

Objective and progress

In 2019, which is our baseline year, we emitted 11,354 tons of CO₂. Scope 1 emissions accounted for 8,272 tons of CO₂ (73%), Scope 2 emissions for 2,917 tons of CO₂ (26%), and Scope 3 emissions (business travel) for 164 tons of CO₂.

Our Scope 1 emissions are mainly driven by the consumption of natural gas, which is used to store products that require heating. Our Scope 2 emissions are indirect emissions generated by purchased electricity (about 14% of the total). We use electricity to handle products at the terminal, for example for pumps, valves, vapor treatment units, and other equipment. The second biggest source of Scope 2 emissions (about 13% of the total) is driven by purchased steam, which is used to heat our tanks in Le Havre.

**By 2025 we aim to emit 20% less CO₂ than in 2019.
In 2022 we achieved a 15.4% reduction in CO₂ emissions compared to 2019.**

In 2021, we emitted 9,753 tons of CO₂, reducing our emissions by 14% in comparison to the 2019 baseline year. In 2022, we made further progress and reduced our CO₂ emissions to 9,602 tons. This means that we achieved a 15.4% reduction in emissions compared to our baseline year of 2019 and are therefore gradually progressing toward our emissions reduction target of 20% by 2025. The decrease in 2021 and further progress in 2022 are mainly driven by:

- 1** The transition of the business into a newly built and more energy-efficient tankpit in Le Havre. The old terminal was heated by natural gas, while the newly built terminal is heated using steam.
- 2** Switching to a more sustainable supplier of steam at Le Havre terminal. This meant switching from steam originating from the incineration of gas to steam produced at a waste-to-energy plant.
- 3** Increasing the share of green energy in our electricity supply, both by producing solar energy at our own sites and by purchasing green electricity in 2021. We will continue implementing measures that decrease our electricity consumption and continue investing in solar panels before investing further in the purchase of green electricity.
- 4** In 2022, at our Santander terminal, we stopped using diesel for generation of power, as the old diesel boiler was replaced by a new propane boiler.

How we reduce our CO₂ emissions

We have put various CO₂ reduction measures in place. Each terminal has a detailed implementation plan and timeline in place based on the local agenda and priorities.

Reducing Scope 1 emissions



- Reassess the most efficient and sustainable heating option (electricity sources, neighboring plants)
- Improve the insulation of tanks and pipelines
- Assess the impact of replacing boilers or burners with more efficient versions
- Switch from gas boilers to more sustainable and efficient options, such as propane
- Replace part of the natural gas consumption with biogas



- Install charging stations for hybrid and electric cars at the terminals, including stations powered by solar energy
- Revise the corporate policy for leasing more efficient cars by introducing a limit for the maximum amount of CO₂ emissions per km driven
- Focus on leasing/renting hybrid and electric cars
- Promote the leasing of e-bikes

Reducing Scope 2 emissions



- Increasing the amount of green electricity and improving energy efficiency
- Preparing a business case and acquiring permits for the installation of solar panels
- Installing and commissioning solar panels
- Looking for energy suppliers that can provide green electricity
- Gradually switching to LED lighting
- Installing pumps with variable speed drive (inverters) and/or automatic pumps for flow regulation
- Smart lighting at night at the terminals/switch off lighting at night where possible
- Guaranteeing green energy consumption with Guarantees of Origin (GOs) in the future after we have further reduced our own energy consumption and improved our solar production capacity

Organizational measures

- Inform employees about “sustainable behavior” at the office
- Replace plastic cups with more sustainable alternatives
- Conduct a sustainability workshop/education/quiz for employees
- Place posters promoting sustainability in offices and common areas

Our emissions in 2022 are equivalent to:



5,211 return flights
Amsterdam - New York



Annual gas and electricity
consumption of 1,978
households



1,041 tours around the world
in an average car



2.9 million kg office
paper consumed



480,100 trees growing in one
year



970 days of operating
one windmill

From grey to green electricity

Target: 100% of electricity from renewable energy sources in 2023.

Alkion focuses on solar panel projects across the entire group. More solar panel installations will be commissioned in 2023: The third Alkion terminal to install solar panels will be Amsterdam in 2023, followed by the second phase of solar panel installation in Lisbon and first phase in Bayonne.

KPIs: Intensity-based CO ₂ footprint	2019	2020	2021	2022
CO ₂ emissions per FTE (CO ₂ in tons / FTE)	32.3	34.8	28.2	27.4
CO ₂ emissions per revenue (CO ₂ in tons / Revenue in million EUR) * 1,000	113.2	121.9	99.3	94.2
Emissions per throughput (CO ₂ in tons / throughput in tons) * 1,000	3.6	4.6	3.6	3.3

KPIs: Total electricity consumption (MWh)	2019	2020	2021	2022
Grey electricity purchased	12,371	12,380	7,020	13,154
Green electricity purchased	0	0	6,772	0
Self-generated electricity by solar and self-consumed	460	356	449	797
Total electricity consumption	12,831	12,736	14,241	13,154
Percentage of green electricity out of total electricity consumption (%)	3.6	2.8	50.7	6.1

KPIs: Self-generated electricity by solar (MWh)	2019	2020	2021	2022
Self-generated electricity by solar	575	502	572	1,318
Of which self-consumed	460	356	449	797
Of which exported to the grid	115	146	124	521

CO₂ reduction, energy savings, and higher energy self-sufficiency



Annual electricity production:
2021: 558 MWh - 2022: 636 MWh

Terminal's electricity consumption covered by electricity generated by solar panels:
2021: 31% - 2022: 33%

Reduction of electricity costs in comparison to scenario without solar panels:
2021: 43% - 2022: 41%

Annual electricity production:
2022: 682 MWh

Terminal's electricity consumption covered by electricity generated by solar panels:
2022: 53%

Reduction of electricity costs in comparison to scenario without solar panels:
2022: 36%



GHG emissions by scope and source

KPIs: GHG emissions (ton CO ₂)	2019	2020	2021	2022
Scope 1				
Gas consumption	7,663	8,556	6,157	5,207
Propane and liquified petroleum gas (LPG)	119	158	120	206
Fuel consumption transport diesel (cars)	255	208	184	200
Fuel consumption transport gasoline (cars)	33	33	48	61
Fuel consumption power (diesel)	92	127	94	0
Fuel consumption non-road diesel (gnr)	87	66	21	74
Terpentine VOC	23	23	13	19
Scope 2				
Electricity	1,493	1,488	964	1,387
Steam	1,424	1,506	2,051	2,349
Total (Scope 1 and 2)	11,190	12,154	9,652	9,503
Scope 3				
Business travel	164	61	101	99
Total (Scope 1, 2, and 3)	11,354	12,215	9,753	9,602

Initiatives

Alkion Terminals is affiliated to Nederland CO₂ Neutraal and Talks Energie Transition, a working group within ORAM, the largest business network in the Amsterdam Metropolitan Area. The Italian branch of Alkion participates in Unem (Unione Energie per la Mobilità), with a working group focusing on the development of lower carbon liquid fuels and e-fuels.

In Spain, our Cartagena terminal has joined the organization Cartagena Puerto Sostenible (Sustainable Port of Cartagena). This initiative is committed to incorporating the 2030 Sustainable Agenda, based on 17 UN Sustainable Development Goals, into the port's strategy. This will be pursued through collaboration with multiple entities, including those in the private sector such as Alkion.

These memberships contribute to knowledge and experience sharing and exchange with other companies on sustainability challenges and solutions. This allows Alkion to be an active participant in the world of energy transition.



For more information on CO₂ Performance Ladder please visit: www.co2-prestatieladder.nl