TurkStream: Russia’s Southern Pipeline to Europe

Russia’s leading state-owned energy company, Gazprom, has long sought to protect its share of Europe’s natural gas market. Along with the controversial and still unfinished Nord Stream 2 project (see CRS In Focus IF11138, Russia’s Nord Stream 2 Pipeline: Continued Uncertainty), Gazprom’s TurkStream project may strengthen Russia’s foothold in European energy markets, especially in southeastern Europe. It also could cement Turkey’s longtime status as a lead recipient of Russian gas, even as Russia’s overall share of Turkish gas imports has recently decreased.

Opponents of the TurkStream project, including some Members of Congress, have expressed concern that the project could erode Ukraine’s transit role for natural gas. Many analysts maintain that Moscow could use its energy exports as leverage in countries that are dependent upon Russian natural gas. The United States, in turn, supports projects to diversify natural gas supplies to Europe and undercut Russia’s market dominance.

Background

The EU is Russia’s largest natural gas export market. In 2019, Russia supplied about 38% of the EU’s natural gas imports. Turkey is Russia’s largest gas export market after the EU, although volumes have fluctuated. Due to Turkish increases in pipeline supply from Azerbaijan and spot purchases from liquefied natural gas (LNG) suppliers such as Qatar and the United States, Russia’s share of Turkey’s imports decreased from about 50% in 2018 to around 33% in 2019 and 2020. However, long-term supply contracts and other factors may affect Turkish efforts to maintain or broaden diversification.

Russia has exported natural gas to Turkey through several pipelines (see Figure 1). The north-south Trans-Balkan Pipeline (TBP), completed in the late 1980s, transported Russian gas to Turkey until January 2020. Via Ukraine, TBP crosses Moldova, Romania, and Bulgaria. In addition to transporting gas to these countries and Turkey, TBP also delivered Russian gas to North Macedonia and Greece. The Blue Stream pipeline, which became operational in 2003, is a joint project between Gazprom and Italy’s Eni that crosses the Black Sea and makes landfall in central Turkey.

The TurkStream project arose after the 2014 cancellation of Russia’s South Stream project, a Gazprom-led venture that would have transported Russian natural gas across the Black Sea to Bulgaria and further into Europe. The South Stream project collapsed in the wake of Russia’s invasion of Ukraine and amid a dispute between Gazprom and the EU involving regulatory issues. In late 2014, Russian President Vladimir Putin announced South Stream’s cancellation as Gazprom signed a memorandum of understanding with BOTAS Petroleum Pipeline Corporation, a Turkish state-owned company, to construct TurkStream.

Russian President Putin and Turkish President Recep Tayyip Erdogan inaugurated TurkStream in January 2020. The TurkStream system consists of two parallel pipelines with a total capacity of 31.5 billion cubic meters (BCM) per year (15.75 BCM each). The pipelines enter the water in Anapa, Russia, and make landfall in Kiyikoy, close to Turkey’s border with Bulgaria. The first pipeline supplies natural gas to Turkey (for more on Turkey’s status as a regional energy transport hub, see CRS Report R41368, Turkey: Background and U.S. Relations). The second pipeline, for which onshore construction continues, extends into southeastern Europe and has begun to deliver gas to some markets there.

Many analysts view TurkStream as a counter to the U.S.-backed Southern Gas Corridor project, which transports natural gas from Azerbaijan to Europe. The Southern Gas Corridor includes three connecting pipelines: the South Caucasus Pipeline (SCP) in Azerbaijan and Georgia; the Trans-Anatolian Pipeline (TANAP) through Turkey; and the Trans Adriatic Pipeline (TAP), which extends from Greece to Italy via Albania and the Adriatic Sea. These three pipelines have an annual total capacity of 16 BCM—roughly half the total planned capacity of TurkStream. The first delivery of gas through TANAP to Turkey was in June 2018, and TAP made its first deliveries in late 2020. Turkey has contracted for 6 BCM from TANAP, and 10 BCM is to continue on through TAP (mostly to Italy and also to Greece and Bulgaria).

Figure 1. Southeastern European Gas Infrastructure

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Southeastern European Market

The second line of TurkStream is to transport Russian natural gas to southeastern and central European markets via Bulgaria, Serbia, and Hungary. This European extension, also referred to as TurkStream 2 and Balkan Stream, comprises new and existing infrastructure. Pipeline construction in Bulgaria and Serbia, totaling about 550 miles in length, is largely complete. Several compressor stations and a segment connecting TurkStream to Hungarian infrastructure have not yet been completed.

In January 2020, Gazprom began deliveries via TurkStream to Turkey, Bulgaria, Greece, and North Macedonia using partially completed and existing infrastructure. Since then, Gazprom also has made deliveries via TurkStream to Serbia, Bosnia and Herzegovina, and Romania. TurkStream has largely supplanted TBP’s role in delivering gas to southeastern Europe and Turkey. As of late 2020, TBP was operating at less than 5% capacity, according to Ukrainian energy officials.

Observers consider gas markets in southeastern Europe to be less interconnected relative to other regions of Europe and more reliant upon Russia as a gas supplier. TurkStream’s proponents in Bulgaria, Serbia, and Hungary assert that the project will strengthen energy security by opening a new supply route; the region experienced major wintertime supply disruptions in 2009 when Russia temporarily halted exports via Ukraine due to a gas contract dispute. Officials also are keen to secure transit revenue from TurkStream. Some analysts, however, caution that TurkStream’s extension could deepen Russia’s market dominance and leverage in some countries, including where Russian-origin companies already have a significant economic footprint through energy assets.

At the same time, others note that southeastern European gas markets are evolving. Existing and planned regional interconnectors and LNG terminals could further integrate gas markets and widen access to alternative suppliers. Among other developments, Gazprom’s share of Greek gas imports has fluctuated in recent years as LNG imports increased and TAP began deliveries in late 2020. Planned regional interconnectors could expand Bulgaria and Serbia’s access to supplies via LNG and TAP, as well.

Relations Between Russia and Turkey

It is unclear to what extent TurkStream reflects or reinforces seemingly improved ties between Russia and Turkey, traditional rivals whose relations often have been fraught. Turkey is a NATO member and a long-standing U.S. ally with geostrategic importance. Some analysts view the Turkey-Russia relationship as less a potential strategic partnership than a “marriage of convenience” as the two countries compartmentalize relations, alternating between cooperation and competition depending on the issue.

A low point in Russia-Turkey relations—and TurkStream negotiations—came in 2015-2016, after Turkey downed a Russian plane near the Turkey-Syria border and Russia temporarily imposed sanctions until receiving an apology from Turkish President Erdogan. Since then, and particularly after Putin showed support for Erdogan during the 2016 coup attempt in Turkey, Turkey and Russia have cultivated closer ties. They have more closely coordinated some actions in Syria, while moving forward with TurkStream, construction of Turkey’s first nuclear power plant, and the sale of a Russian S-400 air defense system to Turkey. Although some differences persist (e.g., in Syria, Libya, and Ukraine), the two countries’ general rapprochement has come as U.S.-Turkey relations have worsened.

U.S. Policy Considerations

Congress and successive U.S. Administrations have expressed concern over Nord Stream 2, TurkStream, and other projects they assert will deepen Europe’s reliance on Russian natural gas, reduce Ukraine’s role as a transit state, and may be a source of increased leverage for Russia. The Nord Stream system and TurkStream are to provide Russia with a total additional capacity of over 140 BCM a year to Europe (including Turkey); this amount nearly equals Ukraine’s total transit capacity of 146 BCM.

The Countering Russian Influence in Europe and Eurasia Act of 2017 (P.L. 115-44, Title II) authorizes sanctions on those who invest at least $1 million (or $5 million over 12 months) or provide goods, services, or support valued at the same amount for the construction of Russian energy export pipelines, including the second line of TurkStream (22 U.S.C. §9526).

Additionally, the Protecting Europe’s Energy Security Act of 2019, as amended in 2020 (PEESA; 22 U.S.C. §9526 note), establishes sanctions on foreign persons who the President determines have sold, leased, provided, or facilitated the provision of vessels for the purpose of subsea pipe-laying activities related to the construction of Nord Stream 2 and TurkStream or any successor pipeline. As amended, PEESA also targets those who provide underwriting services or insurance and those who provide certain upgrades or installation services. Sanctions do not apply to nonbusiness entities of the EU, member states, or some other European governments.

U.S. officials and many Members of Congress have expressed support for initiatives to increase energy security and diversification in Europe. The European Energy Security and Diversification Act of 2019 (22 U.S.C. §§9561 et seq.) enables support through the U.S. International Development Finance Corporation (DFC) for some types of energy projects in Europe by easing country-income-level restrictions. In December 2020, DFC approved an initial $300 million commitment to the investment fund of the Three Seas Initiative, a U.S.-backed platform among 12 EU member states in central and southeastern Europe (including Hungary and Bulgaria) aimed at expanding regional connectivity in energy and other sectors (see CRS In Focus IF11547, The Three Seas Initiative).

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