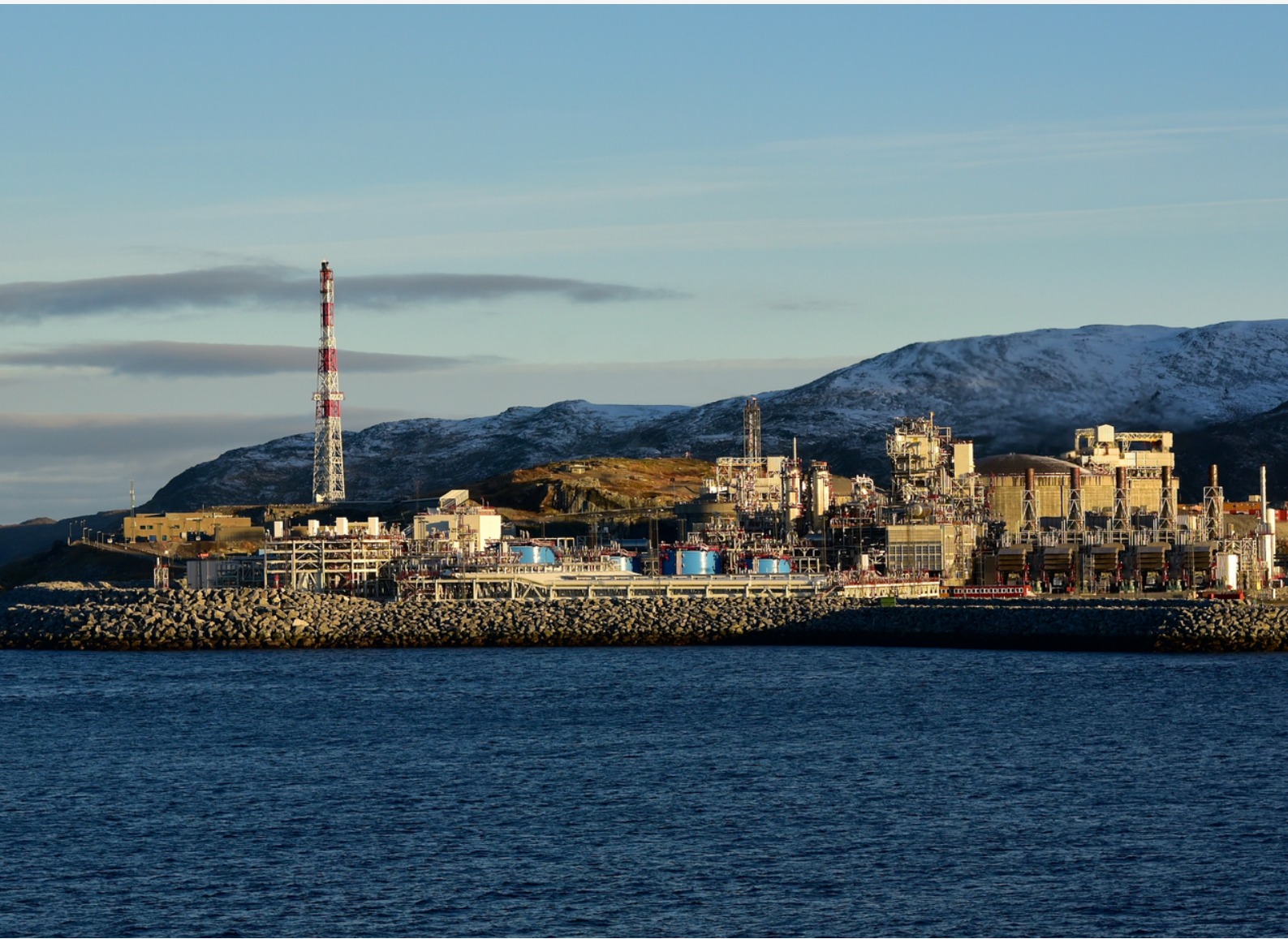
OILCHANGE INTERNATIONAL

BRIEFING
SEPTEMBER 2023

NORWAY'S ELECTRIFICATION OF MELKØYA GAS PLANT

THE PERFECT STORM OF CLIMATE INJUSTICE



Introduction

On August 8th, Norway's PM Jonas Gahr Støre announced the Norwegian Government's green light to Equinor's Snøhvit Future project. The Snøhvit Future project means an electrification of Equinor's LNG plant at Melkøya, Northern Norway, and a longer lifespan for gas production at the LNG facility.

The electrification of Melkøya extends gas production in the Arctic, adds up to 150 million tons of CO_2 that the world cannot afford, ignores and violates Sámi rights, and is a perfect storm of climate injustice:

- **Climate bomb in the Arctic:** Electrification locks in gas production in the Arctic, and prolongs the lifespan of the Melkøya liquid natural gas (LNG) plant for 20 years. The government's own analysis estimates that burning the additional gas production will emit over 150 million tonnes of CO_2.[1] This dwarfs the touted emissions reductions of 850,000 tonnes per year from electrifying the LNG plant.
- **Another slap in the face for Sámi rights:** The Norwegian government has still not followed up on a Supreme Court judgement from 2021 that found a previous energy project breached Sámi reindeer herders' rights. Electrification of Melkøya gives the go-ahead for new power lines that once again pass through reindeer pasture territories. Such contempt for indigenous rights is the opposite of climate justice.

Snøhvit: The Arctic climate bomb

Since the Snøhvit field started producing in 2007, the gas and liquids produced and shipped out from the facility have emitted 163 million tonnes of CO_2, which is equivalent to 3.3 years of Norway's total greenhouse gas (GHG) emissions in 2022.[3]

In the approval of the updated plan for development and operation for the Snøhvit field and Melkøya LNG, the terms set by the Norwegian Ministry of Oil and Energy make clear that Equinor and partners must create a plan by June 2024 to ensure that new gas discoveries merge with the infrastructure at the Snøhvit field and Melkøya LNG.[4] The two discoveries that are mentioned are Snøhvit Beta and Askeladden. These two fields are not commercially viable on their own, but can be commercial when merged with the Snøhvit field. The emissions from burning the projected gas in Askeladden West and Snøhvit Beta is close to 40 million tons of CO_2.[5]

Furthermore, the Ministry of Oil and Energy estimates that the operating period will be prolonged by 20 years, and emissions from burning the projected gas production are estimated at 152.1 million tonnes of CO_2.[6]

The ministry has also published an estimate of emissions reductions from converting the LNG plant from gas to electricity, claiming there will be a reduction of 850,000 tonnes per year compared to the current operation. This reduction comes from displacing gas with electricity to run the compressors at the LNG plant and producing that electricity with renewable energy. However, as the power balance in Finnmark is not strong, it will require massive amounts of new power generation that is planned to be located on Sámi territory.

The ministry claims that the total net emissions from the expanded gas production is a reduction of 50 million tonnes rather than the 151 million tonnes calculated from burning the gas.[7] This is based on a study conducted by Rystad Energy published in February 2023.[8] The study grossly oversimplifies global energy markets, handily assuming that additional Norwegian gas supply displaces coal or other gas sources and, therefore, leads to net emissions reductions.

Oil Change International published a scathing critique of the study, concluding that the study "should not be used by the Norwegian government as a basis for making policy decisions about future oil and gas development".[9] This is because of the study's reliance on "a number of questionable and precarious assumptions to reach its conclusions whilst disregarding the long-term effects of carbon lock-in from new Norwegian production and considerations of global equity."

One of the key assumptions in the Rystad study that leads to a conclusion that additional Norwegian gas can reduce emissions in the global market is the assumption that new gas displaces coal.

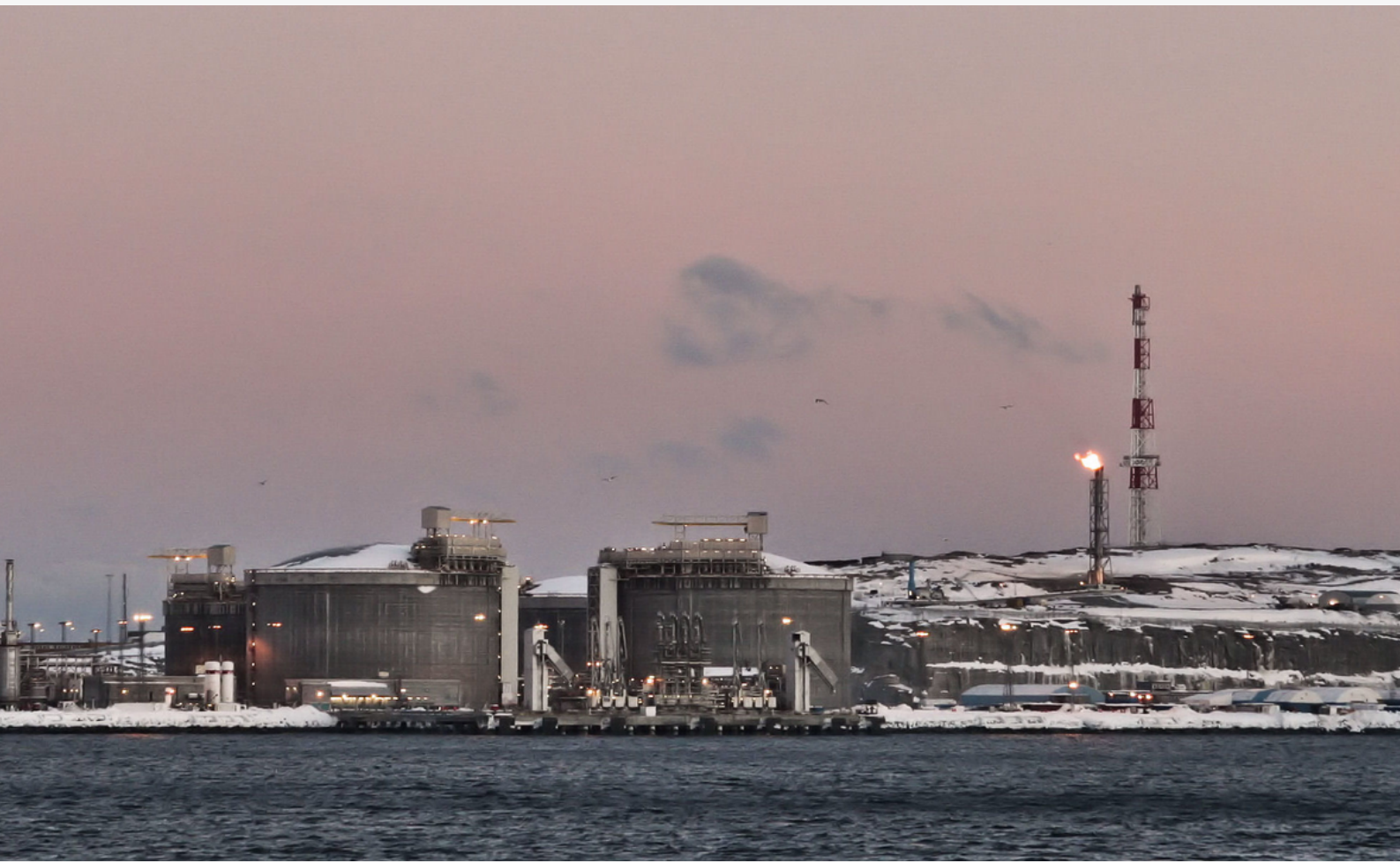
This ignores the fact that renewable energy is already the cheapest source of electricity in countries representing 96% of global electricity generation and the potential for additional gas supply to, in fact, displace clean, renewable energy rather than coal or other sources of gas.[10]

The Rystad authors themselves cautioned that their analysis of the price and demand effects of increased Norwegian gas supply on regional markets "involves a significant simplification" [translated from Norwegian].

A study by Vista Analyse found that increased Norwegian petroleum production increases global emissions, regardless of scenario and time horizon. For oil, the increase is 47–90 kg CO_2 per barrel, while additional gas production increases emissions by 6–41 kg CO_2 per barrel of oil equivalent.[11]

Finally, the Oil Change International critique concluded as follows:

> *Electrification of oil and gas production in Norway will only make a marginal contribution to reducing emissions related to the sector. As it seeks to align its policies with the globally agreed goal of limiting warming to 1.5°C, Norway should immediately start implementing a just transition away from oil and gas production and design a phase-out pathway for its oil and gas production that is aligned with science and equity. Norway can begin this process by starting to phase out the oldest fields first, stopping the renewal of licences when they expire, and ceasing to grant new exploration and production licences on the Norwegian continental shelf.*



Another slap in the face for Sámi rights:

The gas from the Snøhvit field is sent through a pipeline from the Barents Sea to the onshore LNG plant on Melkøya outside the city of Hammerfest. To be able to electrify the facility, a new 52 kilometre long 420 kV power line from Skaidi to Hammerfest needs to be built. The grid is planned to go through 3 different Sámi reindeer pasture territories, that of District 20 Fála, District 21 Gearretnjárga and District 22 Fiettár[12].

The day that the Government made public they were approving Equinor's plans for electrification on Snøhvit also marked the 666th day of human rights violations in Norway. In October 2021, the Supreme Court in Norway unanimously ruled that the wind power plant in Fovsen Njarke reindeer pasture territories, now fully operational, violates the human rights of the Sámi people[13].

Two years on, the Norwegian government has still not implemented the Supreme Court judgment. Instead, the government is doubling down on injustice with the electrification of Melkøya giving the go-ahead for new power lines that once again pass through reindeer pasture territories.

Furthermore, the project gives the go-ahead for more energy production on Sámi lands in Finnmark, despite the clear message from the affected Sámi districts. Such contempt for indigenous rights is the opposite of climate justice.

In their statements to the Ministry of Oil and Energy, all three districts object to the proposed grid, and warn against the consequences of allowing it.[14] The proposed route of the power line will go through important relocation paths for the reindeer, spring grazing areas and it will plough through the district's summer and autumn grazing lands.[15] All three districts also state that the issue has not been properly investigated, and point out that no concrete assessment is made of the overall effects of this measure, together with previous and planned interventions.

The Sámi Parliament is also against granting the proposed power line from Skaidi to Hammerfest. The Sámi Parliament believes that there will be too many disadvantages for the districts, and that electrification will entail a need for further development of energy production and even more power lines. The Sámi Parliament will not give its approval to the proposed new power line on the basis of the consequences for Sámi interests and without the consent of the affected reindeer herding districts.

A gas flare on Melkøya island in Norway, Joakim Aleksander Mathisen.

Key recommendations:

- The electrification plans for Melkøya LNG must be terminated and the concession to build the 420 kV power line from Hammerfest to Skaidi must be revoked.
- The gas production from Snøhvit and the LNG facility on Melkøya must be phased out. The phase-out should be based on principles of equity and should follow the timelines from the 2022 study by the Tyndall Centre at Manchester University.[16] That would entail that the production is reduced by 74% by 2030, and the production is completely ended by 2034.
- The Norwegian Government must immediately stop the ongoing human rights violations against the Sámi people.

Endnotes:

1 Ministry of Oil and Energy, August 2023: https://www.regjeringen.no/contentassets/c0c85d54ff88493b86713781ec7b6ece/vedrorende-godkjenning-av-endret-utbyggingsplan-for-snohvitfeltet-og-hammerfest-lng-l1483852-002-l1484472.pdf

2 Equinor 2023: https://www.equinor.com/energy/snohvit

3 Oil Change International based on production estimates from Rystad Energy uCube (August 2023)

4 Ministry of Oil and Energy, August 2023: https://www.regjeringen.no/contentassets/c0c85d54ff88493b86713781ec7b6ece/vedrorende-godkjenning-av-endret-utbyggingsplan-for-snohvitfeltet-og-hammerfest-lng-l1483852-002-l1484472.pdf

5 Oil Change International based on production estimates from Rystad Energy uCube (August 2023)

6 Ministry of Oil and Energy, August 2023: https://www.regjeringen.no/contentassets/c0c85d54ff88493b86713781ec7b6ece/vedrorende-godkjenning-av-endret-utbyggingsplan-for-snohvitfeltet-og-hammerfest-lng-l1483852-002-l1484472.pdf

7 Ministry of Oil and Energy, August 2023: https://www.regjeringen.no/contentassets/c0c85d54ff88493b86713781ec7b6ece/snohvitfeltet-godkjenning-av-endret-utbyggingsplan.pdf

8 Rystad Energy 'Netto klimagassutslipp fra økt olje- og gassproduksjon på norsk sokkel.' February 15, 2023: https://www.regjeringen.no/contentassets/f5fc522f50674c1f9e0b5db47c264dbe/netto-klimagassutslipp-fra-okt-olje-og-gassproduksjon-pa-norsk-sokkel_hovedrapport.pdf

9 Oil Change International submission to Norwegian Ministry of Oil and Energy on Rystad Energy's study on the greenhouse gas emissions effects of new oil and gas production on the Norwegian continental shelf, February 2023: http://priceofoil.org/content/uploads/2023/09/OCI_Comments_Rystad_Energy_Norway_Study_February_2023.pdf

10 BloombergNEF, "2H 2022 LCOE Update," December 8, 2022, p. 3, available by subscription.

11 Vista Analyse 2023: https://vista-analyse.no/no/publikasjoner/norsk-olje-globale-utslipp/

12 Multiconsult 2021: https://www.statnett.no/globalassets/her-er-vare-prosjekter/region-nord/skaidi-hammerfest/vedlegg-1.-oppdatert-konsekvensutredning-skaidi-hammerfest-dat.-29.01.21.pdf

13 The Supreme Court of Norway 2021: https://www.domstol.no/no/hoyesterett/avgjorelser/2021/hoyesterett-sivil/hr-2021-1975-s/

14 Ministry of Oil and Energy, Aug 2023: https://www.regjeringen.no/contentassets/c0c85d54ff88493b86713781ec7b6ece/ny-420-kv-kraftledning-skaidi-hammerfest-1484266.pdf

15 Multiconsult 2021: https://www.statnett.no/globalassets/her-er-vare-prosjekter/region-nord/skaidi-hammerfest/vedlegg-1.-oppdatert-konsekvensutredning-skaidi-hammerfest-dat.-29.01.21.pdf

16 Calverley, D., & Anderson, K. (2022). Phaseout Pathways for Fossil Fuel Production Within Paris-compliant Carbon Budgets: https://pure.manchester.ac.uk/ws/portalfiles/portal/213256008/Tyndall_Production_Phaseout_Report_final_text_3_.pdf

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Oil Change International *is a research, communications, and advocacy organization focused on exposing the true costs of fossil fuels and facilitating the coming transition towards clean energy*

Front Cover image: Larry Lamsa, Melkøya LNG gas terminal.

Body image: Janter, LNG Gas terminal Melkøya at the Snøhvit gas field.

Back cover image: Leonora Enking, Snøhvit gas processing station.

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