



# Offshore Energy: Low Methane Emissions Energy

## Tightly Controlling Methane Emissions

Due to the scale and level of investment, sophistication, and technology, the offshore region provides the lowest carbon barrels of oil when compared to other oil-producing regions. **Methane emissions are tightly controlled for offshore operations** and are very low when compared to other producing regions. Venting and flaring are tightly controlled for offshore operations and require Federal approval, with **no routine venting or flaring offshore**. In addition, gas detection systems are deployed widely on facilities to quickly detect and shut down leaks.

**Tie-ins to subsea pipelines are incorporated into the design of every sanctioned offshore project. With every project connected to pipeline infrastructure, produced gas is shipped back to shore within minutes.**



### STEP 1

#### Production Separator

As oil and gas are extracted, they flow through a production separator, which utilizes mechanical dispersion and gravity to separate oil, gas and water.



### STEP 2

#### Dehydration

Oil and gas typically go through a crude oil treater or dehydrator to further remove water along with low-boiling impure liquids like solvents or fuels.



### STEP 3

#### Export

Oil and gas are sent back to shore through subsea pipelines where they are then shipped to refineries. **There is no storage of methane offshore.**

## Offshore Production Captures Produced Gas

No matter the type, offshore facilities are required to capture all produced gas. **Typically, offshore facilities recover and sell all produced gas, including methane, which is the primary component of gas.** However, there can be exceptions when the gas is captured for certain offshore uses. In these instances, there are approved uses for the gas, such as running turbines and engines or maintaining pressure on certain pieces of equipment, including floatation cells for produced water treatment.

