

Hvorfor påvirkes norsk velferd relativt lite av aktiviteten i olje- og gasssektoren?

Hvorfor påvirkes norsk velferd relativt lite av aktiviteten i olje- og gasssektoren?

1. Fordi velferden finansieres av avkastningen fra SPU (ikke av løpende inntekter).

Hvorfor påvirkes norsk velferd relativt lite av aktiviteten i olje- og gasssektoren?

1. Fordi velferden finansieres av avkastningen fra SPU (ikke av løpende inntekter).
2. Fordi ressursene som brukes i sektoren vil finne nye anvendelser.

Hva blir konsekvensene av mindre norsk olje og gass?

- ▶ Lavere inntekter til fondet.
- ▶ Lavere aktivitet i sektoren.
- ▶ Mindre gass i internasjonale markeder.

Hva blir konsekvensene av mindre norsk olje og gass?

- ▶ Kort sikt versus lang sikt!

The Gas Trap: Outcompeting Coal vs. Renewables

NBER Working Paper No. w32718

36 Pages • Posted: 23 Jul 2024

[Bård Harstad](#)

Stanford Graduate School of Business

[Katinka Kristine Holtsmark](#)

University of Oslo

Date Written: July 2024

Abstract

We analyze a fundamental dilemma and time-inconsistency problem facing a climate coalition producing natural gas. In the short term, it is tempting to export more to outcompete coal. When this policy is anticipated, however, investments in renewables fall and emissions ultimately increase. When the coalition cannot pre-commit, its policies will be counterproductive. We discuss the robustness of this result and possible solutions. If the coalition can invest directly in renewables, for instance, the incentive to maintain a high price on exports can mitigate the temptation to reduce the price to outcompete coal. Under certain conditions, the commitment outcome can be implemented.

Hva blir konsekvensene av mindre norsk olje og gass?

► Kort sikt versus lang sikt!

The Gas Trap: Outcompeting Coal vs. Renewables

NBER Working Paper No. w32718

36 Pages • Posted: 23 Jul 2024

[Bård Harstad](#)

Stanford Graduate School of Business

[Katinka Kristine Holtmark](#)

University of Oslo

Date Written: July 2024

Abstract

We analyze a fundamental dilemma and time-inconsistency problem facing a climate coalition producing natural gas. In the short term, it is tempting to export more to outcompete coal. When this policy is anticipated, however, investments in renewables fall and emissions ultimately increase. When the coalition cannot pre-commit, its policies will be counterproductive. We discuss the robustness of this result and possible solutions. If the coalition can invest directly in renewables, for instance, the incentive to maintain a high price on exports can mitigate the temptation to reduce the price to outcompete coal. Under certain conditions, the commitment outcome can be implemented.

Climate Change, Directed Innovation, and Energy Transition: The Long-Run Consequences of the Shale Gas Revolution

NBER Working Paper No. w31657

99 Pages • Posted: 11 Sep 2023

[Daron Acemoglu](#)

Massachusetts Institute of Technology (MIT) - Department of Economics; Centre for Economic Policy Research (CEPR); National Bureau of Economic Research (NBER)

[Philippe Aghion](#)

London School of Economics

[Lint Barrage](#)

ETH Zürich

[David Hémous](#)

University of Zürich; Centre for Economic Policy Research (CEPR)

Date Written: September 2023

Abstract

We investigate the short- and long-term effects of a natural gas boom in an economy where energy can be produced with coal, natural gas, or clean sources and the direction of technology is endogenous. In the short run, a natural gas boom reduces carbon emissions by inducing substitution away from coal. Yet, the natural gas boom discourages innovation directed at clean energy, which delays and can even permanently prevent the energy transition to zero carbon. We formalize and quantitatively evaluate these forces using a benchmark model of directed technical change for the energy sector. Quantitatively, the technology response to the shale gas boom results in a significant increase in emissions as the US economy is pushed into a "fossil-fuel trap" where long-run innovations shift away from renewables. Overall, the shale gas boom reduces our measure of social welfare under laissez-faire, whereas, combined with carbon taxes and more generous green subsidies, it could have increased welfare substantially.