Innovations designed for FPSO Atlanta will lead to lower carbon intensity oil production in the Atlanta Field

Investments to reduce carbon emissions

The FPSO Atlanta, which will be responsible for operating the Full Field Development (FFD) for oil and gas production in the Atlanta Field, was designed to be more energy efficient during its operational phase. The reform and adaptation process being carried out in Dubai includes a series of innovations that will reduce the intensity of greenhouse gas (GHG) emissions per barrel produced.

This project exemplifies our commitment to responsible action. With production scheduled for 2044 at the Atlanta Field, we are already anticipating the application of sustainable solutions in the short term to respond to the challenges of climate change and maintain competitiveness in an energy transition scenario.

One of the main innovations is the adaptation of equipment for greater energy efficiency. Examples include the recovery of heat emitted by the unit's own generators and the burning of crude oil from the Field to generate electricity, used in the FPSO systems. The option to use this fuel received a positive opinion from the authorized environmental agency after Enauta conducted a Life Cycle Analysis study and identified that this type of combustion reduces GHG emissions by around 20%.

GHG management

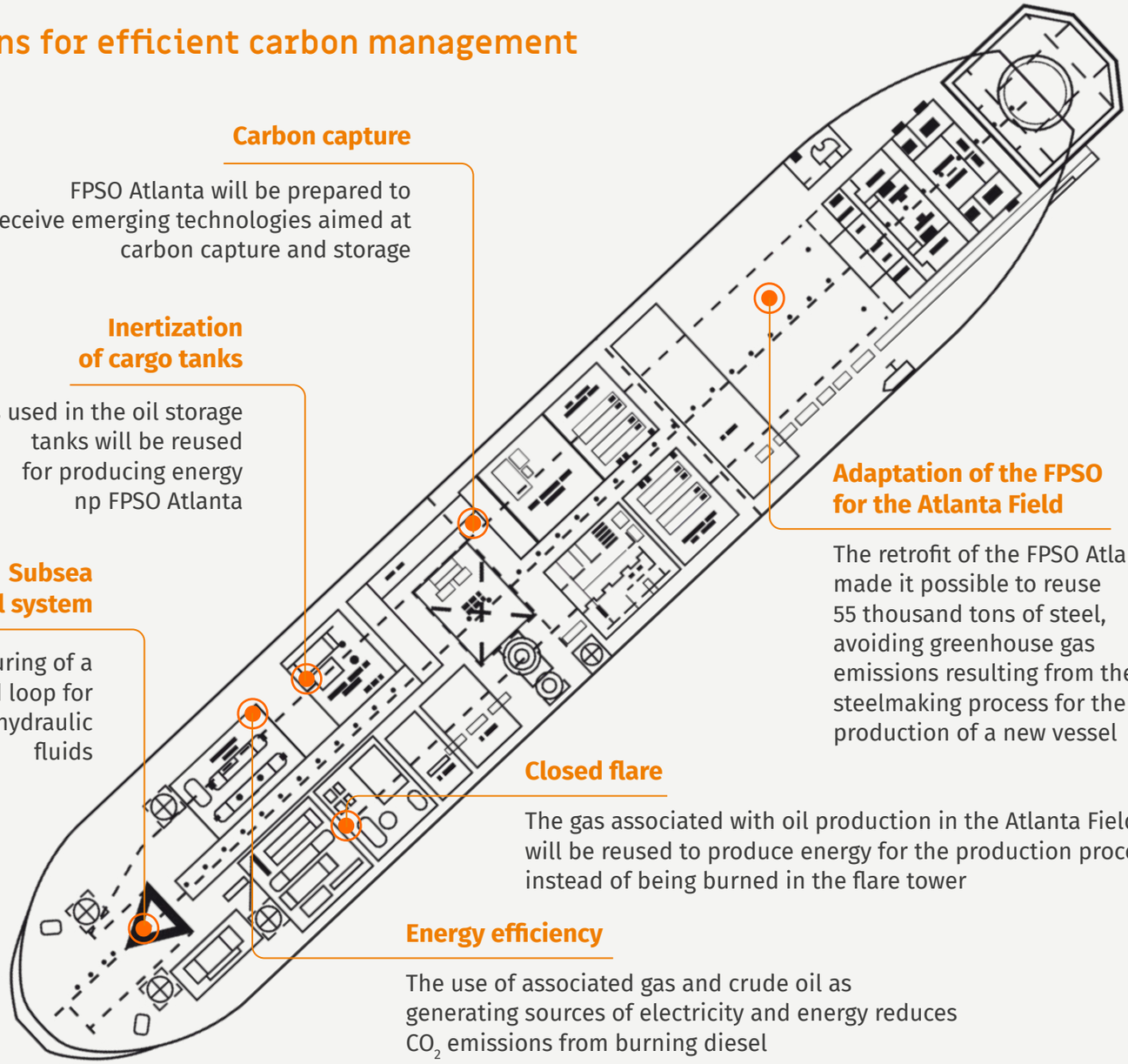
Reducing CO_2 emissions is already a priority in our strategy. Since 2021, we have set a cap on the carbon intensity of operations. The target also includes the variable compensation criteria applicable to all directors and employees.

In 2022, the established goal was to reach an emission intensity lower than or equal to 20 $kgCO_2e/boe$. At the end of the year, performance at the Atlanta Field was 18.81 $kgCO_2e/boe$. Performance was impacted by the lower production volume, even with the 12.6% reduction in GHG emissions from scopes 1 and 2.

Another solution adopted is the inertization of the tanks for storing the produced oil. Instead of the traditional use of flue gas, the cargo tanks will be inerted by associated gas. As the oil is stored, this gas will be recovered and directed to the production of energy in the FPSO itself. This solution is made possible by the use of closed flare technology, in which the flaring of the associated gas is minimized.

Moreover, the project is prepared to receive potential technologies that allow the capture and storage of carbon. These solutions, which are still in the early stages of development, may be available for use in the medium term.

Solutions for efficient carbon management



Carbon capture

FPSO Atlanta will be prepared to receive emerging technologies aimed at carbon capture and storage

Inertization of cargo tanks

The gas used in the oil storage tanks will be reused for producing energy np FPSO Atlanta

Subsea control system

Structuring of a closed loop for recycling hydraulic fluids

Adaptation of the FPSO for the Atlanta Field

The retrofit of the FPSO Atlanta made it possible to reuse 55 thousand tons of steel, avoiding greenhouse gas emissions resulting from the steelmaking process for the production of a new vessel

Closed flare

The gas associated with oil production in the Atlanta Field will be reused to produce energy for the production process, instead of being burned in the flare tower

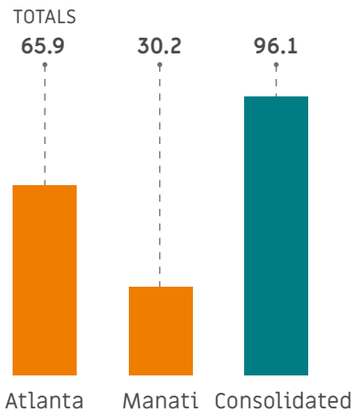
Energy efficiency

The use of associated gas and crude oil as generating sources of electricity and energy reduces CO_2 emissions from burning diesel

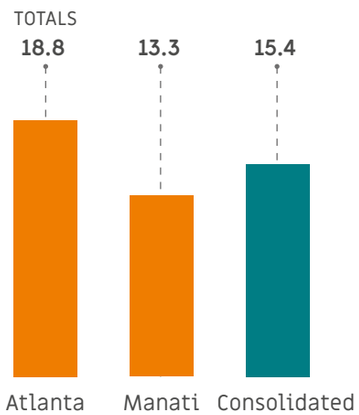
The intensity of emissions from the Atlanta Field was 18.81 $kgCO_2e/boe$ in 2022, a performance impacted by activities at the start of drilling the 4th well

Enauta Emissions

Global emissions in 2022 (thousand tCO_2e)

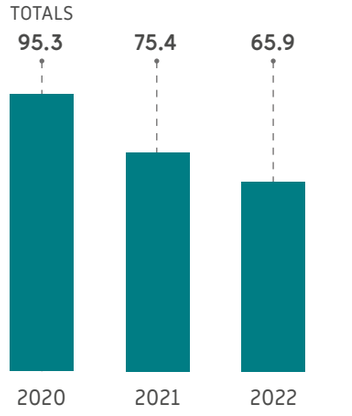


Emission intensity in 2022 ($kgCO_2e/boe$)

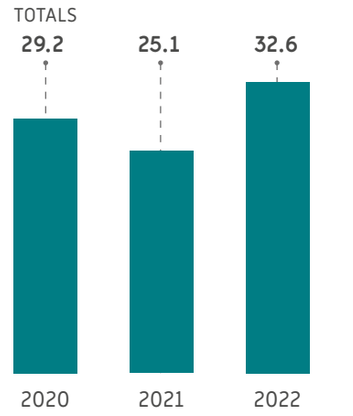


Atlanta Field Emissions

Scope 1 (thousand tCO_2e)



Scope 3 (thousand tCO_2e)



Click here
to learn more about our management and performance in GHG emissions in the 2022 ESG Databook