



Berlin, 1 May 2022

Second energy security progress report

Germany is quickly cutting its dependence on Russian energy.

Germany is currently working rapidly to reduce its dependence on Russian energy and to broaden the supply base of its energy. Thanks to intensive efforts with all the relevant stakeholders, it has been possible to make significant progress, to diversify the supply chains and thus to gradually achieve clear reductions in the degree of dependence.

What has happened since the energy security progress report of 25 March 2022?

Immediately after the war was started, the Federal Government began work to safeguard the supply of energy in Germany whilst reducing dependence on Russia. Since 25 March 2022, the following has transpired:

1. There continues to be a regular dialogue on the current energy supply situation between the Federal Ministry for Economic Affairs and Climate Action and all the key stakeholders at EU, federal and Länder level. This involves constant discussions of and preparations for ways to reduce imports of Russian fuel. In this context, the ministry is helping companies to gradually substitute Russian energy. At present, security of supply is ensured; the Federal Government is doing its utmost to ensure that this remains the case.
2. The Federal Government's programme of 1 March 2022 to buy up gas via the Gas Market Area Manager (Trading Hub Europe, THE) has been completed. In total, approx. 950 million m³ of gas was purchased, to be transferred into the storage facilities up to the end of May. Since 18 March 2020, most of the gas storage facilities have been filling up again. Following low storage levels in the winter, the level now stands at 34.32 per cent (on 1 May 2022).
3. The Gas Storage Act adopted by the Bundestag on 25 March entered into force on 30 April 2022. It stipulates for the first time that gas storage facilities must be well filled at the beginning of the heating period so that we can get safely through the winter. The act imposes specific levels of gas storage: as of 1 October, the storage facilities must be 80 per cent full, as of 1 November 90 per cent, and on 1 February still 40 per cent. The Market Area Manager, Trading Hub Europe, is preparing the implementation of the act in cooperation with the Federal Ministry for Economic Affairs and Climate Action and the Bundesnetzagentur, and has published documents about this on its website.

4. On 30 March 2022, the Economic Affairs Ministry declared the early warning level of the Emergency Plan for Gas; this remains in force until further notice. It serves to take precautionary measures and to have better preparations in place for potential supply bottlenecks and failures. The announcement of the early warning level means that a crisis team has convened. The crisis team consists of the relevant Federal and Länder authorities and the energy companies. The team monitors the supply situation. The Bundesnetzagentur publishes a situation report every day.
5. On 4 April 2022, the Bundesnetzagentur was appointed fiduciary manager of the Gazprom Germania group on a temporary basis until 30 September 2022. The order of fiduciary management was made on the basis of the Foreign Trade and Payments Act, and serves to protect public security and order and to maintain the security of supply in Germany. In this capacity, the Bundesnetzagentur is also examining how the Rehden gas storage facility, which is characterised by particularly low storage levels, and which is operated by a subsidiary of Gazprom Germania, can rapidly be filled in line with the requirements of the new Gas Storage Act.
6. The cabinet adopted the “Easter package” on 6 April 2022. This will deliver the greatest acceleration in the expansion of renewable energy since the first version of the Renewable Energy Sources Act was adopted in 2000. The Easter package also includes amendments to the Offshore Wind Energy Act and improvements to grid expansion (Federal Requirements Plan Act, Grid Expansion Acceleration Act). Further to this, it has proved possible to arrive at good solutions on species protection and the issue of rotating beacons/weather radar, so that new potential sites are available for renewable energy sources.
7. The Federal Government has worked together with the power plant operators on purchasing and forming a coal stockpile from countries other than Russia, and thus done the groundwork for the coal embargo adopted by the EU.
8. On 7 April 2022, the Federal Government again participated in a release of oil stocks in the context of the International Energy Agency (IEA), phased over a 6-month period. Germany is again fulfilling its commitment corresponding to its 5.4% share of total oil consumption among IEA countries (= approx. 6.5 million barrels). Prior to this, the Federal Government participated from 5 March 2022 in a joint effort by all the IEA member states and directly released the German contribution of approx. 3.2 million barrels.
9. On 8 April 2022, Economic Affairs Minister Habeck and Finance Minister Lindner agreed on a protective shield for companies affected by the war. In addition to guarantee programmes and a KfW special loan programme to secure liquidity, targeted measures are also envisaged here to cushion the impact of the high energy prices on the business community. For example, there is a cost-cutting programme in the form of a temporary, narrowly defined allowance for companies particularly affected by the rise in gas and electricity prices. Further to this, a funding programme

is being set up for companies at risk of high collateral payments (margining). The protective shield is being phased in step by step; the guarantee programme was launched on 29 April 2022.

10. On 25 April 2022, the cabinet adopted in a written procedure the amendment to the Energy Security of Supply Act, which dates from 1975. This amendment aims to help the Federal Government cope with a worsening of the situation on the energy markets. The amendment is necessary and urgent so that all options to cope with a crisis are on the table in the present situation, and action can be taken swiftly. The draft has been adopted as a suggested wording, and has been presented to the Bundestag via the parliamentary groups of the governing coalition.
11. The Federal Government has taken out options via RWE and Uniper on four (rather than the initially planned three) floating LNG terminals (Floating Storage and Regasification Units, FSRUs) in order to further improve Germany's energy security. The corresponding contracts are close to completion. Federal funding of €2.94bn is available for this. The FSRUs are to come on stream for the landing and regasification of LNG as quickly as possible. Two decisions on sites have already been taken: these will be at Wilhelmshaven and Brunsbüttel; work will shortly begin in Wilhelmshaven. The first FSRU is to be deployed in Wilhelmshaven before the end of this year. A second FSRU is to come into operation at Brunsbüttel in early 2023. Further potential sites for FSRUs are Stade, Rostock, Hamburg-Moorburg, and Eemshaven in the Netherlands.
12. An LNG Acceleration Act is planned so that these LNG projects can be rolled out at this high, but urgently needed, pace. To this end, the Economic Affairs Ministry is working closely with the Environment and Justice Ministries on a wording for a draft law to be coordinated within the Federal Government. The LNG Acceleration Act will temporarily enable the approval authorities, under certain conditions, to dispense with certain procedural requirements, in particular with regard to the environmental impact assessment. Further to this, contracting authorities are to be able to apply relaxed procurement rules for a certain period in order to speed up the award of public contracts and concessions. The aim of the act is to progress all the approval and permitting procedures and the awarding of public contracts and concessions much more quickly than is possible under current legislation, so that there can be rapid approvals and the deployment of LNG on the German market. In order to ensure that implementation takes place as quickly as possible, the corresponding legal protection must also be accelerated in parallel.

Where we currently stand, and what can be achieved

1. One central building block in the joint efforts to reduce our dependence on Russia this year is to **consume far less oil and gas**, both directly (especially in heating, for transport and in production processes) and indirectly (through the electrification of processes which have so far used oil and gas). Every kilowatt-hour saved contributes to energy security and independence. We need to make particular efforts in the field

of transport and buildings, as the level of dependence on oil and gas is very great here; furthermore, both sectors failed to achieve their climate targets in 2021. For this reason, the Federal Government will again significantly step up its efforts in the field of energy efficiency this year in order – together with companies and households – to achieve rapid falls in gas and oil consumption. Investments are to take place wherever energy consumption can be reduced most quickly: from 2024, the aim is for renewables to provide 65 per cent of the energy for all newly installed heating systems. We are funding the replacement of gas heating systems by heat pumps. From January 2023, Efficiency Standard 55 will be mandatory for new buildings. In this way, we are gradually reducing our dependence on fossil fuel for our heat supply and are phasing out gas-fired heating.

2. Last year, Russian imports covered roughly 35 per cent of German **crude oil consumption**. Over the last few weeks, steps have been taken in a close dialogue between the Federal Ministry for Economic Affairs and Climate Action and the oil industry to terminate supply relationships with Russia: contracts have not been extended and are now expiring, so that it has already proved possible to substitute large amounts of Russian oil. The oil companies (apart from Rosneft) are now in a position, given some preparation, to cover 100 per cent of their requirements without Russian oil. All of these measures together have made it possible to cut Russian oil imports to residual requirements of the refineries in Leuna and Schwedt (approx. 12 per cent in total); an end to dependence on Russian crude oil imports by the late summer is a realistic prospect. An oil embargo with an adequate transitional period would therefore now be manageable in Germany; it would of course entail rising prices. Discussions are currently taking place on this at EU level and with other international partners.

This process of becoming entirely independent of Russian oil is particularly challenging in eastern Germany: the refineries in Leuna and Schwedt, which supply filling stations, airlines, households and businesses e.g. with gasoline, diesel, kerosene and fuel oil, have so far received almost all their crude oil by pipeline from Russia. They accounted for around two-thirds of total Russian crude oil imports in 2021. But Total, which operates the Leuna refinery, the destination of around one quarter of Russian oil imports in 2021, has already adjusted its contracts and is already receiving oil deliveries via the port of Gdańsk, so that imports of oil from Russia have initially been cut by half. The new supply contracts mean that the refinery in Leuna can terminate all its supply relationships with Russia at short notice. The refinery in Schwedt is continuing to be supplied exclusively with Russian crude oil. Since it is majority owned by Rosneft, the Russian state-owned enterprise, a voluntary cessation of supply relations with Russia is not to be expected. In technical terms, an alternative supply of the Schwedt refinery via the ports of Rostock and Gdańsk is feasible. The problem here is that, despite the war in Crimea, a Russian energy company has been able to gain such strong influence on the supply situation. The Federal Government is working very hard to resolve this problem so that it can put the preconditions in place for full independence from Russian oil. To this end, an intensive dialogue is taking place with the Polish Government to deepen

cooperation on security of supply in the region.

Refineries in western Germany accounted for the final third of the oil imports from Russia in 2021. In these cases, it is easier to organise a substitution of Russian imports via other supply channels. This process is in full swing (cf. point 2).

3. Russian **coal** has so far accounted for around 50 per cent of German hard coal consumption, and the proportion of hard coal originating from Russia used for electricity generation was even higher. Most of the operators of power stations supplying the public with electricity have already started to cut back on the amount of Russian coal they use. The major industrial consumers of coal – primarily the steel industry – are also changing most of their supply contracts. The new contractual arrangements mean that dependence on coal has dropped from 50 per cent at the start of the year to around 8 per cent. The ban on the purchase and import of Russian coal and other solid fossil fuels entered into force on 9 April 2022 as part of the fifth package of EU sanctions. Existing contracts concluded before 9 April 2022 can continue to be executed until 10 August 2022. Since 9 April 2022, the conclusion of new purchase contracts has been prohibited, with no transitional period.
4. Due to the high degree of dependence and the infrastructure in place, reducing imports of gas from Russia is highly challenging. In the past, on average, Russian **gas** imports accounted for 55 per cent of the market. This dropped to around 35 per cent by mid-April. To achieve this, the purchase of gas from Norway and the Netherlands has been stepped up, and LNG imports have been raised significantly.

However, independence from Russian gas can only be achieved by a combined national effort. Many stakeholders – the Federation, the Länder, municipalities, businesses and households – need to take many steps simultaneously. Further to this, the Federal Government is working intensively in close coordination with the relevant Länder on bringing several floating LNG terminals into operation in Germany as early as 2022 and 2023. This requires a massive effort by everyone involved – not least in order to put in place the technical preconditions, e.g. the construction of the connecting pipelines (see also above).

Backed by political talks, the energy companies are busy concluding enough LNG contracts. In 2021, Germany purchased 46 billion m³ of gas from Russia, and a fair proportion of this can be substituted by LNG capacities as follows: the Federal Government acts quickly to secure the purchase and selling on of up to 1 billion m³ of LNG via the Netherlands in 2022. The leasing of the total of four floating LNG terminals (FSRUs) can gradually make it possible to land (in the final stage in summer 2024) around 33 billion m³ of LNG. This means that 7.5 billion m³ of LNG will be available for the market in time for the winter of 2022/2023. Further LNG terminals, such as the terminal at Brunsbüttel with a capacity of 8 billion m³, are currently undergoing planning processes and will be available for the energy supply from 2026.

In combination with short-term efforts by companies and households to reduce the use of gas via energy efficiency, energy conservation and electrification, it will thus be possible to cut the proportion of gas consumed in Germany which comes from Russia to around 30 per cent by the end of the year. With all the stakeholders pulling in the same direction, independence from Russian gas can largely be achieved by summer 2024. This will require diversification, energy saving, a quicker ramp-up of hydrogen, and the massive expansion of renewables. In total, this will make it possible to gradually reduce the volume of Russian gas until it covers only 10 per cent of gas consumption in the summer of 2024.