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Executive Director

IEA/EXD(2022)182

Paris, 22 November 2022

Mr. Philip Dunne MP
Chairman of the Environmental Audit Committee
United Kingdom

Electronic Transmission

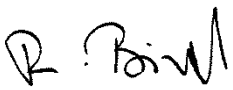
Dear Mr. Dunne,

Thank you very much for your letter of 9 November 2022.

It was unfortunate that my intervention at the hearing of the Environmental Audit Committee was unable to go ahead as planned on 20 October, however, I am pleased to send you my written responses, as an enclosure.

For any follow-up, please do not hesitate to be in touch with my office and rest assured we stand ready to support the valuable work done by your committee.

Yours sincerely,



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International Energy Agency

Responses to the Questions from the Environmental Audit Committee to the International Energy Agency

Reducing reliance on Russian energy and energy efficiency:

1. How successful have European countries, like the UK, been in reducing reliance on imports of Russian oil and gas since the invasion of Ukraine? Has Russia's war in Ukraine led to a permanent realignment in global energy supplies?

Natural gas:

Russian natural gas accounted on average for 40% of the European Union's gas demand between 2017-2021. The United Kingdom had a significantly lower exposure to Russian natural gas. Our data suggests that direct Russian gas supplies – in the form of liquefied natural gas - accounted to less than 3% of the United Kingdom's gas demand between 2017-2021.

Since Russia's unprovoked invasion, both the European Union and the United Kingdom significantly reduced their reliance on Russian gas. The share of Russian gas fell to below 10% of the European Union's gas demand in the first two weeks of November, compared to an average of 40% in the last 5 years. Remaining Russian imports are concentrated in a small number of Central and Eastern European countries which have been historically more reliant on Russia and have more limited diversification opportunities due infrastructure constraints. The United Kingdom has completely ceased Russian natural gas imports. As early as March, a ban was imposed on vessels owned or operated by anyone connected to Russia and authorities –making effectively impossible the import of Russian LNG. A formal ban on Russian LNG was recently adopted and will take effect from 1st of January 2023.

Despite the steep decline in Russian gas supplies, the European Union was able to refill its gas storages. Record inflow of LNG (primarily from the United States) and a steep demand reduction (down by 12% year-on-year) enabled a near-record storage build-up this summer. The vast regasification capacity of the United Kingdom supported additional inflow of regasified LNG into Continental Europe via the gas interconnectors.

The strong inflow of LNG into the European and the United Kingdom (up by 70% year-on-year) lead to reconfiguration of global LNG flows in 2022. Lower LNG availability supported gas-to-coal switching and had negative repercussions on gas- and electricity supply security in the more price sensitive markets, including South Asia.

The phase-out of Russian gas is expected to support higher LNG imports into the European Union over the medium-term, contributing to tighter market conditions. A structural reduction of natural gas demand, via the implementation of energy efficiency measures and an accelerated deployment of renewables and heat pumps, would help to alleviate market tensions and return to a more orderly global LNG market.

Oil:

EU countries and the UK have made significant progress in reducing their reliance on Russian crude oil. By October, EU countries have cut their imports of Russian oil from 4 mb/d before the invasion to 2.4 mb/d, or a reduction of 1.6 mb/d. EU imports of Russian crude oil have fallen by 1.1 mb/d to 1.4 mb/d, with additional supplies sourced from Saudi Arabia, West Africa, Iraq, Norway and Brazil. By 5 December, when the EU embargo on crude oil comes into effect, an additional 1 mb/d of Russian crude oil will have to be replaced in the EU.

EU imports of Russian refined oil products been reduced by 0.5 mb/d compared to pre-war levels, to 0.9 mb/d in October 2022. These will have to be replaced/diverted from 5 February when the EU embargo on oil products come into force. The EU's share in Russian crude oil exports fell to just 31% in October, from 50% before the war, while the product market share fell to 35% versus 50% pre-war levels. In terms of imports, Russia accounted for 18% of total EU imports in October, down from 30% before the war. The United Kingdom has completely halted imports of

Russian oil. Before the invasion the UK imported roughly 200 kb/d of Russian oil, but this had by August been reduced to almost zero.

2. **The IEA has identified a number of opportunities for rapid energy efficiency gains. What are the quickest wins that a country like the UK could implement in the near term? What lessons can the UK learn from other countries on energy efficiency?**

There are many low cost measures which can improve energy efficiency and also reduce energy consumption rapidly. The IEA highlighted how such rapid impact measures could be undertaken in a series of reports, including: 10-point plan to reduce reliance on Russian Natural gas, a 10-point plan to cut oil use, and raising citizen awareness through the "Playing my part" report produced in collaboration with the European Commission. The IEA tracks policy globally and our analysis shows that well-designed, well-implemented energy efficiency policies can have a significant impact on energy use, reducing emissions, and creating jobs in the process. Behavioural measures can be very effective. For example, if everyone in their homes turned down their thermostats by 1 degree, the gas saving would be at least 7%. More structural measures that offer the quickest and largest impacts include promoting installation of heat pumps, upgrading home insulation, and helping small business manage their energy use better. In this regard, the IEA welcomes the announcement as part of the Autumn Statement of the creation of an Energy Efficiency Taskforce and the allocation of funding to energy efficiency measures.

<u>The IEA's net zero scenario for the global energy sector:</u>

3. **Under which circumstances could a country licence new oil and gas exploration and development and still be compatible with the IEA's net zero pathway for the energy sector?**

In the Net Zero Emissions by 2050 (NZE) Scenario published in the WEO 2022, declining fossil fuel demand that occurs as result of the rapid scale up in clean energy technologies can be met through continued investment in existing assets and already approved projects but without any new long lead time upstream conventional projects. Meeting this condition, though, comes with consequences that countries need to consider carefully, especially in a world marked by geopolitical tensions. One crucial aspect is an increased reliance over time on a smaller concentration of suppliers. Any additional oil and gas projects, beyond the levels of supply needed in the NZE Scenario, would lead to additional emissions that would need to be compensated by even more robust emissions reductions later on. Any new developments that go ahead would have to prioritise low-emissions technologies across the full supply chain from extraction, processing and transport to end-use.

4. **Does it make any difference if a country has a lower average emissions intensity of production? How does the UK's emissions intensity compare to other countries?**

The emissions intensity of oil and gas production in the UK is around half the global average but the UK's emissions intensity is notably higher than in Norway for example. The NZE Scenario requires major efforts to reduce emissions from all existing oil and gas assets around the world, so, by 2030, the difference in emissions intensities between new fields and existing fields in the NZE Scenario is relatively small.

5. **We have heard some challenges to the IEA's scenario: industry figures have insisted to us that the demand for oil and gas will continue for decades. Is it premature to put a halt to the development of new fields if demand for fossil fuels will remain?**

Our scenarios provide different perspectives on the future development of the energy system.

- *In our Stated Policies Scenario – a scenario based on today's policy settings – global oil demand rises by around 10% and natural gas demand rises by about 5% to 2030.*

- *In the Announced Pledges Scenario – in which all individual energy and climate commitments announced by countries are achieved in full and on time - oil demand falls slightly and natural gas demand falls by 10% to 2030.*
- *In the NZE Scenario, faster global action to cut emissions means oil and natural gas demand both fall by around 20% to 2030*

In the Stated Policies and Announced Pledges scenarios, declining output from existing sources of production mean that new conventional upstream projects are required to ensure that supply and demand stay in balance. In the NZE Scenario, declining oil and gas demand can be met without the need for the development of any new long lead time conventional fields.

Managing the transition in the oil and gas sector:

6. **The oil and gas sector is clearly going to be one of the most affected by the net zero transition – in terms of jobs, technology and its core business. How should governments and the industry itself plan for and approach this transition? How can governments best support workers in the oil and gas industry during the transition?**

Clean energy policies will create millions more jobs than are lost in the transition, but of course there will be regional differences and local impacts, and it must be a priority to protect workers and communities affected negatively. The net zero transition requires governments to anticipate the upcoming changes with detailed assessments of workforces and skills needs to undertake the scale of new projects required for a low-carbon economy. Building on these assessments, training, upskilling and reskilling programmes are essential to support workers in the oil and gas industry for jobs in higher growth sectors, most specifically clean energy industries. The skills of oil and gas workers can be transferable to other clean energy sectors and oil and gas firms can capitalise on these skills to diversify their portfolio to clean energy technologies. The IEA has developed energy employment modelling and has recently published an overview of jobs across all energy sectors. We have also published new research on best practice in skills and training programmes for clean energy, and are developing additional analysis of future skills needs and how to maximise the creation of good quality jobs for workers of today and of tomorrow.

7. **Electrifying platforms and ending flaring are two of the most significant actions the industry can take to cut their upstream emissions. What policy action would the IEA recommend to accelerate industry action on this?**

A number of policies have already been tried and tested by countries and shown to lead to reductions in emissions from oil and gas operations. This includes: GHG emissions pricing, stringent emissions standards, bans on non-emergency flaring and methane venting, and the establishment of rigorous measurement, reporting and verification frameworks.

Scope 3 emissions from oil and gas:

8. **Should oil and gas companies be setting targets to reduce their total emisisons (including scope 3) or are emissions intensity targets adequate?**

   Please see combined response below on questions 8, 9 and 10.

9. **Oil and gas companies in the UK have encouraged the Government to focus on scope 1 and 2 emissions. How important is it to net zero goals that governments should take scope 3 emission into account when making policy decisions on oil and gas extraction?**

   Please see combined response below on questions 8, 9 and 10.

10. Oil and gas companies and the UK Government have argued that calculating scope 3 emissions from licencing in the North Sea would be 'too complicated'. Is there any technical reason why the scope 3 emissions of new oil and gas licencing rounds cannot be accurately estimated?

There are lots of different metrics that are being discussed on assessing the alignment of oil and gas companies and financial organisation portfolios with net zero targets and the IEA is actively engaged in those discussions. It is important new targets are clear in what they want to achieve and that they avoid possible unintended consequences.

Accurately estimating Scope 1 and 2 emissions as well as Scope 3 emissions is a key issue, as companies could be underestimating the actual level of emissions coming from their operations through a lack of robust measurement and verification processes. Criteria on measurement should therefore be considered when developing metrics, although the need for more measurement should not delay efforts to reduce emissions.

Phasing out inefficient fossil fuel subsidies:

11. The Glasgow Pact agreed at COP26 committed to phasing down coal and phasing out inefficient fossil fuel subsidies. In your view, is sufficient progress being made on this?

As a result of the energy crisis and increases in natural gas prices, coal is seeing a temporary surge in demand in some regions. But we expect that efforts to reduce emissions will soon put coal into decline again: in our Stated Policies Scenario, global coal use falls by around 10% between 2021 and 2030, with a near-50% decline in advanced economies.

Many countries are trying to reform their fossil fuel subsidy regimes but they have faced difficulties especially given the recent high and volatile fuel prices.

12. How would the IEA define an 'inefficient fossil fuel subsidy'?

Inefficient fossil fuel subsidies are subsidies where end-user prices paid by consumers are lower than prices that correspond to the full cost of supply and that encourage wasteful energy consumption, reduce energy security, impede investment in clean energy sources or undermine GHG emissions reduction efforts.