$**	**62,350 $mtCO_2e$**
Livestock	12,248	13,161
Synthetic Fertilizers	4	0.7
On-site Diesel Fuel burning	10,895	13,270
Natural Gas	16,361	15,517
Downstream Transportation (Owned Fleet)	20,296	19,891
Owned Cars	-	61
Refrigerants Leakage	1,148	449
Crop residues	689	-
Scope 2. Indirect Emissions (Purchased Electricity)	**32,333 $mtCO_2e$**	**24,957 $mtCO_2e$**
Total Scope 1 & 2 Emissions	2019: **93,974 $mtCO_2e$**	2020: **87,307 $mtCO_2e$**
Scope 3. Indirect Emissions	**189,271 $mtCO_2e$**	**241,685 $mtCO_2e$**
Upstream Transportation	1,355	302
Employees Commuting	9,174	8,809
Local Farms (all activities)	124,758	180,921
WTT Emissions	12,945	12,245
Water Usage and Wastewater Treatment	392	285
Consumables	100	208
Packaging	34,757	36,942
Solid Waste Disposal	2,899	832
Exports	2,891	1,141
Total Scope 1, 2 & 3 Emissions	2019: **283,245 $mtCO_2e$**	2020: **328,992 $mtCO_2e$**

	2019	2020
Biogenic Carbon	**23,027$mtCO_2e$**	**553 $mtCO_2e$**
Land use Change (LUC)	22,474	-
Planted trees	553	553
Avoided Emissions	**484 $mtCO_2e$**	**465 $mtCO_2e$**
PV Electricity Generated	484	465

The total emissions for Juhayna for the year 2020 are **328,991 mtCO2e**. Compared to Juhayna's emissions for the year 2019, the absolute total emissions have increased by around **16%**. However, Scope 1 and 2 have decreased by **7%.** The highest individual contributor are the local farms **55%**, followed by packing of our products **11%**, purchased electricity **8%** and downstream transportation **6%.** Out of our total carbon footprint, Scope 3 emissions are corresponding to **74%.**

For biogenic carbon, the carbon sequestration by the planted trees at Al-Enmaa Farm amounted to **553 $mtCO_2e$.** The Land use Change of our farms is only calculated once and is therefore not included in this year's Biogenic Carbon. The avoided emissions are owing to our installed PV modules for electricity generation at our dairy farm in Al-Bahariya Oasis, preventing the release of **465 $mtCO_2e$.** Biogenic carbon uptake and avoided emissions from the installation of PV modules do not fall under any of the 3 Scopes and are presented separately in line with the GHG Protocol guidelines.

Absolute Emissions Increased by

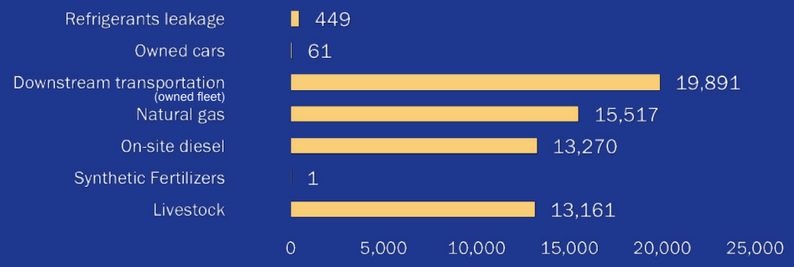
16%

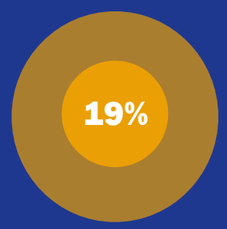
Scope 1 & 2 Emissions decreased by

7%

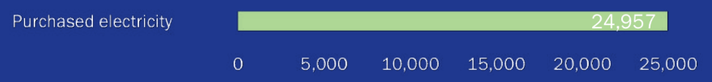
Emissions per Scope and Activity ($mtCO_2e$)

SCOPE 1

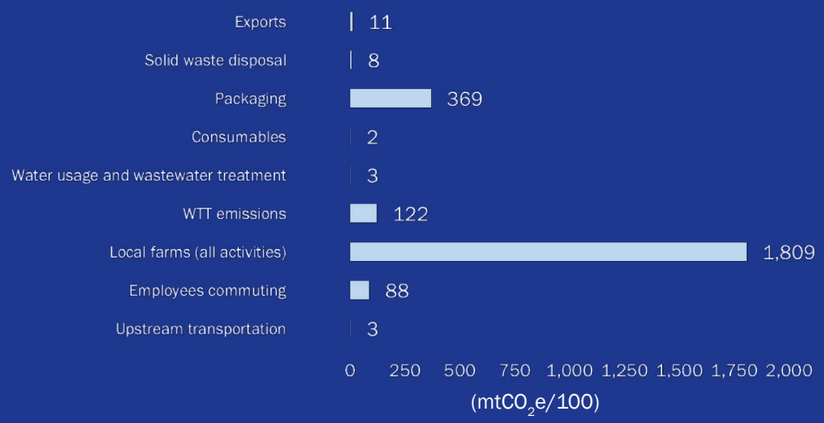


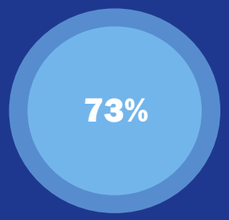


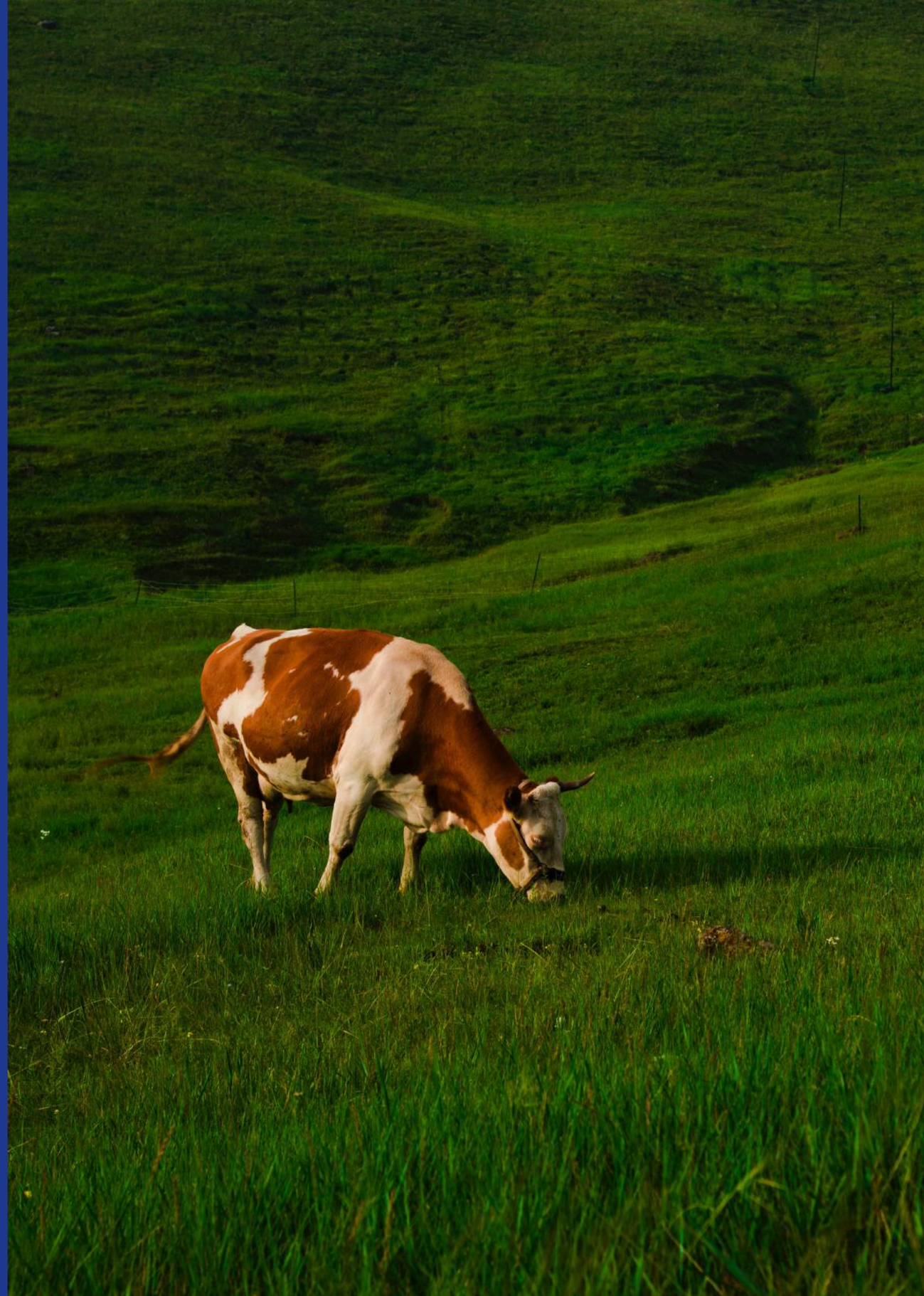
SCOPE 2



SCOPE 3







CARBON FOOTPRINT REPORT 2020

Farming Emission Summary

	2019	2020
Scope 1. Direct Emissions	**23,836 mtCO$_2$e**	**26,399 mtCO$_2$e**
Livestock	12,248	13,161
Synthetic Fertilizers	4	1
On-site Diesel Fuel burning	10,895	13,238
Crop residues	689	-
Scope 3. Indirect Emissions	**133,042 mtCO$_2$e**	**187,672 mtCO$_2$e**
Upstream Transportation	1,355	302
Employees Commuting	3,154	2,639
Local Farms (all activities)	124,758	180,921
WTT Emissions	3,747	3,810
Consumables	0.96	-
Solid Waste Disposal	27	0.2

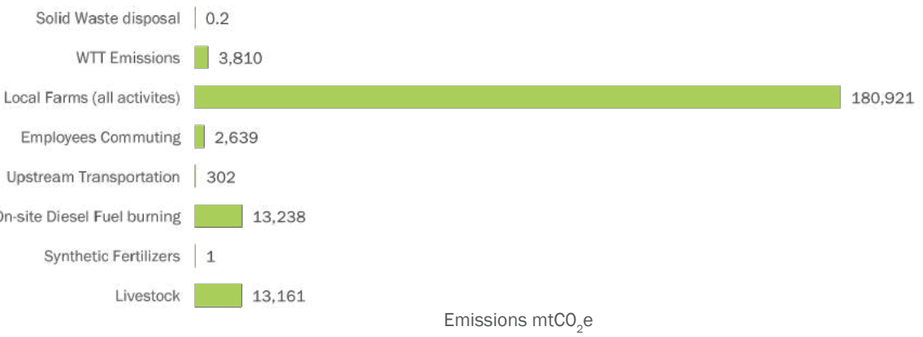
Total Scope 1 & 3 Emissions

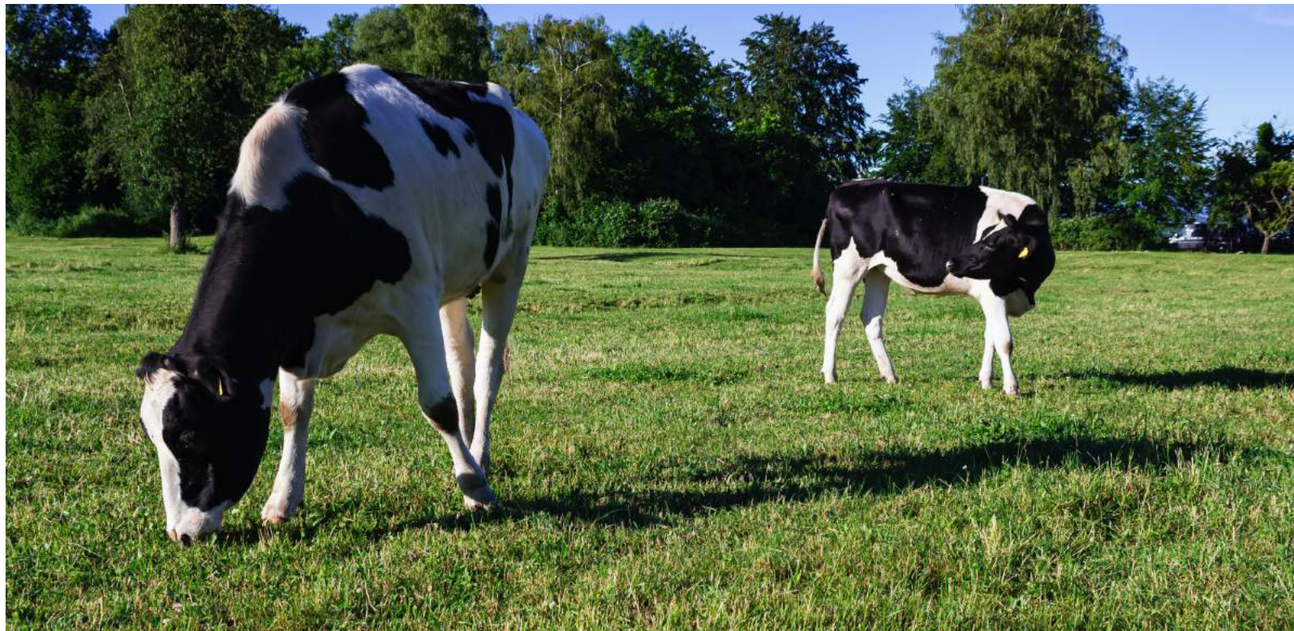
2019	2020
156,878 mtCO$_2$e	**214,071 mtCO$_2$e**

Biogenic Carbon	**23,027 mtCO$_2$e**	**553 mtCO$_2$e**
Land use Change (LUC)	22,474	-
Planted trees	553	553
Avoided Emissions	**484 mtCO$_2$e**	**465 mtCO$_2$e**
PV Electricity Generated	484	465

The farming sector has the highest share from the total emissions with **65%**. Local farms have the highest share of emissions followed by El-Eseila farm. However, the emissions from the local farms falls under Scope 3 (indirect emissions). No crops were planted or harvested during 2020, implying no crop residues. As for the Biogenic Carbon, **553 mtCO$_2$e** are sequestered from planting trees. The Land use Change of our farms is only calculated once and is therefore not included in this year's Biogenic Carbon. Moreover, having a 1MW Solar PV system installed in Al-Bahareya Oasis generated clean energy avoiding **465 mtCO$_2$e.**

Farming Activities Emissions Summary 2020 (mtC0$_2$e)



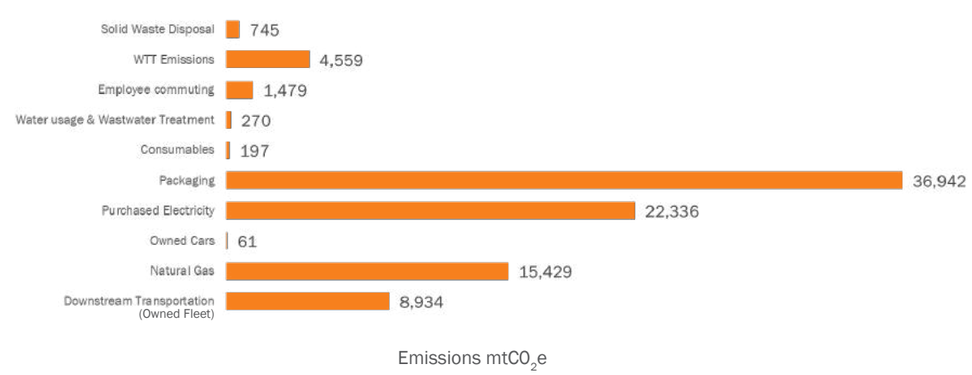


Manufacturing Emission Summary

	2019	2020
Scope 1. Direct Emissions	**24,803 $mtCO_2e$**	**24,423 $mtCO_2e$**
Natural Gas	16,251	15,429
Downstream Transportation (to Tiba) - Owned Fleet	8,552	8,934
Owned Cars	-	61
Scope 2. Indirect Emissions (Purchased Electricity)	**29,311 $mtCO_2e$**	**22,336 $mtCO_2e$**
Total Scope 1 & 2 Emissions	2019: **54,114 $mtCO_2e$**	2020: **46,759 $mtCO_2e$**
Scope 3. Indirect Emissions	**43,734 $mtCO_2e$**	**44,192 $mtCO_2e$**
Employees Commuting	2,523	1,479
WTT Emissions	4,817	4,559
Municipal Water Usage and Wastewater Treatment	373	270
Consumables	55	197
Packaging	34,757	36,942
Solid Waste Disposal	1,208	745
Total Scope 1, 2 & 3 Emissions	2019: **97,848 $mtCO_2e$**	2020: **90,952 $mtCO_2e$**

For the manufacturing sector, the activity with the highest contribution is the products packaging, as indicated for each of the individual plants. The packaging emissions account for around **40%** of the total manufacturing emissions, and **84%** of total Scope 3 emissions. Scope 1 emissions are corresponding to **27%** and Scope 2 emissions to **25%**. Emissions from owned vehicles and downstream transportation from the factories to Tiba were calculated for all the factories together, since the products are delivered from the different factories to the warehouse using the same fleet.

Manufacturing Activities Emissions Summary 2020



Distribution Emission Summary

	2019	2020
Scope 1. Direct Emissions	**13,002 $mtCO_2e$**	**11,528 $mtCO_2e$**
Natural Gas	110	89
Downstream Transportation to Retail - Owned Fleet	11,744	10,958
Refrigerants Leakage	1,148	449
On-site Diesel Fuel burning	-	33
Scope 2. Indirect Emissions (Purchased Electricity)	**2,910 $mtCO_2e$**	**2,511 $mtCO_2e$**
Scope 3. Indirect Emissions	**11,983 $mtCO_2e$**	**9,629 $mtCO_2e$**
Employees Commuting	3,239	4,578
WTT Emissions	4,312	3,846
Municipal Water Usage and Wastewater treatment	11	12
Consumables	23	11
Solid Waste Disposal	1,508	41
Exports	2,891	1,141

Total Scope 1 & 2 Emissions

2019: **15,912 $mtCO_2e$**

2020: **14,039 $mtCO_2e$**

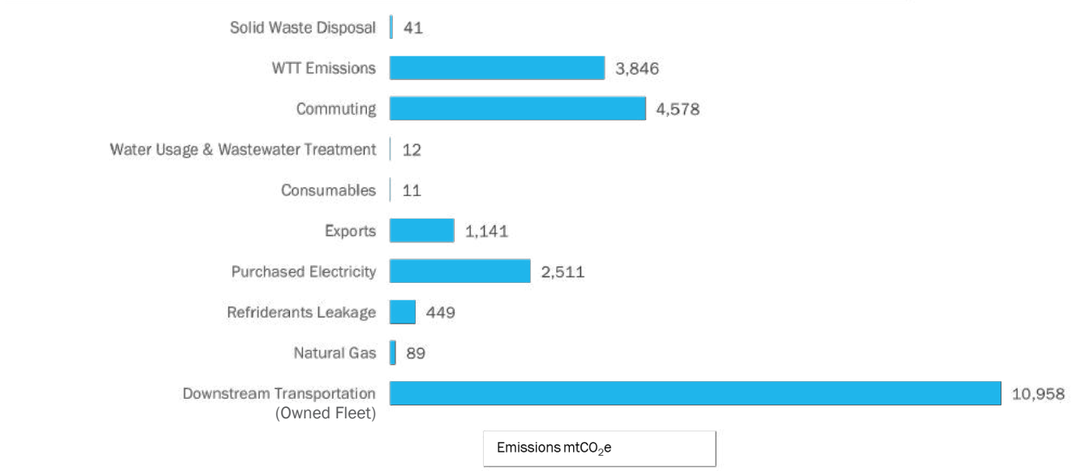
Total Scope 1, 2 & 3 Emissions

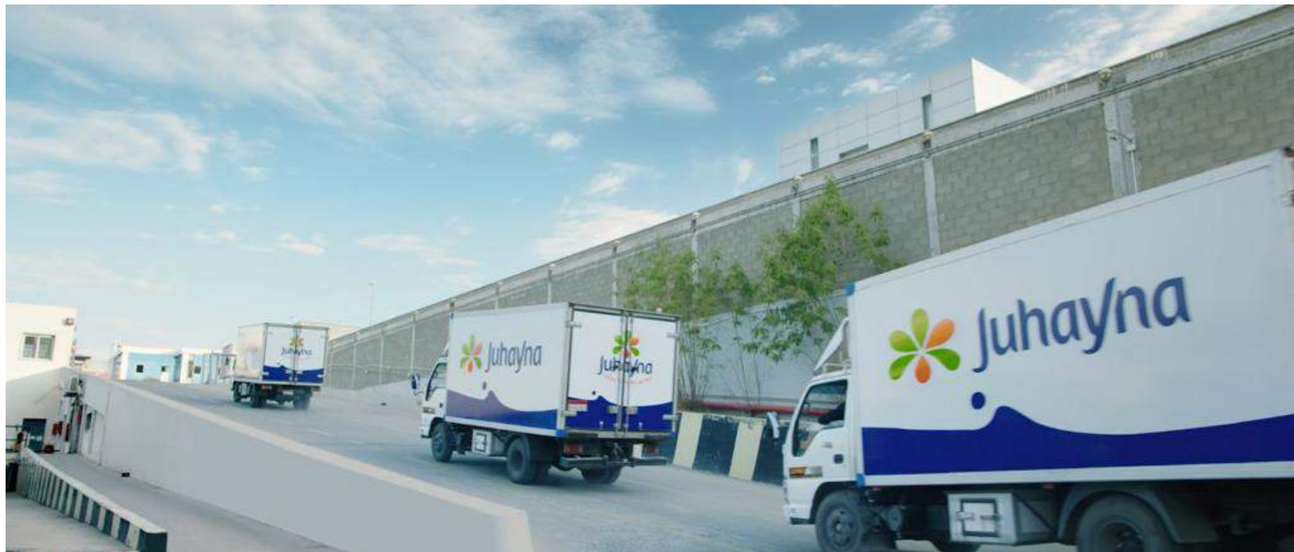
2019: **27,895 $mtCO_2e$**

2020: **23,668 $mtCO_2e$**

The distribution activities are consisting of the downstream transportation from Tiba to the retails as well as the exports, mainly by ocean fleet and a few by land transports. In addition to this, the emissions of the activities of our 29 distribution centres all over the country have been taken into consideration. The downstream transportation is the largest contributor of emissions of the distribution with a share of **46%**. Scope 1 and 2 emissions together are corresponding to **14,039 $mtCO_2e$, 59%.**

Distribution Activities Emissions Summary 2020 ($mtCO_2e$)





Headquarters Emission Summary

	2019	2020
Scope 2. Indirect Emissions (Purchased Electricity)	**112 $mtCO_2e$**	**110 $mtCO_2e$**
Scope 3. Indirect Emissions	**580 $mtCO_2e$**	**190 $mtCO_2e$**
Employees Commuting	326	112
WTT Emissions	69	30
Solid waste disposal	156	45
Municipal water usage & Wastewater Treatment	8	2
Consumables	21	-

Total Scope 2 & 3 Emissions

2019: **692 $mtCO_2e$**

2020: **300 $mtCO_2e$**

The share of Juhayna's HQ emissions is **less than 1%** of the total emissions. This is mainly due to the type of activities performed in the HQ. Comparing the activities in an office to activities performed in a factory or a dairy farm explains why this sector have the lowest contribution. The other sectors activities are more emission intensive than the management sector in any industry and specially the industry of Fast-moving consumer goods (FMCGs).

JUHAYNA'S ENVIRONMENTAL PERFORMANCE AT A GLANCE

Last year, we conducted our very first carbon footprint assessment, setting our baseline metrics. This year, we have been striving to improve our environmental performance and metrics. Another important element of assessing our performance and providing transparency to our stakeholders, is the **Carbon Disclosure Project** (CDP). Last year, we disclosed our Climate Change data on CDP, an international non-profit organization serving the global disclosure system for investors, businesses and cities to manage the environmental impacts. The platform has become more and more well-known, making environmental reporting and risk management a business norm, and enabling insights and action towards a sustainable economy.

SCORE

C

Juhayna Food Industries scored C in CDP's 2021 Climate Change questionnaire. Our submission is available to investor signatories as well as anyone interested to learn more about our environmental performance. We have included our CDP insights in our sustainability work, with a highly dedicated sustainability team working to improve our environmental performance, with several sustainable projects in the pipeline.

By committing to Science-Based targets this year, we are further using international standards to keep up with the global initiatives to sustain our planet. The set targets, in alignment with a 1.5 degrees Scenario is **31.8%** reduction for Scope 1+2 emissions.

31.8%

Scope 1+2 emissions

EMISSIONS
(mtCO2e)

Per Revenue (M.EGP)	Per Revenue (M.$)	Per EBIT (M.EGP)	Per Output (Tons of Product)
11.4	180.1	99.1	0.163
-7.2% compared to 2019	**-6.8%** compared to 2019	**-14.3%** compared to 2019	**-9.3%** compared to 2019

INTRODUCTION

For the second year, we are reporting our GHG emissions, and we are enlightened to share this carbon footprint report of Juhayna Food Industries with you. We have been able to compare our business' performance in relation the base year to assess our progress. We have also set new targets (Science-Based targets) to reduce our emissions in alignment with the global efforts required to meet a 1.5˚C scenario, to be reached by 2026. Moreover, we have studied our environmental performance and set a way forward with a decarbonization plan for our business with different opportunities of investments to manage and decrease our GHG emissions and carbon footprint.

The year has been challenging in many ways, largely due to the pandemic. However, we have been able to keep delivering our products of highest quality in even more flexible ways than before and discovered new ways to sustain our business. Despite the pandemic, we have been able to increase our production compared to the previous year. Furthermore, we continued to enhance our position as a leading Egyptian dairy company with the introduction of Greek Yogurt into our product mix, launched in March 2020.

We have also changed our packaging for yogurt, Rayeb, Zabado, and Mix milk, choosing even more sustainable and durable packaging to preserve the environment and deliver products of highest quality. Moreover, we have commissioned a new production line for fruit concentrates at Al Marwa plant and installed two new lines for the production of Mix at Al Masreya plant to increase the efficiency of our factories. Thereto, we have formed a collaboration with Reform to reuse our business' waste ethically and sustainably.

The pandemic implied several adjustments in our business. Most face-to-face contact was reduced to online meetings, and we introduced a working from home policy for all our employees, with specific emphasis on factory operations and transportation to and from the company's premises. Hygiene and safety of employees and workers have been more important than ever, in all our business starting at the farms to ready-packed products to be delivered to our consumers. Strictly preventive precautions such as PPEs and social distancing have been applied to secure a safe working environment for all our employees and workers in all our business lines, as well as keep delivering products of highest quality. We also increased our presence on online grocery shopping websites and apps, which was particularly beneficial in 2020.

All in all, the year has been challenging but yet prosperous. The year has shed light on our ability to adjust to unpredicted circumstances. We see challenges as a way to grow and take advantage of each situation to find new ways to sustain our business. Not least, we have learnt new ways how to mitigate our environmental impacts while maintaining a leading business performance. The other way round, we have seen its paybacks for our employees and workers.

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 typically choose to disclose either emissions from operations over which they have financial or operational control (the control approach) or from operations based on their equity share in the operation (the equity share approach). Here, the operational control approach is utilised. This included our farms, factories, distribution centres and headquarters.

FARMING	MANUFACTURING	DISTRIBUTION	HEAD QUARTERS
AL FARAFRA	AL MASREYA	28 COUNTRIES	JUHANYA'S HQ
AL ENMAA	AL MARWA	29 CENTERS	
LOCAL FARMS	AL DAWLEYA	136,000 OUTLETS	
	EGYFOODS		

OPERATIONAL BOUNDARIES

This carbon footprint report of 2020 covers emitting activities of Juhayna's business. 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 selected significant indirect emissions resulting from Juhayna's operations.

It is of importance to highlight that in conformance with the GHG Protocol Corporate Standard, the reporting of both direct emissions (Scope 1) and indirect emissions resulting from purchased electricity (Scope 2), are mandatory to report. While emissions falling under Scope 3 are not; these are optional, and companies may choose which emissions to report. However, Scope 3 GHGs are the largest component of most organizations' carbon footprint and are therefore significant to include. For Juhayna Group's 2020 carbon footprint, the most central activities contributing to Scope 3 emissions were included in the calculations. The Biogenic Carbon and avoided emissions of the business have also been accounted for.

SCOPE 1

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

1

SCOPE 2

Indirect GHG emissions from the consumption of purchased electricity, heat, steam or cooling.

2

SCOPE 3

Indirect GHG emissions from other activities. A detailed Standard exists that sets out the rules for 15 categories of Scope 3 emissions. Examples of emissions included in this Scope are outsourced services such as exports, transportation, emissions from waste disposal, etc.

3

BIOGENIC

Emissions related to the natural carbon cycle that originate from biological sources such as plants, trees, and soil, as well as those resulting from the combustion, harvest, digestion, fermentation, decomposition or processing of biologically based materials. This includes CO_2 removals by soils and biomass following afforestation and reforestation.

AVOIDED EMISSIONS

Avoided emissions are emissions that would have been emitted into the atmosphere but are avoided. In Juhayna's case, PVs are utilised to generate electricity, thus avoiding emissions that would otherwise have been generated by using another source for electricity generation.

CALCULATION APPROACH AND METHODOLOGY

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 Protocol Guidelines

which include, but not limited to:

- A Corporate Accounting and Reporting Standard
- Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- GHG Protocol Agricultural Guidance – Interpreting the Corporate Accounting and Reporting Standard for the agricultural sector

ISO 14064-1:2018

Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

2006 Intergovernmental Panel on Climate Change (IPCC)

Guidelines for Greenhouse Gas Inventories (with 2019 Refinements), including specific reference to Volume 4 – Agriculture, Forestry, and Other Land Use (AFOLU)

In alignment with the GHG protocol, the carbon footprint assessment accounted for all seven greenhouse gases covered by the Kyoto protocol: namely carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3).

GREENHOUSE GAS	CHEMICAL FORMULA	100Y-YEAR GWP
Carbon dioxide	CO_2	1
Methane	CH_4	27
Nitrous oxide	N_2O	273
Hydrofluorocarbons	HFCs	Various
Perfluorocarbons	PFCs	Various
Sulfur hexafluoride	SF_6	25,200
Nitrogen trifluoride	NF_3	17,400

All activities related to the business have been identified with their corresponding emissions accounted for. Activity data of 2020 was retrieved from the data recordings and all data has been reviewed and refined.

The general formula could be applied for each activity to obtain its emissions. The unit of the GHG emissions is metric tons carbon dioxide equivalent ($mtCO_2e$). The unit CO_2e refers to an amount of a GHG, whose atmospheric impact has been standardized to that one-unit mass of carbon dioxide (CO_2), based on the global warming potential (GWP) of the gas.

The general calculation approach for the emissions, counted in $mtCO_2e$, 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 $mtCO_2e$. The general formula for calculating the emissions for each activity is according to the below equation.

GHG emissions, E [$mtCO_2e$] = Activity, A [unit] x Emission Factor, EF [$mtCO_2e$/unit]

REPORTING PERIOD

The reporting period covers from the **1st of January 2020** to the **31st of December 2020**. The year 2019 is the base-year to which all the activities in the upcoming years are compared to and referenced.

CFP RESULTS


Juhayna
GREEK
STRAWBERRY YOGURT
12G PROTEIN
LOW FAT
LOW SUGAR
Juhayna
GREEK
PEACH YOGURT
12G PROTEIN
LOW FAT
LOW SUGAR
Juhayna
GREEK
MIXED BERRIES YOGURT
12G PROTEIN
LOW FAT
LOW SUGAR
Juhayna
GREEK
FRENCH VANILLA BEAN YOGURT
12G PROTEIN
LOW FAT
LOW SUGAR
Juhayna
GREEK
PASSION FRUIT
DRINKABLE YOGURT
15G PROTEIN
NO ADDED SUGAR
Juhayna
GREEK
MIX BERRIES OATS
DRINKABLE YOGURT
15G PROTEIN
NO ADDED SUGAR

FARMING SECTOR

The farming sector constitutes of the two farms owned by Juhayna and the local farms where Juhayna outsources its milk from: El-Eseila, Al-Farafra and the local farms.

EL-ESEILA FARM

AL-FARAFRA FARM

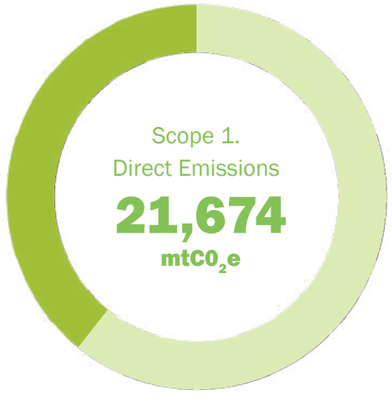
LOCAL FARMS

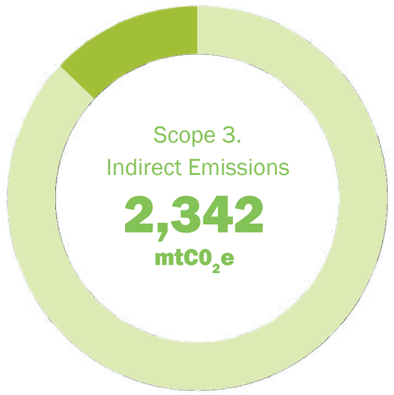
65%

This sector is the main contributor to the GHG emissions with a share of 65% of the total emissions.

EL-ESEILA FARM ACTIVITIES

Al-Enmaa Livestock Company: Specializes in building dairy farms and owns 550 feddans in the Bahareya Oasis (El-Eseila). El-Eseila farm is a fully owned dairy farm that has the capacity to house 7,000 milking cows covering a sizeable portion of the company's raw milk needs.





- Live Stock = 13,161 $mtCO_2e$
- Diesel Fuel Burning = 8,513 $mtCO_2e$

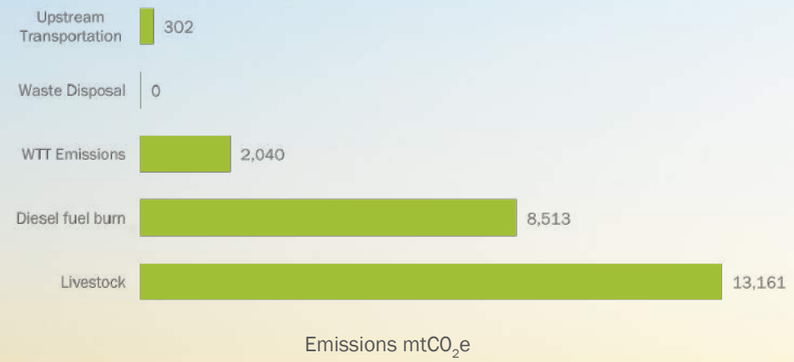
- Upstream Transportation = 302 $mtCO_2e$
- WTT Emissions = 2040 $mtCO_2e$
- Solid Waste Disposal =0.2 $mtCO_2e$

Total Scope 1 & 3 emissions
24,017
$mtCO_2e$

Avoided emissions (PV Electricity Generated)
465
$mtCO_2e$

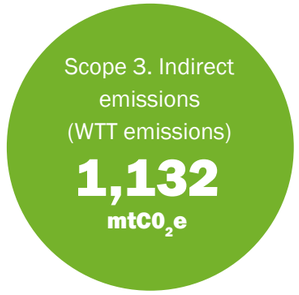
No crops were planted in 2020; thus, no emissions related to crop residue or fertilizer usage. The highest emissions share is from the Livestock emissions; around **55%** form the total farm emissions.

El-Eseila Farm Activities Emissions 2020 ($mtCO_2e$)

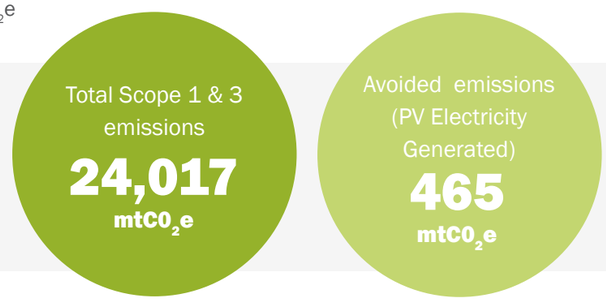


Al-FARAFRA FARM ACTIVITIES

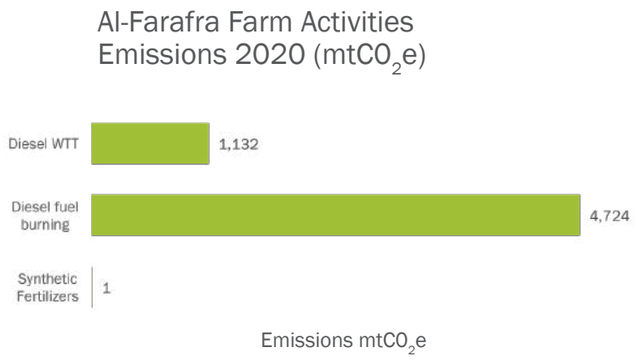
Al-Enmaa Company for Agriculture Cultivation: Specializes in planting and cultivating fruits and various crops. It covers 7,450 feddans of land in the Farafra Oasis.



- Diesel Fuel Burning = 4,724 $mtCO_2e$
- Synthetic Fertilizers = 1 $mtCO_2e$



No annual crops were planted in 2020, only orange trees (perennial crop) for which fertilizer usage emissions were accounted for. The emissions from Al-Farafra are from diesel fuel burning which constitutes almost all the emissions.

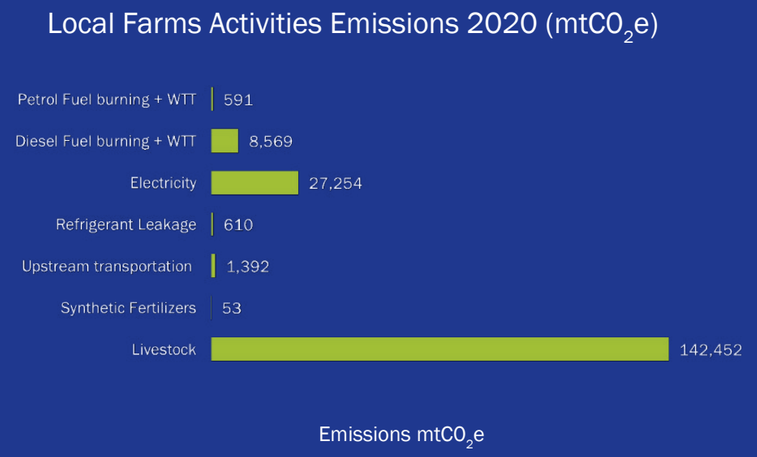


LOCAL FARMS ACTIVITIES

Juhayna works with 152 hand-picked local farms to guarantee a supply of top-quality raw milk.

- Livestock = 142,452 $mtCO_2e$
- Energy = 27,254 $mtCO_2e$
- Petrol (Fuel burning + WTT) = 591 $mtCO_2e$
- Diesel (Fuel burning + WTT) = 8,569 $mtCO_2e$
- Refrigerants Leakage = 610 $mtCO_2e$
- Upstream Transportation = 1,392 $mtCO_2e$
- Synthetic Fertilizers = 53 $mtCO_2e$

The emissions from the local farms have the highest share from the total emissions which is equal to around **55%** of Juhayna's total emissions. The main activity with the highest contribution is the livestock. Emissions from the livestock is **78%** of the local farms emissions, **67%** of the total farming sector, **59%** of total Scope 3 emissions, and **43%** of Juhayna's total emissions.



FARMING EMISSION SUMMARY

	2019	2020
Scope 1. Direct Emissions	**23,836 $mtCO_2e$**	**26,399 $mtCO_2e$**
Livestock	12,248	13,161
Synthetic Fertilizers	4	1
On-site Diesel Fuel burning	10,895	13,238
Crop residues	689	-
Scope 3. Indirect Emissions	**133,042 $mtCO_2e$**	**187,672 $mtCO_2e$**
Upstream Transportation	1,355	302
Employees Commuting	3,154	2,639
Local Farms (all activities)	124,758	180,921
WTT Emissions	3,747	3,810
Consumables	0.96	-
Solid Waste Disposal	27	0.2

Total Scope 1 & 3 Emissions

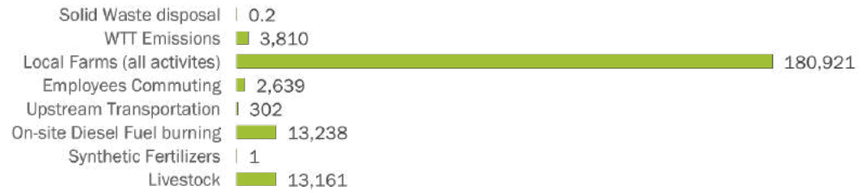
2019: **156,878 $mtCO_2e$**

2020: **214,071 $mtCO_2e$**

Biogenic Carbon	**23,027 $mtCO_2e$**	**553 $mtCO_2e$**
Land use Change (LUC)	22,474	-
Planted trees	553	553
Avoided Emissions	**484 $mtCO_2e$**	**465 $mtCO_2e$**
PV Electricity Generated	484	465

The farming sector has the highest share from the total emissions with **65%**. Local farms have the highest share of emissions followed by El-Eseila farm. However, the emissions from the local farms falls under Scope 3 (indirect emissions). No crops were planted or harvested during 2020, implying no crop residues. As for the Biogenic Carbon, **553 $mtCO_2e$** are sequestered from planting trees. The Land use Change of our farms is only calculated once and is therefore not included in this year's Biogenic Carbon. Moreover, having a 1MW Solar PV system installed in Al-Bahareya Oasis generated clean energy avoiding **465 $mtCO_2e$.**

Farming Activities Emissions Summary 2020 ($mtCO_2e$)



Farming Total Absolute Emissions per Farm 2020 ($mtCO_2e$)


Walaa mohamed ali

MANUFACTURING

We have 4 factories, all of them located at 6th of October City, with facilities of highest standards to produce and pack our products. The production mix is varying from milk and dairy products such as Zabado and Rayeb, as well as our newly introduced Greek Yogurt. We continuously improve the efficiency of the manufacturing. Moreover, we have commissioned a new production line for fruit concentrates at Al Marwa plant and installed two new lines for the production of Mix at Al Masreya plant to increase the efficiency of our factories.

EGYFOODS

The facilities of EgyFoods are 36,000 m^2, embracing 215 employees and 60 workers, with 4,350 yearly visitors of the factory. The plant manufactures dairy products, mainly yogurts and yogurt drinks including Rayeb and Zabado. A number of certificates has been earned by the factory, including FSSC 22000 and OHSAS 18001. EgyFoods has, along with the other factories of Juhayna, also earned the ISO 14001 certificate for applying integrated resources management systems.

Egyfoods Manufacturing Activities Emissions 2020 ($mtCO_2e$)

Scope 1.
Direct Emissions
(Natural Gas)
3,140
$mtCO_2e$

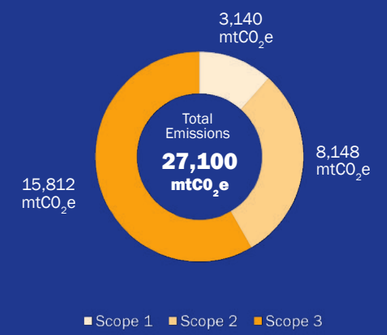
Scope2.
Indirect Emissions
(Purchased Electricity)
8,148
$mtCO_2e$

Total Scope 1 & 2 Emissions = 11,288 $mtCO_2e$

Scope 3. Indirect Emissions	**15,812 $mtCO_2e$**
WTT Emissions	489
Municipal Water Usage & Wastewater Treatment	61
Solid Waste Disposal	207
Consumables	4
Packaging	14,748
Employee commuting	303

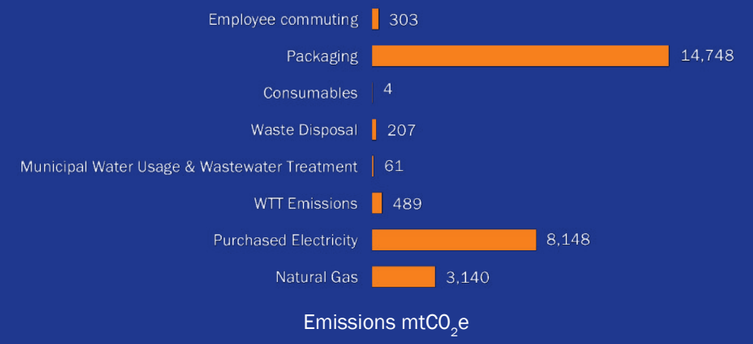
Total Scope 1, 2 & 3 Emissions = 27,100 $mtCO_2e$

Egyfoods Emissions per Scope 2020 ($mtCO_2e$)



EgyFoods is our second largest contributor of emissions among our factories, corresponding to **27,100 $mtCO_2e$, 30%** of the factories' emissions. The highest share of emissions is packaging, with **14,748 $mtCO_2e$, 54%** of EgyFoods' carbon footprint, followed by the purchased electricity of **8,148 $mtCO_2e$, 30%** of the emissions of the plant.

Egyfoods Manufacturing Activities Emissions, 2020 ($mtCO_2e$)



AL-DAWLEYA

Al-Dawleya with its 55,000 m^2 is one of the largest industrial manufacturing facilities in Egypt and the MENA region. The factory comprises 216 employees and 150 workers, with around 9,000 yearly visitors. The plant is producing and packaging fresh juices and drinks, including Juhayna Classics, Pure and Bekhero and is fully automated. The factory holds a number of certificates including FSSC 22000, ISO- 14001, OHSAS 18001 and ISO-50001.

Al-Dawleya Manufacturing Activities Emissions, 2020 ($mtCO_2e$)

Scope 1.
Direct Emissions
(Natural Gas)
2,036
$mtCO_2e$

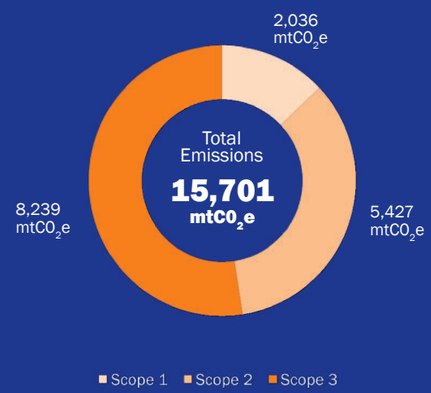
Scope2.
Indirect Emissions
(Purchased Electricity)
5,427
$mtCO_2e$

Total Scope 1 & 2 Emissions = 7,463 $mtCO_2e$

Scope 3. Indirect Emissions	**8,239 $mtCO_2e$**
WTT Emissions	399
Municipal Water Usage & Wastewater Treatment	71
Solid Waste Disposal	207
Consumables	16
Packaging	7,046
Employee commuting	500

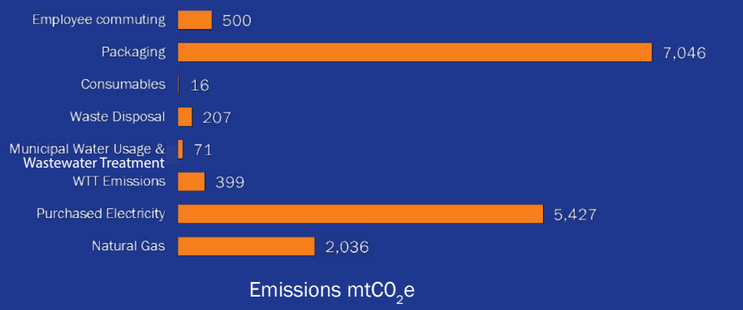
Total Scope 1, 2 & 3 Emissions = 15,701 $mtCO_2e$

Al-Dawleya Emissions per Scope 2020 ($mtCO_2e$)



Al-Dawleya is only corresponding for **17%** of the emissions of the factories, even though it is one of the largest plants due to its high efficiency. Alike the rest of the factories, packaging is contributing to the largest share of the carbon footprint of Al-Dawleya with **7,046** $mtCO_2e$, **45%** followed by the purchased electricity **5,427 $mtCO_2e$, 35%.** Scope 1 emissions, natural gas is corresponding to **2,036 $mtCO_2e$, 13%.**

Al-Dawleya Manufacturing Activities Emissions, 2020 ($mtCO_2e$)



AL-MARWA

Al-Marwa is one of long-standing factories, consisting of 17,000 m^2 and engaging 55 employees and 131 workers, with 8,950 yearly visitors. The plant specializes in the production of fruit concentrates and pulps including mango, guava, strawberry, peach, apricot, apple, and concentrated carrot that are used for both internal and domestic consumption, as well as exports. The factory is semi-automated and has earned certificates such as SSC 2200 Food Safety System Certificate, as well as ISO 14001/2007 which is granted for applying integrated resources management systems.

Al-Marwa Manufacturing Activities Emissions 2020 ($mtCO_2e$)

Scope 1.
Direct Emissions
(Natural Gas)
4,659
$mtCO_2e$

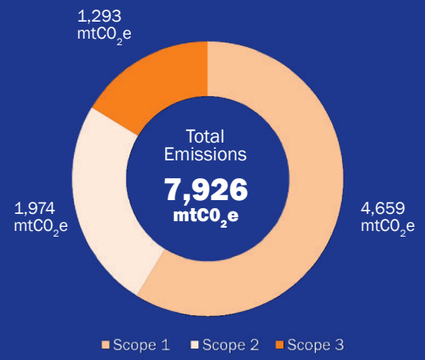
Scope2.
Indirect Emissions
(Purchased Electricity)
1,974
$mtCO_2e$

Total Scope 1 & 2 Emissions = 6,632 $mtCO_2e$

Scope 3. Indirect Emissions	**1,293 $mtCO_2e$**
WTT Emissions	694
Municipal Water Usage & Wastewater Treatment	41
Solid Waste Disposal	58
Consumables	171
Employee commuting	329

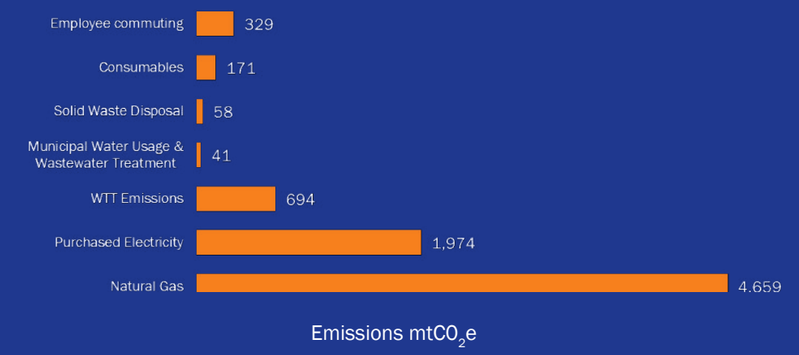
Total Scope 1, 2 & 3 Emissions = 7,926 $mtCO_2e$

Al-Marwa Emissions per Scope 2020 ($mtCO_2e$)



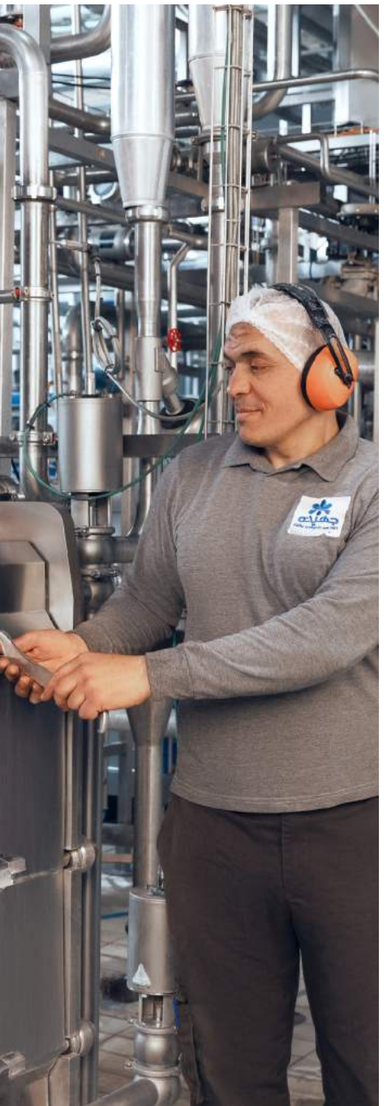
As previously mentioned, this plant is producing juice concentrates. Therefore, no packaging is needed for the output of Al-Marwa, since the large tanks of concentrates are being reused. The highest contribution is the natural gas emissions with a share of **59%** of the plant's total emissions, followed by purchased electricity **1,974 $mtCO_2e$** with a share of **25%.**

Al-Marwa Manufacturing Activities Emissions, 2020 ($mtCO_2e$)



AL-MASREYA

Al-Masreya's facilities are comprising 24,570 m^2 with a total of 296 employees and 50 workers, with around 3,580 visitors. The factory utilizes advanced technologies to produce different milk products. Among the certificates which the factory holds are ISO: FSSC 22000, ISO 14001 and OHSAS 18001.



Al-Masreya Manufacturing Activities Emissions, 2020 ($mtCO_2e$)

Scope 1.
Direct Emissions
(Natural Gas)
5,594
$mtCO_2e$

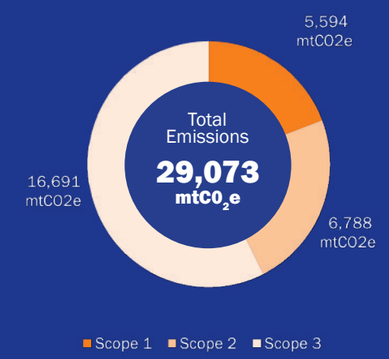
Scope2.
Indirect Emissions
(Purchased Electricity)
6,788
$mtCO_2e$

Total Scope 1 & 2 Emissions = 12,382 $mtCO_2e$

Scope 3. Indirect Emissions	**16,691 $mtCO_2e$**
WTT Emissions	820
Municipal Water Usage & Wastewater Treatment	98
Solid Waste Disposal	273
Consumables	5
Packaging	15,148
Employee commuting	347

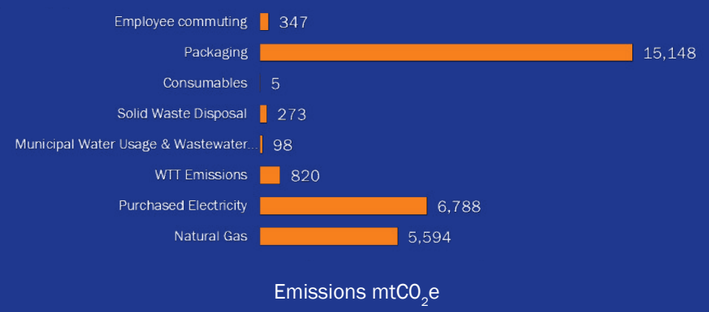
Total Scope 1, 2 & 3 Emissions = 29,073 $mtCO_2e$

Al-Masreya Emissions per Scope 2020 ($mtCO_2e$)



Al-Masreya is the plant with highest contribution to the manufacturing emissions with a share of **32%.** Yet, the plant has a high output production and is the most efficient plant at Juhayna. The largest contribution is from packaging **52%** followed by purchased electricity **23%** (Scope 2 emissions) and natural gas **19%** (Scope 1 emissions).

Al-Dawleya Manufacturing Activities Emissions, 2020 ($mtCO_2e$)



MANUFACTURING EMISSIONS SUMMARY

	2019	2020
Scope 1. Direct Emissions	**24,803 $mtCO_2e$**	**24,423 $mtCO_2e$**
Natural Gas	16,251	15,429
Downstream Transportation (to Tiba) - Owned Fleet	8,552	8,934
Owned Cars	-	61
Scope 2. Indirect Emissions (Purchased Electricity)	**29,311 $mtCO_2e$**	**22,336 $mtCO_2e$**

Total Scope 1 & 2 Emissions

2019: **54,114 $mtCO_2e$**

2020: **46,759 $mtCO_2e$**

Scope 3. Indirect Emissions	**43,734 $mtCO_2e$**	**44,192 $mtCO_2e$**
Employees Commuting	2,523	1,479
WTT Emissions	4,817	4,559
Municipal Water Usage and Wastewater Treatment	373	270
Consumables	55	197
Packaging	34,757	36,942
Solid Waste Disposal	1,208	745

Total Scope 1, 2 & 3 Emissions

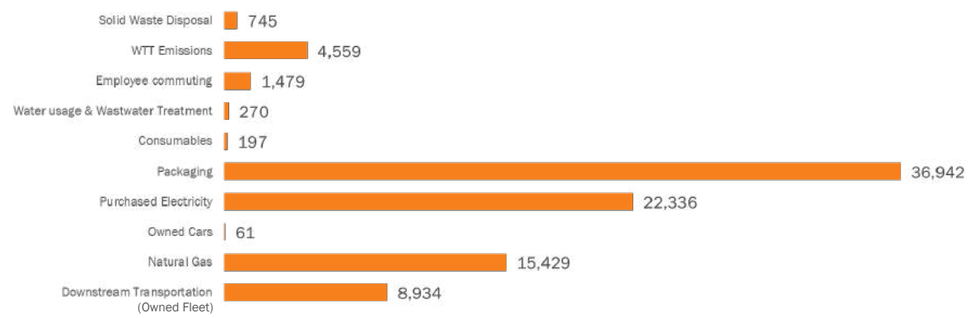
2019: **97,848 $mtCO_2e$**

2020: **90,952 $mtCO_2e$**

Emissions from owned vehicles and downstream transportation from the factories to Tiba (Juhayna's distribution arm) were calculated for all the factories together. The products are delivered from the different factories to the warehouse using the same fleet. Therefore, data for each factory's separate transportation wasn't available.

For the manufacturing sector, the activity with the highest contribution is the products packaging, as indicated for each of the individual plants. The packaging emissions are corresponding to around **40%** of the total manufacturing emissions, and **84%** of Scope 3 emissions. Scope 1 emissions are corresponding to **27%** and Scope 2 emissions to **25%.**

Manufacturing Activities Emissions Summary 2020 ($mtCO_2e$)



Manufacturing Total Emissions per Factory, 2020 ($mtCO_2e$)

DISTRIBUTION CENTERS

TIBA for Trade and Distribution is the main distribution network of Juhayna and is one of the largest distribution fleets in the Egyptian food and beverage industry. Juhayna established TIBA for trade and distribution 2005 as part of the vertical integration of our Supply Chain. TIBA comprises around 1,000 vehicles, transporting both refrigerated and non-refrigerated products, in addition to 29 distribution centres all over the country that reaches 136,000 retail outlets. During the year, a total of 13,205 tons of products were exported to 28 countries, 26 by ocean fleets and 2 by land exports.

DISTRIBUTION EMISSION SUMMARY

	2019	2020
Scope 1. Direct Emissions	**13,002 mtCO$_2$e**	**11,528 mtCO$_2$e**
Natural Gas	110	89
Downstream Transportation to Retail - Owned Fleet	11,744	10,958
Refrigerants Leakage	1,148	449
On-site Diesel Fuel burning	-	33
Scope 2. Indirect Emissions (Purchased Electricity)	**2,910 mtCO$_2$e**	**2,511 mtCO$_2$e**
Scope 3. Indirect Emissions	**11,983 mtCO$_2$e**	**9,629 mtCO$_2$e**
Employees Commuting	3,239	4,578
WTT Emissions	4,312	3,846
Municipal Water Usage and Wastewater treatment	11	12
Consumables	23	11
Solid Waste Disposal	1,508	41
Exports	2,891	1,141

Total Scope 1 & 2 Emissions

2019: **15,912 mtCO$_2$e**

2020: **14,039 mtCO$_2$e**

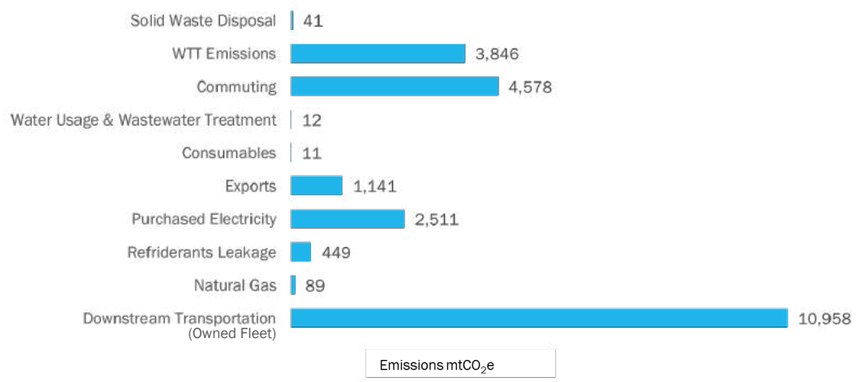
Total Scope 1, 2 & 3 Emissions

2019: **27,895 mtCO$_2$e**

2020: **23,668 mtCO$_2$e**

The distribution activities are consisting of the downstream transportation from Tiba to the retails as well as the exports, mainly by ocean fleet and a few by land transports. In addition to this, the emissions of the activities of our 29 distribution centres all over the country have been taken into consideration. The downstream transportation is the largest contributor of emissions of the distribution with a share of 46%. Scope 1 and 2 emissions together are corresponding to 14,039 mtCO$_2$e, 59%.

Distribution Activities Emissions Summary 2020 (mtCO$_2$e)



HEADQUARTERS

Juhayna's headquarters is located in Sodic – Elsheikh Zayed. The area of the headquarters is around 6,670 m. The number of employees is 113 and the number of visitors for the year 2020 is 4,763.

HEADQUARTERS ACTIVITIES EMISSIONS 2020 ($mtCO_2e$)

	2019	2020
Scope 2. Indirect Emissions (Purchased Electricity)	**112 $mtCO_2e$**	**110 $mtCO_2e$**
Scope 3. Indirect Emissions	**580 $mtCO_2e$**	**190 $mtCO_2e$**
Employees Commuting	326	112
WTT Emissions	69	30
Solid waste disposal	156	45
Municipal water usage & Wastewater Treatment	8	2
Consumables	21	-

Total Scope 2 & 3 Emissions

2019: **692 $mtCO_2e$**

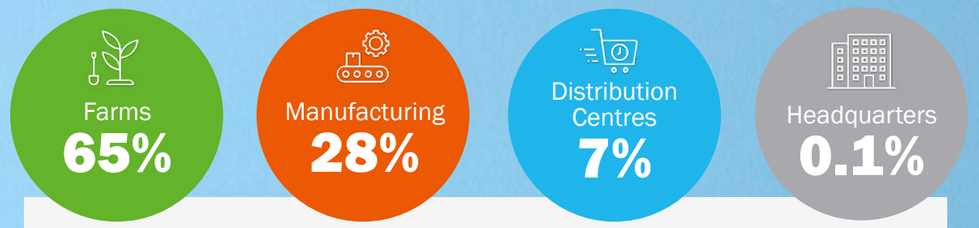
2020: **300 $mtCO_2e$**

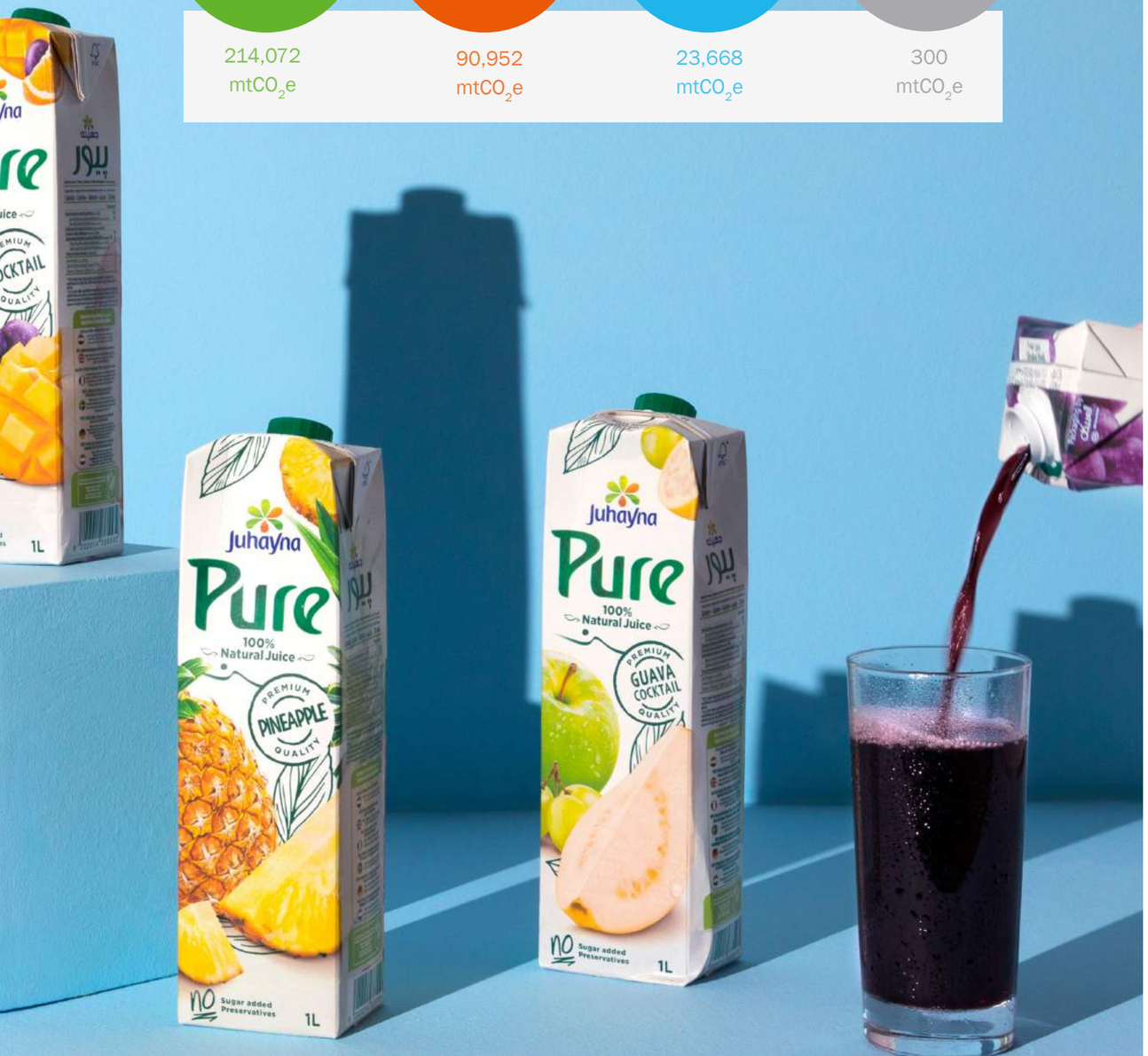
The share of Juhayna's HQ emissions is **less than 1%** of the total emissions. This is mainly due to the type of activities performed in the HQ. Comparing the activities in an office to activities performed in a factory or a dairy farm explains why this sector have the lowest contribution. The other sectors activities are more emission intensive than the management sector in any industry and specially the industry of Fast-moving consumer goods (FMCGs).

CFP RESULTS SUMMARY

Below the CFP 2020 results for each section of Juhayna Food Industries are presented, with detailed data as well as a summary for each of the sections.

Our total carbon footprint as distributed per operational boundaries includes:





TOTAL EMISSIONS

	2019	2020
Scope 1. Direct Emissions	**61,641 $mtCO_2e$**	**62,350 $mtCO_2e$**
Livestock	12,248	13,161
Synthetic Fertilizers	4	0.7
On-site Diesel Fuel burning	10,895	13,270
Natural Gas	16,361	15,517
Downstream Transportation (Owned Fleet)	20,296	19,891
Owned Cars	-	61
Refrigerants Leakage	1,148	449
Crop residues	689	-
Scope 2. Indirect Emissions (Purchased Electricity)	**32,333 $mtCO_2e$**	**24,957 $mtCO_2e$**
Total Scope 1 & 2 Emissions	2019 **93,974 $mtCO_2e$**	2020 **87,307 $mtCO_2e$**
Scope 3. Indirect Emissions	**189,271 $mtCO_2e$**	**241,685 $mtCO_2e$**
Upstream Transportation	1,355	302
Employees Commuting	9,174	8,809
Local Farms (all activities)	124,758	180,921
WTT Emissions	12,945	12,245
Water Usage and Wastewater Treatment	392	285
Consumables	100	208
Packaging	34,757	36,942
Solid Waste Disposal	2,899	832
Exports	2,891	1,141
Total Scope 1, 2 & 3 Emissions	2019 **283,245 $mtCO_2e$**	2020 **328,992 $mtCO_2e$**

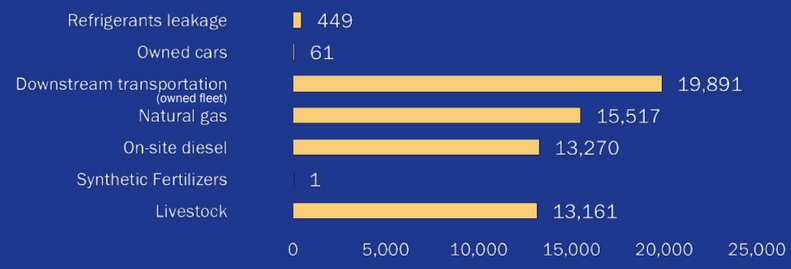
	2019	2020
Biogenic Carbon	**23,027mtCO$_2$e**	**553 mtCO$_2$e**
Land use Change (LUC) Planted trees	22,474 553	- 553
Avoided Emissions	**484 mtCO$_2$e**	**465 mtCO$_2$e**
PV Electricity Generated	484	465

The total emissions for Juhayna for the year 2020 are **328,991** mtCO2e. Compared to Juhayna's emissions for the year 2019, the absolute total emissions have increased by around **16%**. However, Scope 1 and 2 have decreased by **7%.** The highest individual contributor are the local farms **55%**, followed by packing of our products **11%**, purchased electricity **8%** and downstream transportation **6%.** Out of our total carbon footprint, Scope 3 emissions are corresponding to **74%.**

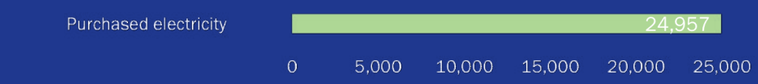
For biogenic carbon, the carbon sequestration by the planted trees at Al-Enmaa Farm amounted to **553 mtCO$_2$e.** The Land use Change of our farms is only calculated once and is therefore not included in this year's Biogenic Carbon. The avoided emissions are owing to our installed PV modules for electricity generation at our dairy farm in Al-Bahariya Oasis, preventing the release of **465 mtCO$_2$e.** Biogenic carbon uptake and avoided emissions from the installation of PV modules do not fall under any of the 3 Scopes and are presented separately in line with the GHG Protocol guidelines.

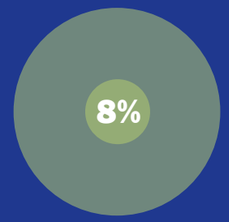
The following graphs shows the share of the different activity's emissions in each scope.

SCOPE 1

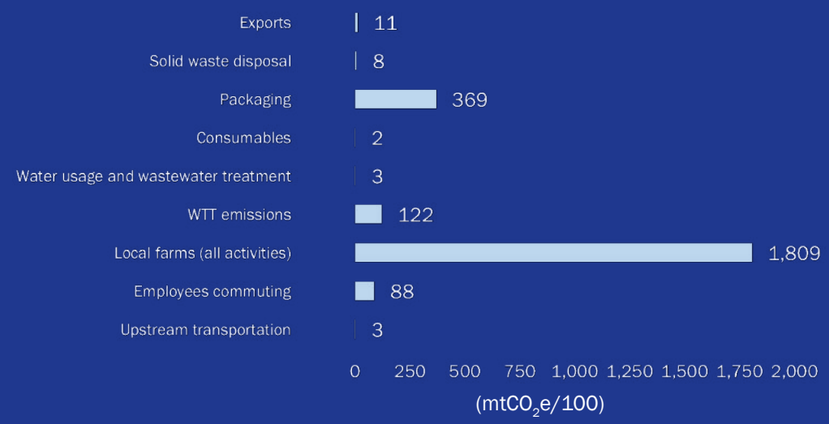


SCOPE 2





SCOPE 3



BASELINE COMPARISON

Juhayna's Business 2020 vs 2019 Baseline Year (BY)

ORGANIZATIONAL BOUNDARIES	2019 (BY)	2020	INDICATOR
OWNED FARMS	2	2	No change
OUTSOURCED LOCAL FARMS	110	152	38% increase
FACTORIES	4	4	No change
DISTRIBUTION CENTRES	29	29	No change

This year, we have been able to compare our business' performance in relation the base year to assess our progress. No changes in operational and organizational boundaries have been done in comparison to the base year. However, we managed to improve the methodology and data quality related to the accounting of scope 3 emissions resulting from the local outsourced farms, as compared to the previous year. We were able to gather accurate scope 1 and 2 data of over 10% of our local outsourced farms by milk quantity; hence, improving the accuracy of the GHG calculations associated with their operations. We are currently working on engaging all our suppliers and aiming to cover 100% of the farms in later reports.

SECTOR	EMISSIONS 2019 ($mtCO_2e$)	SHARE (%)	EMISSIONS 2020 ($mtCO_2e$)	SHARE (%)
FARMING	156,878	55.4%	214,072	65.1%
MANUFACTURING	97,848	34.5%	90,952	27.7%
DISTRIBUTION	27,895	9.8%	23,668	7.2%
HQ	623	0.3%	300	0.1%
TOTAL EMISSIONS	**283,245**	**100%**	**328,991**	**100%**

The total emissions for Juhayna for the year 2020 are **328,991 $mtCO_2e$**. Compared to Juhayna's emissions for the year 2019, the absolute total emissions have increased by around **16%**. However, Scope 1 and 2 have decreased by **7%.** In all of our business lines the emissions have decreased, except for the farming where there is an increase of emissions compared to the base year. The reason for this is that the data has been refined and more accurate data of the local farms has been used this year, where number of local farms included in 2020 have increased compared to 2019.

Juhayna's Carbon Emissions Intensity 2020 (Scope 1 & 2 emissions)

SALES	EBIT*	OUTPUT
11.4 $mtCO_2e$/M.EGP **180.1** $mtCO_2e$/M.$	**99.1** $mtCO_2e$/M.EGP **1,561.6** $mtCO_2e$/M.$	**0.163** $mtCO_2e$/ton of product

* Earnings before Interest and Taxes

Juhayna's Carbon Emissions Intensity 2020 (Scope 1 & 2 emissions)

		2019 (BY)	2020	INDICATOR
EMISSIONS INTENSITY* ($mtCO_2e$/M.EGP)	**REVENUE**	12.3	11.4	-7.2% Reduction
	EBIT	115.6	99.1	-14.3% Reduction
EMISSIONS INTENSITY* ($mtCO_2e$/M.$) Per	**REVENUE**	193.2	180.1	-6.8% Reduction
	EBIT	1,813.9	1,561.6	-13.9% Reduction
ABSOLUTE EMISSIONS ($mtCO_2e$)	**Scope 1**	61,640	62,350	1.2% Increase
	Scope 2	32,333	24,957	-22.8% Reduction
	Scope 1+2	93,973	87,307	-7.1% Reduction
	Scope 3	189,271	241,684	27.7% Increase
	Total	**283,245**	**328,991**	**16.2%** Increase
EMISSIONS INTENSITY ($mtCO_2e$/ton of product)	**Scope 1**	0.118	0.116	-1.2% Reduction
	Scope 2	0.062	0.047	-24.7% Reduction
	Scope 1+2	0.179	0.163	-9.3% Reduction
	Scope 3	0.361	0.451	24.7% Increase
	Total	**0.720**	**0.776**	**7.8%** Increase

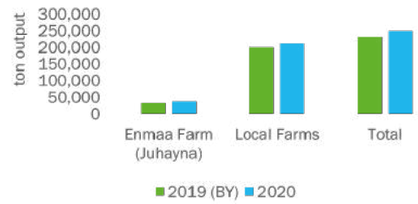
** Scope 1 and 2 emissions*

The emission intensity has reduced in all aspects, both when looking at the revenue, EBIT and output, as well as per million EGP and million USD. The reduction is around **7 percent** for the emissions per revenue and around **14 percent** for the EBIT. As for the metric emissions/ ton of product, the reduction is around **9 percent.**

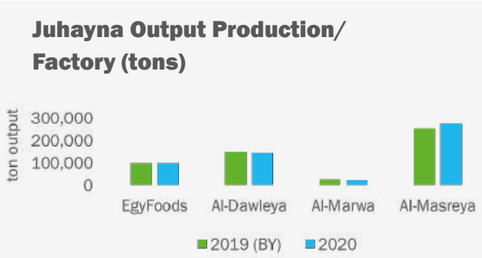
Output production

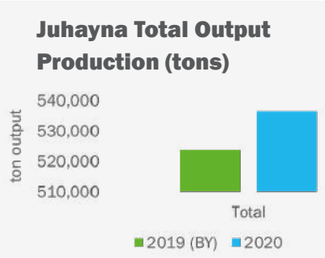
At Juhayna, we care very much about our farms, as well as the local farms to ensure the well-being of the cows, as well as the highest quality of milk. The milk production is the base for all our dairy products. The total production of Juhayna is including all our products, such as milk, yoghurts, juices etc. Even though 2020 has been challenging due to the pandemic, we have been able to increase our production, which we are very proud of.

Juhayna Milk Production (tons)

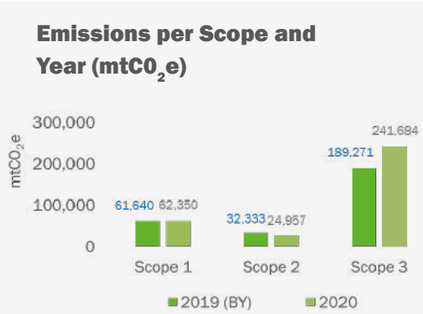


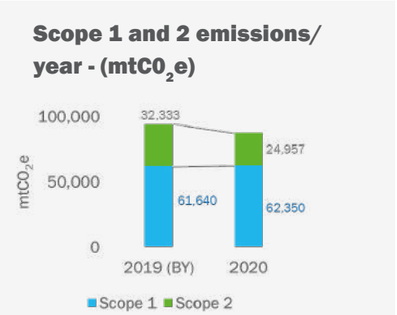
MILK PRODUCTION (tons)	2019 (BY)	2020	INDICATOR	
ENMAA FARM	xxx	xxx	15.2%	Increase in production
LOCAL FARMS	xxx	xxx	6.3%	
TOTAL	xxx	xxx	7.5%	



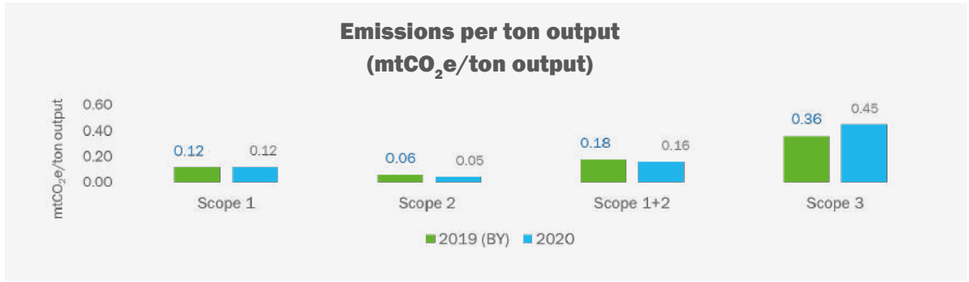


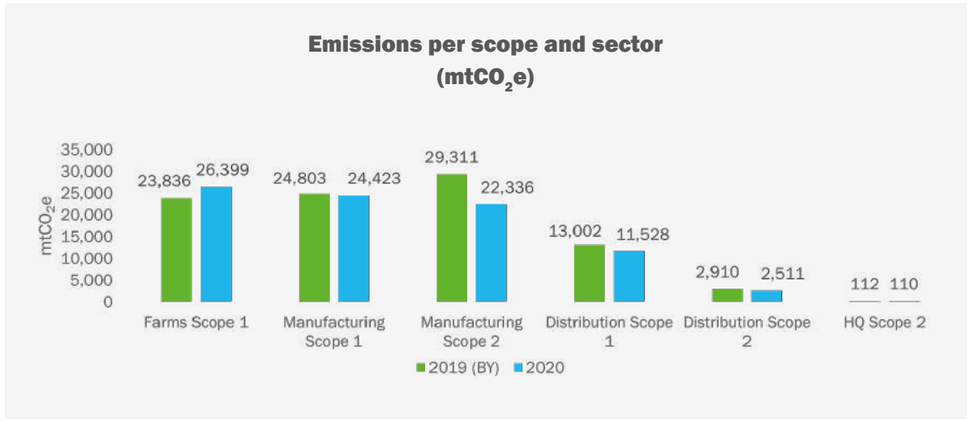
PRODUCTION (tons)	2019 (BY)	2020	INDICATOR	
EGYFOODS	xxx	xxx	-0.2%	Reduction in production
AL-DAWLEYA	xxx	xxx	-3.7%	
AL-MARWA	xxx	xxx	-1.1%	
AL-MASREYA	xxx	xxx	7.3%	Increase in production
TOTAL	xxx	xxx	2.4%	

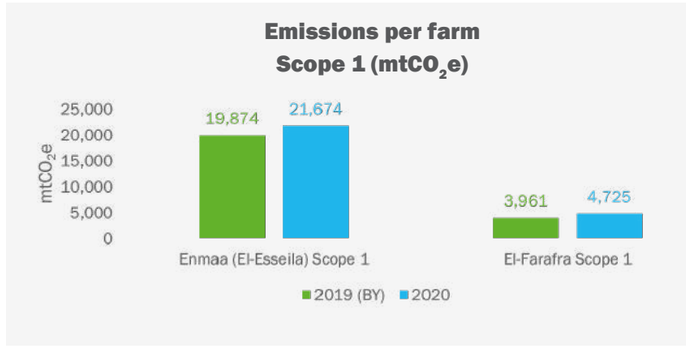


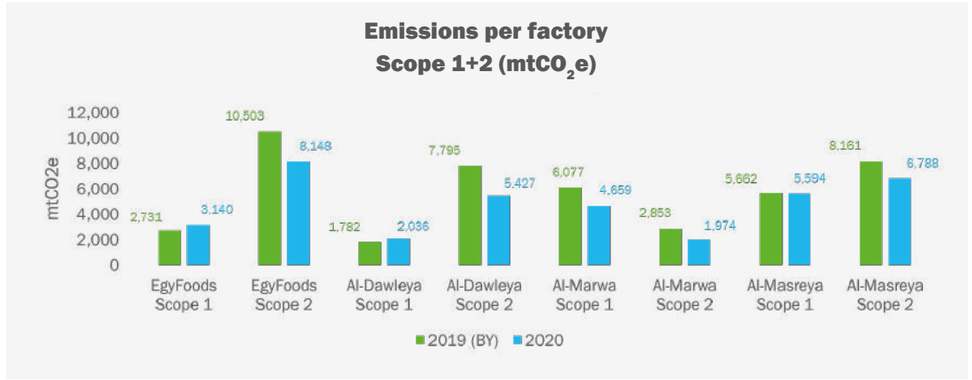


Our total absolute emissions in $mtCO_2e$ decreased for Scope 1 and 2, while the absolute Scope 3 emissions increased by around **28 percent.** It is desired to account for all indirect Scope 3 emissions as a result of operating the business. This year, we have strived to collect and include more precise data of our Scope 3 emissions, resulting in an increase in this Scope.


Emissions per ton output
(mtCO2e/ton output)
mtCO2e/ton output
0.60
0.40
0.20
0.00
0.12
0.12
0.06
0.05
0.18
0.16
0.36
0.45
Scope 1
Scope 2
Scope 1+2
Scope 3
2019 (BY)
2020


Emissions per scope and sector
(mtCO2e)
mtCO2e
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
23,836
26,399
24,803
24,423
29,311
22,336
13,002
11,528
2,910
2,511
112
110
Farms Scope 1
Manufacturing Scope 1
Manufacturing Scope 2
Distribution Scope 1
Distribution Scope 2
HQ Scope 2
2019 (BY)
2020


Emissions per farm
Scope 1 (mtCO2e)
mtCO2e
25,000
20,000
15,000
10,000
5,000
0
19,874
21,674
3,961
4,725
Enmaa (El-Esseila) Scope 1
El-Farafra Scope 1
2019 (BY)
2020

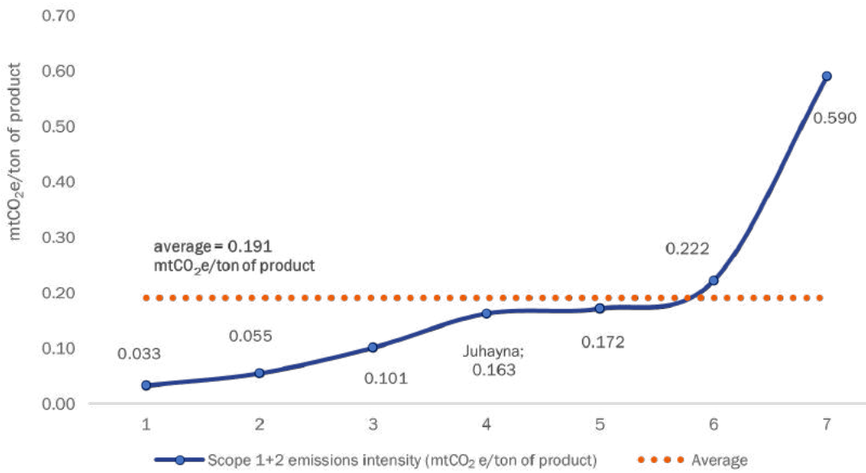

Emissions per factory
Scope 1+2 (mtCO2e)
mtCO2e
12,000
10,000
8,000
6,000
4,000
2,000
0
2,731
3,140
10,503
8,148
1,782
2,036
7,795
5,427
6,077
4,659
2,853
1,974
5,662
5,594
8,161
6,788
EgyFoods Scope 1
EgyFoods Scope 2
Al-Dawleya Scope 1
Al-Dawleya Scope 2
Al-Marwa Scope 1
Al-Marwa Scope 2
Al-Masreya Scope 1
Al-Masreya Scope 2
2019 (BY)
2020


Juhayna
Pure
Mango
Red Grapes
Apple
SKIMMED

BENCHMARKING

The benchmarking of Juhayna has been conducted in two aspects, external with similar businesses and dairy companies, as well as internally for all segments of Juhayna's business separately in order to track the internal progress.

EXTERNAL BENCHMARKING



For the external benchmarking, only Scope 1 and 2 emissions are considered. Seven different dairy companies, operating in different parts of the world have been assessed, where Juhayna is one of the dairy companies. It is of importance to keep in mind that the external benchmarking is only an indicative measure, since each of the businesses are operating in different parts of the world, which might imply differences in system boundaries and business activities as well as slight variations in methodologies when calculating carbon footprints.

The emission intensity is measured as $mtCO_2e$/ton of product, where the lowest value is 0.033 $mtCO_2e$/ton of product. Juhayna has an emission intensity of **0.163 $mtCO_2e$/ton** of product, below the average value of **0.191 $mtCO_2e$/ton of product.**

INTERNAL BENCHMARKING

Besides assessing our business' performance externally, we also strive to track and improve our performance internally. Therefore, an internal benchmarking is conducted, considering Scope 1 and 2 emissions of our main sections: farming, manufacturing and distribution.

Farming

FARM	ON-SITE DIESEL	LIVESTOCK	SYNTHETIC FERTILIZERS	CROP RESIDUES	TOTAL
DIRECT EMISSIONS INTENSITY ($mtCO_2e$/TON OF MILK)					
EL-ESEILA	0.23	0.36	0.00	0.00	0.60
DIRECT EMISSIONS INTENSITY ($mtCO_2e$/CROP AREA)					
AL-FARAFRA	5.66	0.00	0.001	0.00	5.66

Farms Carbon Intensity Scope 1

CARBON INTENSITY SCOPE 1*	UNIT	2019 (BY)	2020	INDICATOR
ENMAA FARM	$mtCO_2e$/ton product output	0.63	0.60	-5.3% Reduction

** No Scope 2 emissions for Enmaa Farm.*

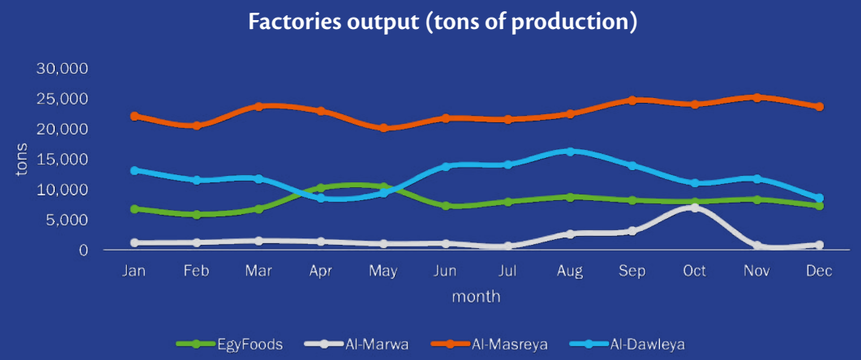
The intensity metrics of the farms include only Scope 1 emissions. Both of Juhayna's owned farms are not connected to the grid and are depending on diesel generators for generating electricity. Enmaa Farm also has PVs to replace some of the fuel burning with renewable energy. Thus, Juhayna's owned farms have no Scope 2 emissions.

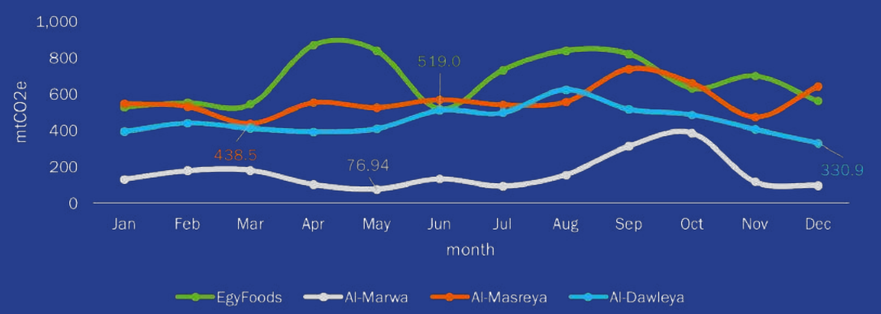
The metrics of El-Eseila and Al-Farafra farms, were determined per ton of milk and per crop area respectively. Planting of annual crops did not take place during 2020; only orange trees crop area was accounted for in addition to associated fertilizers usage.

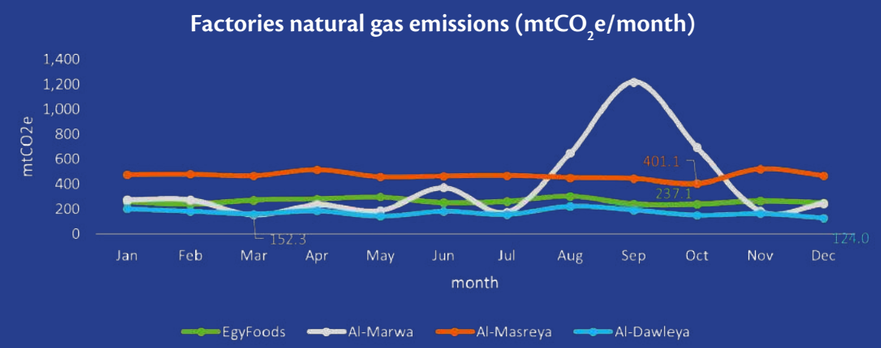
For Enmaa Farm, there is an improvement from last year's carbon intensity, the base year, with a reduction of about 5 percent. The intensity metric is yielded as Scope 1 emissions per ton milk production. As for Farafra Farm, which has no livestock, no crop harvesting has been reported for year 2020 and therefore, no intensity metric has been calculated.

Manufacturing

LOWEST VALUES ACHIEVED DURING 2020	UNIT	EGYFOODS	AL-DAWLEYA	AL-MARWA	AL-MASREYA
Natural Gas	$mtCO_2e$/ton product output	0.027	0.011	0.096	0.017
Electricity		0.071	0.030	0.056	0.018
Carbon Intensity (Incl. Downstream Transp.)		0.013	0.068	0.306	0.062

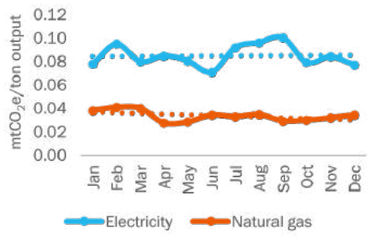




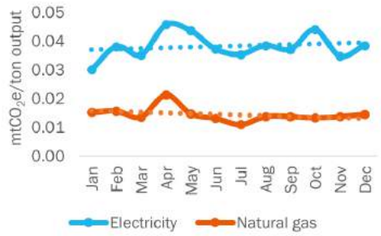


Scope 1 and 2 emissions are considered for all carbon intensity metrics, (mtCO2e/ton output production). The lowest values of the year have been identified for each of the factories with regards to the electricity consumption and use of natural gas. These values were used to see what levels we could reach in manufacturing. If we could achieve these lowest values every month which we have reached during 2020, we could enhance our carbon footprint and reduce our emissions.

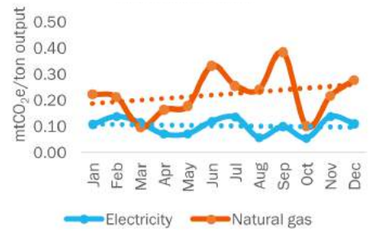
EgyFoods Scope 1 and 2 emissions intensity ($mtCO_2e$/ton output)



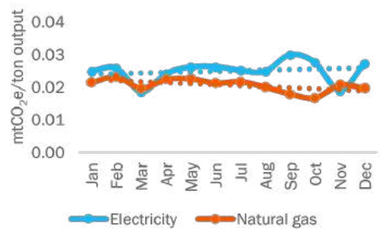
Al-Dawleya Scope 1 and 2 emissions intensity ($mtCO_2e$/ton output)



Al-Marwa Scope 1 and 2 emissions intensity ($mtCO_2e$/ton output)



Al-Masreya Scope 1 and 2 emissions intensity ($mtCO_2e$/ton output)



Factories total carbon intensity Scope 1&2 ($mtCO_2e$/ ton production output)

Manufacturing Natural Gas

LOWEST VALUES ACHIEVED DURING THE YEAR	UNIT	2019 (BY)	2020	INDICATOR
EGYFOODS	$mtCO_2e$/ton product output	0.0202	0.0270	33.7% Increase
AL-DAWLEYA		0.0082	0.0110	34.1% Increase
AL-MARWA		0.1240	0.0960	-22.6% Reduction
AL-MASREYA		0.0194	0.0170	-12.4% Reduction

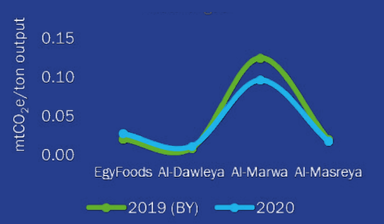
Manufacturing Electricity Consumption

LOWEST VALUES ACHIEVED DURING THE YEAR	UNIT	2019 (BY)	2020	INDICATOR
EGYFOODS	$mtCO_2e$/ton product output	0.0853	0.0707	-17.1% Reduction
AL-DAWLEYA		0.0412	0.0299	-27.3% Reduction
AL-MARWA		0.1001	0.0558	-44.2% Reduction
AL-MASREYA		0.0259	0.0185	-28.6% Reduction

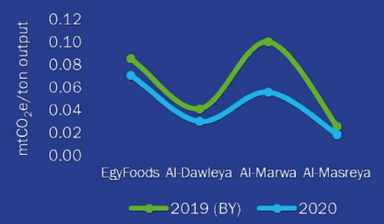
Manufacturing Carbon intensity Scope 1+2 (including downstream transportation)

LOWEST VALUES ACHIEVED DURING THE YEAR	UNIT	2019 (BY)	2020	INDICATOR
EGYFOODS	$mtCO_2e$/ton product output	0.1537	0.1340	-12.8% Reduction
AL-DAWLEYA		0.0803	0.0684	-14.8% Reduction
AL-MARWA		0.4011	0.3057	-23.8% Reduction
AL-MASREYA		0.0706	0.0620	-12.2% Reduction

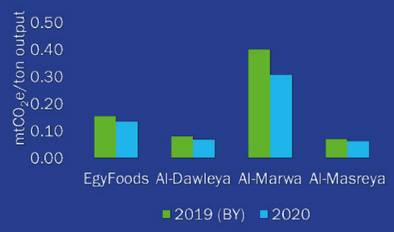
Manufacturing Lowest values achieved Natural gas



Manufacturing Lowest values achieved Electricity



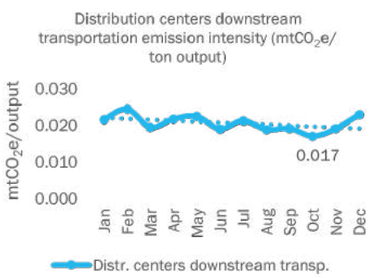
Manufacturing Carbon intensity Scope 1+2 including downstream transportation

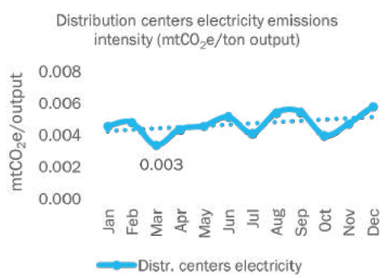


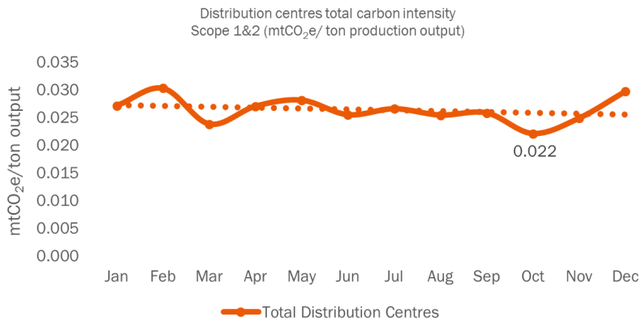
Distribution Centres

Similar to the farms and factories, the lowest values achieved during 2020 have been identified for the use of natural gas and electricity consumption. As for the carbon intensity, Scope 1 and 2 emissions are considered.

LOWEST VALUES ACHIEVED DURING 2020	UNIT	TIBA
DOWNSTREAM TRANSP. (WAREHOUSES TO RETAIL)	$mtCO_2e$/ton product output	0.017
ELECTRICITY		0.003
CARBON INTENSITY (INCL. DOWNSTREAM TRANSP.)		0.026







LOWEST VALUES ACHIEVED DURING THE YEAR	UNIT	2019 (BY)	2020	INDICATOR
DOWNSTREAM TRANSP. (WAREHOUSES TO RETAIL)	$mtCO_2e$/ton product output	0.016	0.017	6.3% Increase
ELECTRICITY		0.004	0.003	-16.2% Reduction
CARBON INTENSITY (INCL. DOWNSTREAM TRANSP.)		0.030	0.026	-14.4% Reduction

SCIENCE-BASED TARGETS

Science-Based targets (SBT), set to be achieved in 5 years.

In alignment with international standards, we have chosen to relate our targets for GHG emissions reductions with the Science-Based Targets initiative (SBTi). Targets are considered 'science-based' if they are in line with what climate science deems necessary to meet the goals of the Paris Agreement, where science-based targets provide a clear pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the negative impacts of climate change.

The IPCC's Sixth Assessment report showcased the urgency for global climate actions and to avoid the most significant effects of climate breakdown, we must all collaborate to halt global temperature rise to 1.5°C. That's why all businesses are invited to publicly commit their companies to a science-based net-zero and 1.5°C target, and join the Race to Zero, which we at Juhayna are enlightened to commit and be part of.

In line with our commitment to be part of the global climate actions and contributions to limit the impacts of climate change, we have decided to update our 2019 targets and set science-based targets. The targets are set using the absolute contraction approach, which is a method for companies to set emissions reduction targets that are aligned with the global efforts required to meet a 1.5˚C scenario. The targets are set to be achieved by 2026, where we will follow up, report and evaluate our progress using these targets.

SBT to be achieved by 2026

Emissions	Base year 2019 ($mtCO_2e$)	Most recent year 2020 ($mtCO_2e$)	Target year 2026 ($mtCO_2e$)	SBT Reduction (%)
Scope 1	61,640	62,350	43,518	29.4%
Scope 2	32,333	24,957	20,612	36.3%
Scope 1+2	**93,973**	**87,307**	**64,130**	**31.8%**

The table below is indicating the progress of the set targets in alignment with the SBTi.

Absolute Emissions	2019 (BY) ($mtCO_2e$)	2020 ($mtCO_2e$)	SBT Reduction by 2026 (%)	Status of Targets
Scope 1	61,640	62,350	29.4%	0.0% Achieved
Scope 2	32,333	24,957	36.3%	62.8% Achieved
Scope 1+2	**93,973**	**87,307**	**31.8%**	**22.3% Achieved**

The details of the set SBT are presented in the table below.

SCIENCE-BASED TARGETS

Time Frame
To be achieved by 2026

SBT
Absolute contraction approach

Scenario
1.5°C scenario

JUHYANA'S OVERALL SBT

Total Scope 1+2 reduction

31.8%
To be achieved by 2026.

Total intensity Scope 1+2 reduction

0.111
$mtCO_2e$/ton output production

Intensity Scope 1+2 (2020)

0.1628
$mtCO_2e$/
ton output

Intensity Scope 1+2 (2026)

0.111
$mtCO_2e$/
ton output

Reduction by

0.052
$mtCO_2e$/
ton output
(31.8%)

Specific targets for each of Juhayna's business lines have been chosen not to be set for the science-based targets, as all our business goes hand in hand. We strongly believe that all our lines of business need to work together to achieve a change. And more importantly, we seek long-term solutions that fit the nature and core values of our business. Therefore, we have studied our environmental performance and set a way forward with a decarbonization plan for our business with different opportunities of investments to manage and decrease our GHG emissions and carbon footprint. The decarbonization plan is presented more in detail in the following section.

DECARBONIZATION PLAN

An in-depth decarbonization plan has been prepared during 2020 together with Juhayna's sustainability team and experts within the field to cover areas of improvements for Juhayna and how to achieve actual reductions in GHG emissions and reach the set targets. However, the pandemic has put spokes in the wheel, causing delays in the process and realization of the set plan.

Nevertheless, the decarbonization plan is still valid, even though some projects are currently on hold. We are eager to continue our work for a decarbonized business and we are enthusiastic about the coming years to put these projects into realization.

Energy and Water Efficiency Audit (and Management System)

Adoption of energy and water management systems for all facilities and achieve continuous improvement in energy and water consumption

Waste Management Plan and Operating SystemT

Develop and implement a waste management strategy that addresses Juhayna's whole business, including its farms, headquarter, and distribution centres allowing for segregation, accurate quantification, and reuse/ recycling/recovery.

Company Fleet Vehicle Efficiency

To guarantee that the vehicles in the transportation fleet are operating effectively in terms of fuel consumption, implement routine inspections and maintenance.

Analysis of Employee Commuting

Design, adopt and implement employee commuting data collection and analysis system

Supply Chain Decarbonization and Climate Resilience Program

Program for supply chain decarbonization and climate resilience, including but not limited to training and capacity-building webinars and workshops, carbon footprint analysis, adoption of regenerative agriculture, resource efficiency (Energy and Water) audit, and environmental management system in accordance with ISO 140001

Green Building Guidelines

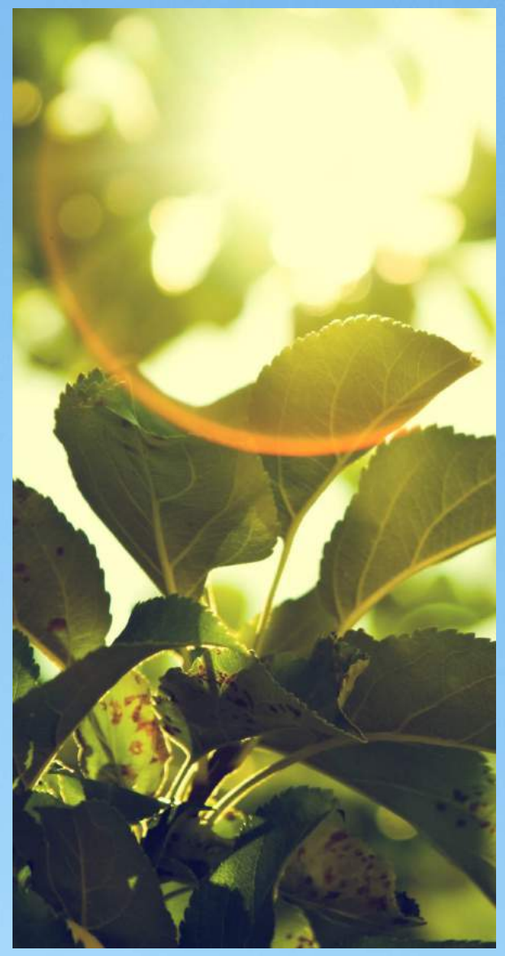
Develop and adopt green building guidelines incl. refurbishment of buildings such as insulation, draught proofing, efficient lighting and lighting control, HVAC operational parameters and control, external/internal shading optimization, daylight and occupancy sensors and building energy and water efficiency and management.

ESG Data Management System

Including a tailored ESG platform and training and capacity building

Corporate culture

to introduce environmental culture through training and capacity-building programs.



Climate-related issues incentive program development

This to include attainment of targets

Design, adopt and implement a refrigerant leakage reduction program

The first step to reduction is measuring. Keep meticulous records of all the acquired refrigerants, including their type, quantity, and precise area of use.

Sustainability Policies

Introduce and adopt sustainability policies for all Juhayna’s activities, with commitment to practices and standards to promote environmentally and socially responsible operations, including developing **low-carbon business travel policy.**

QUALITY ASSURANCE STATEMENT

QUALITY ASSURANCE STATEMENT

To Juhayna's Board of Directors',

We have been appointed by Juhayna group to conduct GHG calculations pertaining to Juhayna's operational activities in Egypt for the period from 1st of January to the 31st of December 2020. The scope covered Juhayna's farms, factories, distribution centers, and headquarters.

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 GHG calculations, we have adopted the Greenhouse Gas Protocol and ISO 14064-1:2018. Specification with guidance at the organization level for quantification and reporting of GHG emissions and removals.

It is our responsibility to express a conclusion about the quality and completeness of the primary data collected/ provided by Juhayna Group.

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 Juhayna's raw data used in the GHG calculations have not been thoroughly collected, verified and truly represent Juhayna's resource consumption in 2019 related to all categories/aspects identified in this report. We do not assume and will not accept responsibility to anyone other than Juhayna for the provided assurance and conclusion.

Dr. Abdelhamid Beshara
Founder and Chief Executive Officer
Masader, Environmental & Energy Services S.A.E
Cairo, August, 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.

157 Baehler's Mansions Building, 2nd Floor,
26th of July Street, Zamalek, Cairo, Egypt

Tel/Fax: +202 2735 4033
Email: info@be-masader.com
Website: https://www.be-masader.com

APPENDICES

DATA QUALITY

All data is retrieved from Juhayna's Database and is corresponding to activities occurring during 2020. The data quality has been assessed and the unit and resolution of each line of the business are presented below.

SCP	ACTIVITY	UNIT	RESOLUTION	NOTES
GENERAL DATA				
3	Consumables	tons or items	Yearly consumption. Quantities of purchased items.	
3	Commuting	km and means of travel	Survey of employee commuting per destination.	Survey performed during 2020.
3	Solid waste disposal by employees	tons	N/A. Monthly solid waste disposal of employees, workers and visitors were estimated.	All waste is approximated as landfilled municipal waste.
FARMING				
1	PV	kWh	Monthly consumption was used.	Total electricity consumption was provided, and separated by type (diesel generator, and PV).
1	Diesel fuel	Litres	Monthly and annual consumptions were used.	Data was provided for generators and equipment separately.
1	Livestock	Total no. of heads	Total no. of heads per type and their average weights.	Tier 1 by IPCC's software. Updated GWP values as per IPCC's AR5.
1	Fertilizers usage	kg N/year	Amounts of nitrogen content in kg used per year.	Orange trees. No crops were planted/harvested during 2020.
3	Upstream transportation	km	Total no. of shipments in 2020.	Distances were determined using Google Maps.
3	Solid waste disposal	tons	Annual amount of plastic waste generated.	Only plastic waste emissions were accounted for. Agricultural waste (manure) emissions were accounted for under "Livestock" activity emissions. Crop residues were not generated as there was not crop plantation during 2020.
3	Local Farms activities	-	Available scope 1 and 2 data for 12 out of a total of 152 local farms. (10.94% from total by milk quantity).	Emissions were calculated for the sample and were averaged/estimated for 100% of the farms. Improvement of data compared to last year.

SCP	ACTIVITY	UNIT	RESOLUTION	NOTES
MANUFACTURING				
1	Downstream transportation	Litres	Monthly fuel consumption in litres.	
1	Natural gas	m^3	Monthly natural gas consumption.	
2	Purchased electricity	kWh	Monthly electricity consumption was used.	
3	Packaging	Items	Quantities of products and their packaging.	Where material type and weight of packaging were not received, these were estimated.
3	Municipal water use	m^3	Monthly municipal water use for all factories except Al-Masreya, where an average monthly value was used.	
3	Solid waste disposal	tons or items	Monthly solid waste disposal (sold quantities).	
DISTRIBUTION CENTERS				
1	Downstream transportation	litres	Monthly consumption.	
1	Natural gas	m^3	Monthly consumption.	
1	Diesel use	Litres	Monthly consumption.	
1	Refrigerants leakage	kg	Yearly consumption.	
2	Electricity consumption	kWh or EGP	Monthly electricity consumption in kWh or EGP.	
3	Municipal water use	m^3 or EGP	Monthly consumption. For some distribution centres, average values were used.	
3	Exports	tons	Weight of exports per country.	Assumed port from Egypt for all ocean fleet exports. Port to port distance travelled was calculated using sea routes.
3	Solid waste disposal	tons	Monthly solid waste disposal.	
HQ				
2	Electricity consumption	EGP	Monthly electricity consumption in EGP.	
3	Municipal water use	EGP	Yearly consumption in EGP.	Calculated based on Egyptian commercial rates.

Good. No changes recommended.

Satisfactory. Could be improved.

Weak. Area for improvement.

RELEVANCY AND EXCLUSIONS

Some activities have been excluded from Juhayna Group's CFP due to unavailability of data, or practical reasons such as not technically feasible to obtain the data, e.g. for activities that are beyond Juhayna Group's operations and control.

Scope 3 Categories (GHG Protocol)	Emissions (mtCO2e)	Rationale	Status
Purchased goods and services	218,071	Includes office supplies, paper consumption, face masks, packaging of products, and emissions associated with locally outsourced milk.	Relevant, calculated.
		Chemicals and other cleaning agents; Emission factors were not available for the commercially used cleaning agents. In addition, the related emissions have been considered to be negligible.	Relevant, not yet calculated.
		Consumables of farms and HQ: No data available.	
Capital goods	-	Includes the emissions from embodied carbon in Juhayna's owned assets, buildings, etc.	Relevant, not yet calculated.
Fuel and energy-related actives (not included in scope 1 and 2)	12,530	Includes WTT from fuel burning and transportation, as well as energy consumed to supply municipal water and treat it.	Relevant, calculated.
Upstream transportation and distribution	302	Covers emissions of raw material transportation from farms (owned and local) to the factory	Relevant, calculated.
Waste generated in operations	832	Includes emissions from the transportation of Solid waste and the landfill emissions from the disposed waste. Waste generated by employees, workers and visitors were estimated in accordance with the British Standard.	Relevant, calculated.
Business travel	-	Accounted for under scope 1 (Owned vehicles (factories + HQ)) as it takes place using company-owned vehicles.	Not relevant, rationale provided.
Employee commuting	8,809	Commuting emissions by non-owned buses.	Relevant, calculated.

Scope 3 Categories (GHG Protocol)	Emissions (mtCO2e)	Rationale	Status
Upstream leased assets	-	Juhayna does not have any upstream leased assets.	Not relevant, rationale provided.
Downstream transportation	1,141	Covers exports emissions only, as other downstream transp. takes place using the company-owned fleet, so accounted for under Scope 1.	Relevant, calculated.
		Exports: only port-to-port emissions were included in the calculations. Kilometrage data from the port to distribution centres of the importing country was not feasible to obtain in addition to being out of scope (beyond Juhayna's operation and control).	Relevant, not yet calculated.
Processing of sold products	-	Not relevant to Juhayna, as the company sells finished food products ready for direct consumption, which do not require any further industrial processing.	Not relevant, rationale provided.
Use of sold products	-	Emissions from this category could include energy use at retail outlets by Juhayna's refrigerators, which were not evaluated due to limited data availability from our customers (retail outlets).	Relevant, not yet calculated.
End of life treatment of sold products	-	Out of our operational boundaries and scope.	Not relevant, rationale provided.
Downstream leased assets	-	Juhayna does not have any downstream leased assets.	Not relevant, rationale provided.
Franchises	-	Not relevant to Juhayna's business model; hence, it has been excluded.	Not relevant, rationale provided.
Investments	-	We expect to identify and evaluate our investments-related emissions within the next two years.	Not evaluated.

DEFINITIONS & TERMINOLOGY

Avoided Emissions	Avoided emissions are emissions that would have been emitted into the atmosphere, but are avoided. In Juhayna's case, PVs are utilised to generate electricity, thus avoiding emissions that would otherwise have been generated by using another source for electricity generation.
Baseline Year	A historical year used to compare succeeding year's emissions.
Biogenic Carbon	Emissions related to the natural carbon cycle, as well as those resulting from the combustion, harvest, digestion, fermentation, decomposition or processing of biologically based materials. This includes CO_2 removals by soils and biomass following afforestation and reforestation.
Carbon Footprint	The quantity of Greenhouse gases (GHGs) expressed in terms of carbon dioxide equivalent (CO_2e), emitted into the atmosphere by an individual, organization, process, product or event from within a specified boundary in a certain timeframe.
CO_2 Sequestration	The capture and secure storage of carbon that would otherwise be emitted to or remain in the atmosphere.
CO_2e	Carbon dioxide equivalent – standardization of all greenhouse gases to reflect the global warming potential relative to carbon dioxide.
Direct Emissions	Greenhouse gas emissions from facilities/sources owned or controlled by the reporting company, e.g. livestock, generators, vehicle fleets.
Emission Factor	Specific values used to convert activity data into greenhouse gas emission values.
Indirect Emissions	Greenhouse gas emissions from facilities/sources that are not owned or controlled by the reporting company, but for which the activities of the reporting company are responsible, e.g. purchasing of electricity.
Kyoto Protocol	It operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets.
Refrigerant	A refrigerant is a substance or mixture, usually a fluid, used in a heat pump and refrigeration cycle.
Scope 1	Direct GHG Emissions from sources that are owned or controlled by the reporting entity (i.e. any owned or controlled activities that release emissions straight into the atmosphere).
Scope 2	Indirect GHG emissions from the consumption of purchased electricity, heat, steam or cooling.
Scope 3	Indirect GHG emissions from other activities. A detailed Standard exists that sets out the rules for 15 categories of Scope 3 emissions. Examples of emissions included in this Scope are outsourced services such as exports, transportation, emissions from waste disposal, etc.