Fossil fuel imports from Russia to South Korea, Japan, and Taiwan in the first five months of the invasion of Ukraine

August 2022

Figure 1 | Russia budget revenue from fossil fuel purchase (Source: CREA analysis)
Key findings

This briefing assesses fossil fuel imports from Russia to three East Asian democracies, Japan, South Korea and Taiwan, that have expressed support for Ukraine in its struggle for independence and survival. Fossil fuels are a key enabler of Russia’s military buildup and aggression, and phasing out imports of fossil fuels from Russia is one of the most important steps that countries can take.

- In the first five months of the invasion of Ukraine (from the 24th of February until the end of July), the three East Asian economies imported an estimated EUR 5.1 billion (USD 5.5 billion) of fossil fuels from Russia.
- Out of the three countries, Japan spends the most on Russian fossil fuels: more than two times as much as Taiwan and 50% more than South Korea. Most of the imports in Japan are gas imports, while South Korea spends noticeably the most on oil out of the three. Japan also spends the most on coal.
  - South Korea imported an estimated EUR 1.6 billion (USD 1.7 billion) worth of fossil fuels from Russia, out of which, coal imports equaled a total of EUR 606 million (USD 656 million), LNG EUR 187 million (USD 204 million), and oil EUR 810 million (USD 889 million).
  - Japan imported an estimated EUR 2.4 billion (USD 2.6 billion) worth of fossil fuels from Russia, out of which coal EUR 870 million (USD 945 million), LNG EUR 1.1 billion (USD 1.2 billion), and oil EUR 450 million (USD 492 million).
  - Taiwan imported an estimated EUR 1.1 billion (USD 1.2 billion), out of which coal EUR 830 million (USD 902 million), LNG EUR 145 million (USD 161 million), and oil EUR 122 million (USD 135 million).
- These imports contributed an estimated USD 1 billion into the state budget of the Russian Federation under the form of mineral extraction taxes and export duties. From this, Japan accounted for USD 491 million, while South Korea accounted for USD 385 million, and Taiwan for USD 100 million. The sale of oil provided the Russian Federation budget with the largest income from these exports: USD 441 million. Gas sales accounted for a budget revenue of USD 434 million. Lastly, coal sales accounted for budget revenues of USD 102 million. In total, about 18% of the value of fossil fuel exports went directly into the coffers of the Russian Federation.
- In addition to its imports, South Korea re–exported EUR 1.7 billion (USD 1.9 billion) worth of oil-related products to China. From that, crude oil was the most imported product, amounting to EUR 1.5 billion (USD 1.7 billion). Imports belonging to the
oil/chemical category equaled a total of EUR 122 million (USD 135 mln). In addition to that, EUR 46 million (USD 52 mln) worth of Russian oil products were imported to China from South Korea.

- There are several Korean, Japanese and Taiwanese companies that have continued purchasing Russian fossil fuels.
- Taipower is the largest importer of Russian coal with an estimated EUR 310 million (USD 334 million) in the period from the beginning of the invasion until the end of July, followed by Formosa Petrochemical Company with EUR 131 million (USD 143 million). Korea’s POSCO is the largest Korean coal importer with EUR 86 million (USD 94 million). In Japan, the largest importer of coal is JFE Steel with EUR 61 million (USD 67 million).
- Japan has some of the largest fossil gas importing companies in the world. The biggest one of them, JERA, including its subcompanies, imported a total of EUR 501 million (USD 549 million) worth of liquified natural gas. The largest gas importer in Taiwan is CPC corporation, which imported EUR 145 million (USD 162 million) worth of liquified natural gas. The biggest Korean gas importer, state-owned Kogas, imported EUR 106 million (USD 118 million) worth of natural gas.
- The biggest Japanese oil importer, ENEOS Corp. imported EUR 250 million (USD 275 million) worth of oil, while Korea National Oil Corporation imported EUR 79 million (USD 90 million) and Taiwan’s CPC Corporation EUR 36 million (USD 39 million).
- Since the beginning of the invasion, Japan has been the third largest importer of Russian coal after China and India. Taiwan has been the fifth-largest importer and South Korea the seventh. For LNG, all three countries are among the top eight biggest importers — Japan importing considerably more than the other two.
- Taiwan has some of the largest coal importing ports in the world. Japan, on the other hand, has some of the largest gas importing ports.
Figure 2 | Largest importers of fossil fuels from Russia, from 24 February to 31 July 2022
(Source: CREA analysis)
**Figure 3** | Largest importing ports of fossil fuels from Russia, from 24 February to 31 July 2022 (Source: CREA analysis)
Identified Korean, Japanese, and Taiwanese importers of Russian fossil fuel (sorted by monetary values)

**Figure 4** | Largest importing companies of fossil fuels from Russia, in Japan South Korea and Taiwan, from 24 February to 31 July 2022 (Source: CREA analysis)

The importers are identified based on the location of the shore facility at which a ship unloads cargo. Some shipments cannot be identified as multiple potential buyers use the same facility, or the owner of the facility cannot be ascertained. CREA has made every effort to accurately identify the owners of different facilities but errors are possible and will be corrected if we receive new information.
Developments by country

Japan

Japan’s fossil fuel dependence is very high, with 94% of its energy supply provided by imported fossil fuels. The country has aligned itself with Ukraine and imposed sanctions against Russia in response to the invasion of Ukraine.

Japan announced in April that it will phase out its imports of Russian coal, while looking for other sources. However, it did not give a clear timeline for the phase-out. Our data shows that Japan continued to import Russian coal in the period of May to July, albeit at reduced volumes by some 62% in June as compared to the peak in March, pointing to the difficulty in replacing Russian coal rapidly and at affordable prices.

Oil imports from Russia into Japan stopped mid-April. Japan had pledged to phase out its imports of Russian oil, a small share of its total demand and our data shows no Russian crude imports to Japan after April 20th.

LNG is the thorniest issue that Japan is faced with as Russia supplies a significant part of Japan’s demand under long term contracts at prices that are well below current market levels. Japan has recently announced it wants to maintain its stake in Sakhalin 2 where the LNG is imported from. Imports of LNG from Russia were at the same levels in the period May to June showing Japan’s reluctance to exit the long term contracts and find suppliers in a very tight global LNG market seeing record prices.

Finally, Japan is expected to restart four of its nuclear reactors in order to reduce dependence on coal and gas in these volatile times.

South Korea

Russia is a major supplier of fossil fuel to South Korea and has maintained its position after the Ukraine invasion. Coal imports to South Korea have remained at similar levels throughout March-June, but have seen a steep decline in July, by 58% compared to June, possibly marking a longer term decline as South Korea rallied itself to Western sanctions and looks to decrease its exposure to Russian fossil fuels. In the first 100 days of the war,
South Korea was the fifth-largest coal importer. However, relative to other major importers, South Korea is now the seventh-largest coal importer.

LNG imports have declined month on month in April by 50% and stayed at those levels in April and July, while in June we saw no LNG imports; likely due to seasonal or maintenance issues. South Korea imports LNG from Russia through long term contracts from Sakhalin 2 project and the relative steadiness of imports resembles Japan's situation. State-owned Kogas remains the fourth-largest identified importer of Russian LNG among the companies from the three countries.

South Korea is not only reliant on Russian oil for meeting domestic demands, but also re-exports a significant amount to China. Oil shipments from Russia to South Korea continued at similar levels from prior to the invasion up to May. From May to July, oil imports into South Korea have remained steady, although remaining at a quarter of the peak seen in April. Increasing amounts of oil imported in South Korea are being shipped to China, a total of EUR 1.7 billion (USD 1.9 billion), as of July 31st. At the end of the five-month period since the outbreak of the war, Yeosu port was the fifth largest of all ports importing Russian oil globally.

As in the case of Japan, South Korea is also planning on ramping up its nuclear energy share, planning to lift the nuclear share of the energy mix to 30% by 2030, from 27% last year.

Taiwan

Taiwan’s dependence on Russian LNG and coal imports is relatively high. Coal imports have started declining from their peak in March on a steady pace up to June, but have increased again month on month in July by almost 70%.

LNG imports were relatively flat from March to May, but were at zero in June and July while oil imports declined by 55% in May as opposed to March, remained at relatively the same level in June and dried out in July. Additionally, April has seen no Russian oil imports to Taiwan.

Since the beginning of the invasion, Taiwan has been the fifth-largest Russian coal importer in monetary terms. It is also the eighth-largest LNG importer. Taiwan has some of the biggest coal and LNG importing companies and ports in the world. Taipower is the largest identified coal importer in terms of monetary value of shipments, having sent an
estimated EUR 310 million (USD 334 million) to Russia since the beginning of the invasion until July 31st. CPC Corporation is the largest importer of LNG and oil products (EUR 181 million; USD 201 million).

Taiwan appears committed to work towards its Net Zero 2050 goal and carbon pricing scheme and its government and biggest companies have planned to spend about NT$900 billion ($32 billion) between 2022 and 2030 on renewable technologies, grid infrastructure and energy storage.
About CREA

Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions to air pollution. CREA uses scientific data, research and evidence to support the efforts of governments, companies and campaigning organizations worldwide in their efforts to move towards clean energy and clean air, believing that effective research and communication are the key to successful policies, investment decisions and advocacy efforts. CREA was founded in December 2019 in Helsinki and has staff in several Asian and European countries.

In our statement of support for Ukraine, CREA absolutely condemns the Russian military’s unprovoked and unjustified attack against another sovereign nation, Ukraine. The assault goes against the fundamental values of human wellbeing, safety, and dignity that our organisation seeks to advance. We urgently call for an end to the assault and stand in solidarity with the Ukrainian and Russian people calling for peace.