



Some background...

Emissions:

Offshore vessels contributes the most to emissions from domestic shipping with approx 1 million tonnes of CO_2 per year.

Government white-paper 2019: Proposes to assess climate regulations for offshore vessels

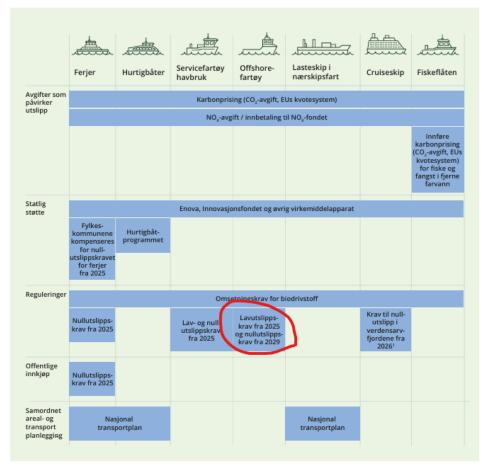
Hurdalsplattformen 2021: Government plattform includes ambitions for climate regulations for offshore vessels

National budget 2023: Parliament asks government to introduce zero emission regulations for offshore vessels

Labour-government 2025:

Proposal on public hearing

Norwegian national emissions budget





Overview of the proposal

- The purpose of the regulation is to reduce greenhouse-gas emissions from ships used in connection with petroleum activities and to promote the development of zero-emission technology for such ships. *Estimated reduction is 1,4 million CO*₂e from 2029-2040.
- The regulation applies to operators (oil and gas companies) on the Norwegian continental shelf and covers vessels used in connection with petroleum activities.
- The GHG-intensity shall be reduced in four stages relative to a reference value: 10% (2029–2031), 15% (2032–2034), 20% (2035–2037), and 40% (2038–2040).
- The requirement applies in aggregate to all vessels performing activities on behalf of the operator, and not to each individual vessel.
- Operators may cooperate to comply with the requirement jointly.



Logic of the proposal in a nutshell

- The oil and gas companies must increasingly demand low carbon solutions, and expect higher day-rates and contract prices due to increased CAPEX/OPEX
- Due to the Norwegian petroleum tax system, oil and gas companies can deduct 78% of the investment (mirrored by a 78% tax on revenues)
- Estimated total abatement cost over the period is NOK 4.62 billion → 78% of this (NOK 3.60 billion (approx EUR 304.6 million)) in public financial support

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1.4 million tCO_2e \times 3,300 \text{ NOK/}tCO_2e
= 1,400,000 × 3,300 = 4,620,000,000 NOK.
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Potential overlap with international regulations

- Norwegian government proposal: All norwegian offshore vessels
- EU Emissions Trading System (ETS): Offshore vessels ≥ 5 000 GT from 2027. Review by 2027 if vessels ≥ 400 BT should be included
- FuelEU Maritime: Offshore vessels not included
- IMO Net-Zero framework draft: All vessels ≥ 5 000 GT. Norwegian Maritime Authority expects ≥ 400 BT by 2033.
- EU vs IMO: EU is obliged and will consider adjustments to ETS to avoid double pricing of the same emissions, and is expected to consider FuelEU alignment to avoid overlap in intensity requirements



Technology options

- Liquid biofuels can't be used for compliance
- Biogas can be used, provided it meets sustainability criteria.
- Renewable fuels of non-biological origin and low-carbon hydrogen are double-counted until 2034.
- Onboard carbon capture to be reviewed by 2028
- Wind assisted propulsion (WASP) no bonus credit
- Operational and energy efficiency measures alone won't reduce GHG-intensity



Consequences of the proposal for RFNBOs

- Reference value: GHG-intensity of 91,16 gCO₂e/MJ (well-to-wake) same as FuelEU Maritime.
- Todays estimated GHG-intensity of the Norwegian offshore-fleet: approx 90 gCO₂e/MJ (well-to-wake).
- Shorepower and sustainable biogas expected to be used for compliance what's left for other technologies such as RFNBOs?

year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
No.												
RFNBO												
vessels	2	4	5	6	7	14	15	17	24	34	47	55
LNG/LBG												
vessels	15	15	15	15	15	15	15	15	15	15	15	15



Plattform Supply Vessels (PSVs) ideal for conversion

- Long contracts reduces financial risk
- Regular routes (ports) and operational profile reduces technical risks and makes supply chain easier and cheaper
- Regular workforce ideal for crew training and contingency planning
- PSVs very much standardized which makes replication and scale easier
- PSVs mainly connected to Norwegian market avoids possible distortion of Norwegian ships-owners competitiveness in other markets with less demanding policies

