



**EMISSIONS INTENSITY
TARGETS**
FOR GRUPO MEXICO'S
OPERATIONS

CLIMATE CHANGE

In recent years, we have calculated the emissions intensity for the Mining Division (ton CO₂e/ton Cu) using an operational approach. This approach includes all emissions generated by our mining operations (Scope 1), as well as emissions from electricity consumption (Scope 2) from third parties outside Grupo México, plus those received from the combined cycle plant 'La Caridad', operated by our Infrastructure Division, for each ton of copper produced (contained in concentrates and cathode ESDES). However, this analysis excluded the production of other secondary metals generated by our operations.

In 2023, we aimed to refine our analysis and emissions intensity targets to encompass the main processes (mining, smelting and refining, and electricity production) of Grupo México. For mining processes, we considered the production of all metals (copper, zinc, molybdenum, gold, silver, etc.). Since copper is our main product, we consider the production of copper equivalent.

Included Processes



Mine

Operational emissions (Scope 1) and emissions from purchased electricity outside of Grupo México are accounted for per ton of copper equivalent produced in the mines.



Smelting and Refining

Operational emissions (Scope 1) and emissions from purchased electricity outside of Grupo México are accounted for each ton of copper equivalent produced during the smelting and refining process.



Electricity Generation

We consider the operational emissions (Scope 1) from the "La Caridad" combined cycle plant for every MWh generated.

Next, we provide an overview of our operational emissions and copper equivalent intensities from 2022 onwards. Throughout 2024, we will continue to update this analysis and the presented targets in line with the new reduction opportunities we identify:

2027 Intensity Targets

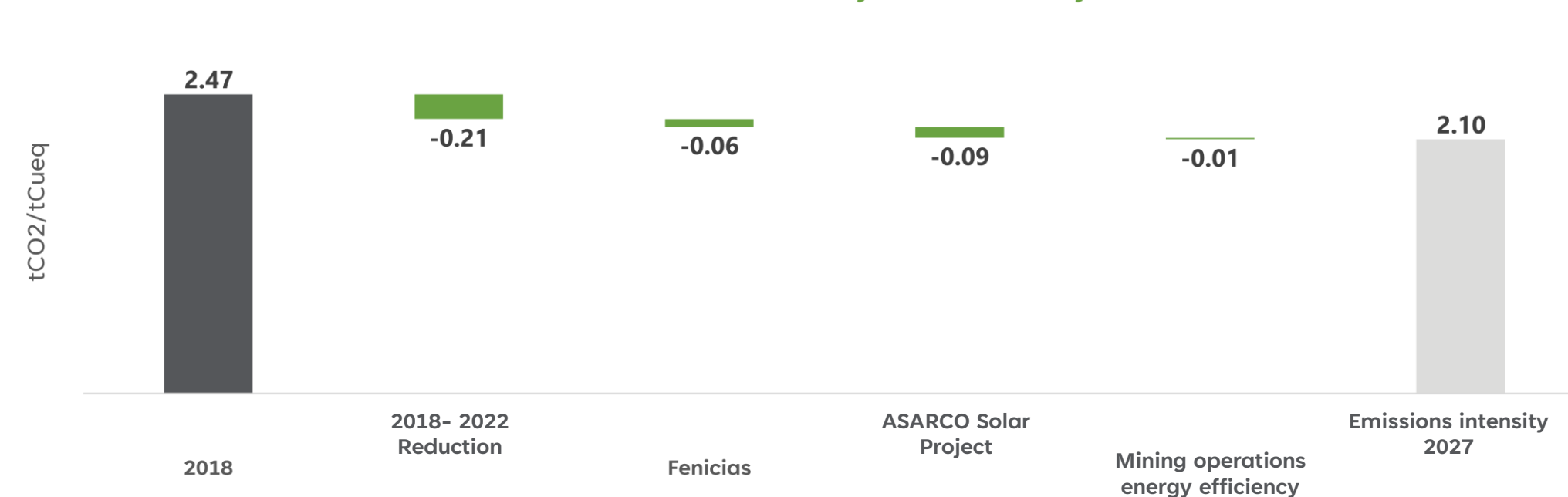
	2018	2027 BAU	2022	2023	2027 Estimated Final Emissions	Proposed Intensity Reduction Target for 2027	Percentage of Grupo México Emissions Covered by Target
Mining Division Emissions – Mining Operations							
ton CO ₂ e	2,935,545	3,377,478	2,654,041	2,447,332	2,868,587		
Intensity (tCO ₂ e/tCue)	2.47	2.47	2.18	1.83	2.10	15% VS 2018	46% of emissions BAU
Mining Division Emissions - Smelting and Refining							
ton CO ₂ eq	587,290	609,738	563,330	509,970	387,278		
Intensity (tCO ₂ e/tCue)	0.76	0.76	0.86	0.82	0.48	30% VS 2018	8% of emissions BAU
Mining Division total emissions (tCO₂e)	3,522,834	3,987,217	3,217,370	2,957,302	3,255,865		
Infrastructure Division Emissions							
ton CO ₂ e	1,600,000	1,600,000	1,368,201	1,303,696	1,368,201		
Emission intensity (tCO ₂ e/ MWh)	0.408	0.408	0.395	0.382	0.355	10% VS 2018 (It will be achieved with the commissioning of the Fenicias wind farm)	22% of emissions BAU
Transportation Division Emissions							
ton CO ₂ e	1,460,000	1,810,000	1,422,003	1,521,456	1,612,003	To be defined	
Emission intensity (tonCO ₂ eq/ transported tonne)	12.6	-	11.7	11.5	11.1	4% VS 2018	24% of emissions BAU
Grupo México total (tCO₂e)	6,582,834	7,397,217	6,007,575	5,782,454	6,236,070		

We aim to achieve the intensity targets outlined through the projects illustrated in the following graph by 2027. For further details on these projects, please refer to the climate change chapter of the 2023 Sustainable Development Report.

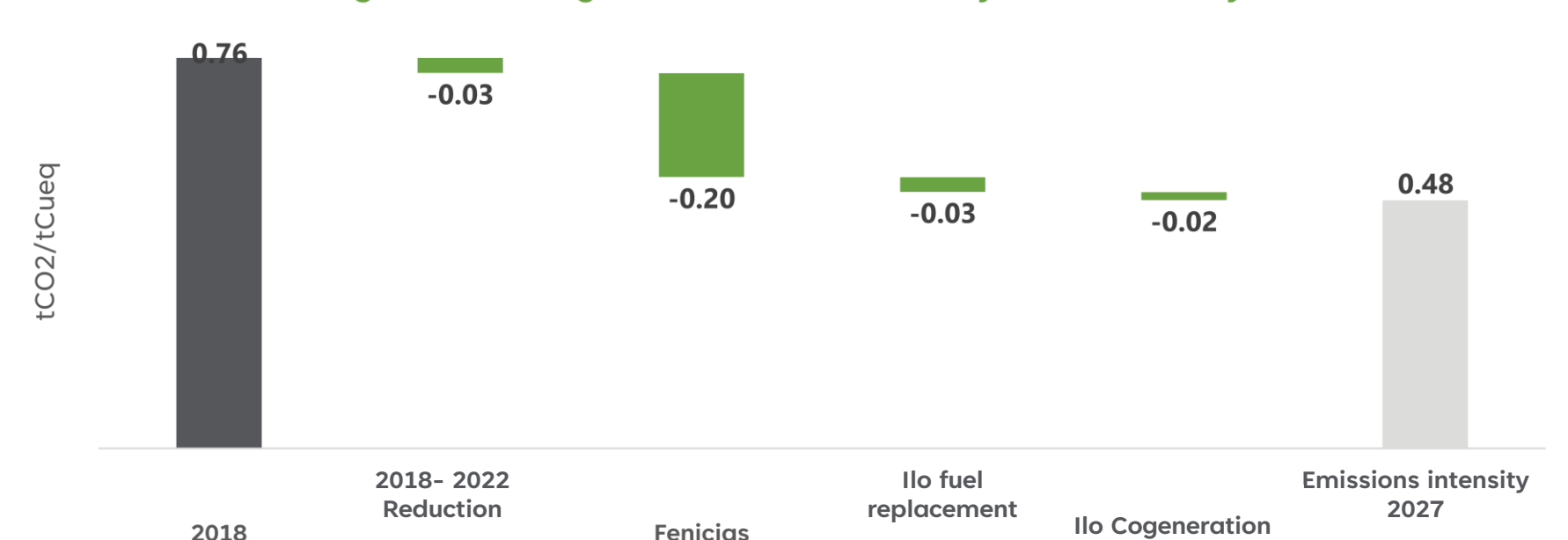
Emission reduction initiatives-Transportation Division

- AESS**
 - Reduction of fuel consumption in slack locomotives.
- Trip Optimizer**
 - Autopilot installed in 275 locomotives = annual savings of 4% of diesel consumption -> 2025 installation in 30 additional locomotives -3.6% annual diesel consumption
- HP / Ton**
 - Efficient use of horsepower to move more tons with fewer locomotives.
- LNG**
 - Fleet of 30 LNG locomotives: they replace 52% of diesel consumption in hybrid locomotives.
 - Hydrogen fleet: research phase 2023-2026

Mines - Emission Reduction by 2027 (intensity) -15%



Refining and Smelting - Emission Reduction by 2027 (intensity) -30%



2035 Intensity Targets

	2018	2035 BAU	2022	2023	2035 Estimated Final Emissions	Proposed Intensity Reduction Target for 2035	Percentage of Grupo México Emissions Covered by Target
Mining Division Emissions – Mining Operations							
ton CO ₂ e	2,935,545	3,888,793	2,654,041	2,447,332	1,401,499		
Intensity (tCO ₂ e/tCue)	2.47	2.47	2.18	1.83	0.89	50% VS 2018	47% of emissions BAU
Mining Division Emissions - Smelting and Refining							
ton CO ₂ eq	587,290	683,631	563,330	509,970	446,681		
Intensity (tCo2e/tCue)	0.76	0.76	0.86	0.82	0.49	35% VS 2018	8% of emissions BAU
Mining Division total emissions (tCO₂e)	3,522,834	4,572,424	3,217,370	2,957,302	1,848,179		
Infrastructure Division Emissions							
ton CO ₂ e	1,600,000	1,600,000	1,368,201	1,303,696	1,368,201		
Emission intensity (tCO ₂ e/ MWh)	0.408	0.408	0.395	0.382	To be defined	To be defined	
Transportation Division Emissions							
ton CO ₂ e	1,460,000	2,160,000	1,422,003	1,521,456	1,837,003	To be defined	
Emission intensity (tonCO ₂ eq/ transported tonne)	12.6	-	11.7	11.5	10	10% VS 2018	26% of emissions BAU
Grupo México total (tCO₂e)	6,582,834	8,332,424	6,007,575	5,782,454	5,051,854		

We aim to achieve the intensity targets outlined through the projects illustrated in the following graph by 2035. For further details on these projects, please refer to the climate change chapter of the 2023 Sustainable Development Report

Emission reduction initiatives-Transportation Division

1. AEES	<ul style="list-style-type: none"> Reduction of fuel consumption in slack locomotives.
2. Trip Optimizer	<ul style="list-style-type: none"> Autopilot installed in 275 locomotives = annual savings of 4% of diesel consumption -> 2025 installation in 30 additional locomotives -3.6% annual diesel consumption
3. HP / Ton	<ul style="list-style-type: none"> Efficient use of horsepower to move more tons with fewer locomotives.
4. LNG	<ul style="list-style-type: none"> Fleet of 30 LNG locomotives: they replace 52% of diesel consumption in hybrid locomotives. Hydrogen fleet: research phase 2023-2026

Metas de intensidad al 2035

