

Is Europe Winning the Energy War?

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Presenter's Biography

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Morten Frisch, Senior Partner, Morten Frisch Consulting (MFC)

- Engineer and economist, member SPE 1975 and IAEE 1980
- 50+ years hands-on strategic, commercial & operational gas experience along the entire gas/LNG and other energy chains
- Prior to forming MFC in 1990 worked for Norwegian Government, Statoil/Equinor, ConocoPhillips & ExxonMobil
- Plans and conducts commercial energy projects for clients; acting as gas sales contract lead negotiator
- Frequently called upon as expert witness in international gas contract disputes
- Degrees from University of Newcastle-upon-Tyne, UK, and Massachusetts Institute of Technology (MIT), USA

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Forward-looking Statement

This Berlin Round Table discussion addresses the current European Energy Crisis, its likely causes and how the European energy supply and pricing environment potentially could be improved. Although Morten Frisch believes the statements he makes during the round table discussion reflect a correct view of the situation in international energy markets during October 2023, Morten Frisch and/or Morten Frisch Consulting (MFC) cannot be held responsible if this should prove not to be the case, or if any of the conclusions drawn from this round table discussion should prove to be inaccurate. No representation or warranty is made as to the accuracy or completeness of subjects discussed, statements made including concluding remarks.

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Is Europe Winning the Energy War?

The two sided European energy crisis “coin”:

1. Net Zero Carbon Energy policies to switch to 100% renewables – “**renewable fundamentalism**”; and
2. the Russian “**gas war**” that presided the invasion of Ukraine.

The Energy Crisis and Covid

The energy crisis was delayed by the Covid pandemic by some eight (8) months, but the crisis was rekindled by the Russian gas war starting in spring 2021 for then to be magnified by Russia's invasion of Ukraine on 24 February 2022.

Green energy inflation and subsidies

Renewable fundamentalism challenges have to a large extent been overlooked by OECD governments while the same governments have been hiding green energy inflation with subsidies.

Energy Transition Confronting Realities

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- The critical need for a much faster build out and strengthening of electricity transmission systems in order to maximise the value of wind and solar power systems;
- limitations of wind turbine, solar panel and hydrogen electrolyser supply chains – resulting in high inflation;
- the need for power back up to cover wind and solar intermittency and the CO₂e foot print and cost of such back up operations; and
- the production and use of hydrogen as an energy carrier restricted to tight clusters to reflect the Laws of Physics and therefore critical efficiency and cost considerations.



Crude oils and petroleum products to be
needed for longer

Gas to be needed for *even longer...*

and

No Net Zero Hydrocarbon without
Nuclear Energy



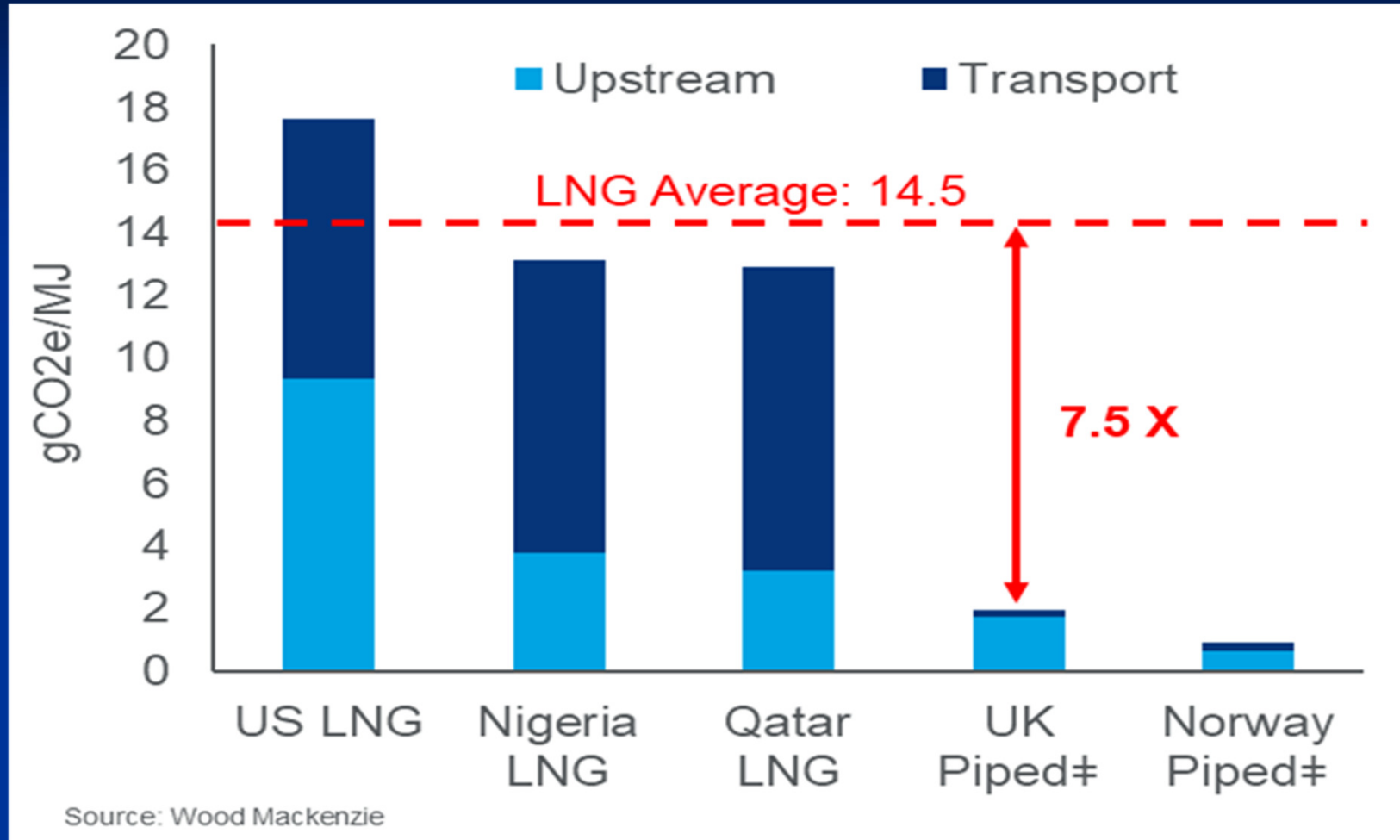
European oil and gas production

European countries having oil and gas reserves should accelerate licencing and E&P activities to optimise oil and gas production.

Oil and gas produced in European countries being subject to strict environmental regulations will have a considerably lower CO₂e footprint than crude oils and pipeline gas/LNG imported from outside the region.



Emissions of delivered** gas to UK (gCO₂e/MJ)



****Delivery point is Isle of Grain #Norway Piped is Troll**

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Let the discussion begin

Morten Frisch

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