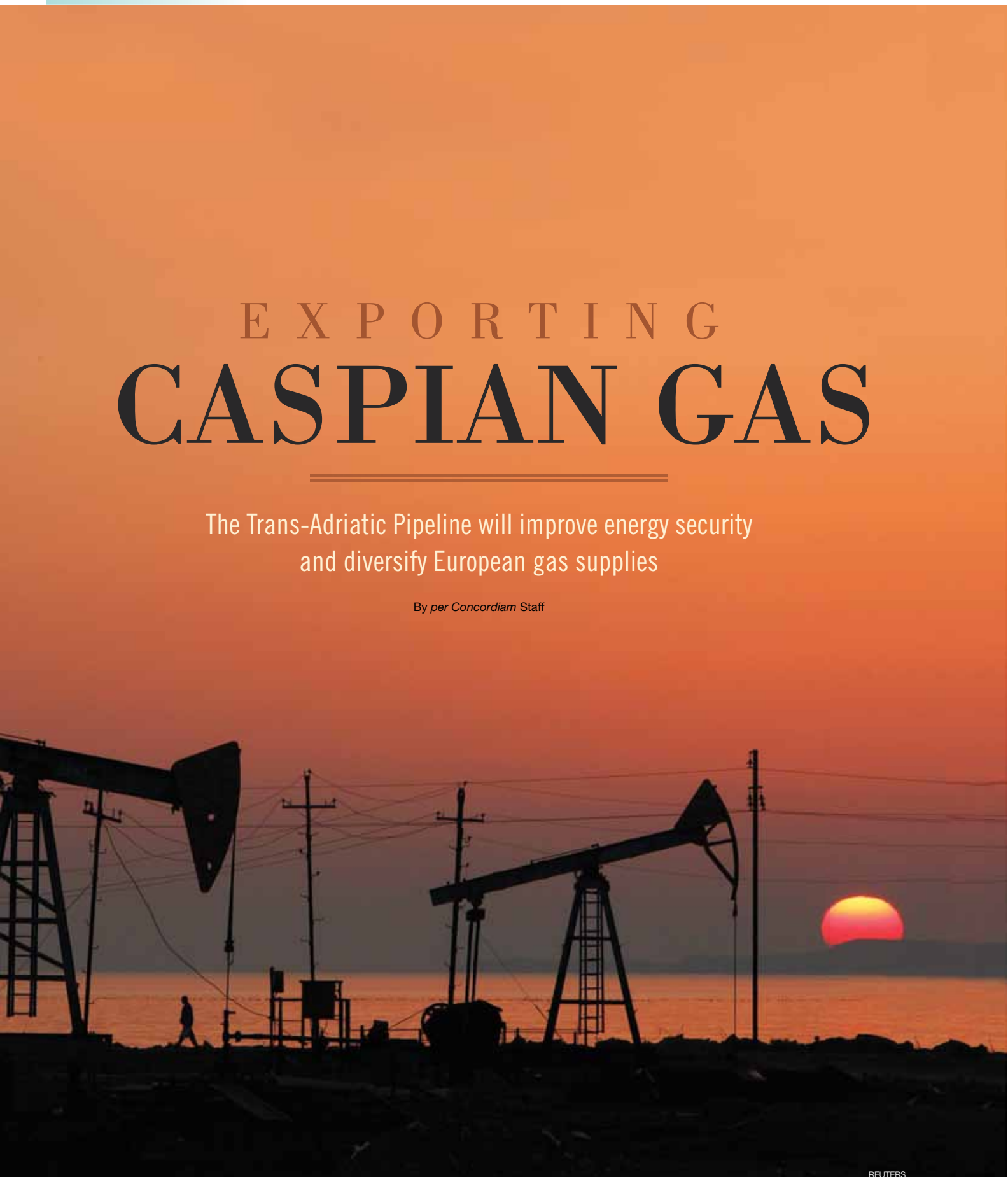


EXPORTING CASPIAN GAS

The Trans-Adriatic Pipeline will improve energy security
and diversify European gas supplies

By per Concordiam Staff



REUTERS

In the 13th century, Venetian traveler Marco Polo visited what is now Baku, Azerbaijan, where he watched oil scooped in buckets from “a fountain from which oil springs in great abundance.” Centuries earlier, the Absheron Peninsula, on which Baku sits, was considered sacred by the ancient Zoroastrian religion whose believers worshiped in fire temples fed by the plentiful natural gas deposits seeping from below. Oil and gas have always been abundant in the region. At the beginning of the 20th century, Baku produced more than half the world’s oil.

Starting in 2019, Caspian basin natural gas will flow to Europe through a new pipeline. The Trans-Adriatic Pipeline (TAP) was selected in June 2013 by the international consortium of energy companies that operate Azerbaijan’s offshore Shah Deniz natural gas field. The approval came after sometimes intense competition among several potential pipeline proposals. By diversifying Europe’s natural gas sources and reducing dependence

on Russian-controlled pipelines, TAP represents a meaningful improvement in European energy security.

At a cost of 4.4 billion euros, the 870-kilometer TAP will transport 16 billion cubic meters of gas per year from Kipoi, Greece, on the Turkish border, through Albania and across the Adriatic Sea to Italy. To access TAP, Azerbaijan will pump gas from Baku to Turkey via the South Caucasus Pipeline and then link up with the soon-to-be-built Trans-Anatolian Gas Pipeline (TANAP). TAP also complements the Baku-Tbilisi-Ceyhan oil pipeline, opened in 2006, in transporting Azeri energy to European markets through what energy experts call the “southern corridor.”

TAP’s selection may signal the end for the proposed Nabucco pipeline, a longer and more ambitious project that would have transported a greater volume of Caspian basin gas through Turkey and Central Europe to Vienna. Nabucco, which enjoyed strong political support from the European Union and United States, eventually lost its bid based on simple economics — it was



Italian Economic Development Minister Corrado Passera, from left, Greek Foreign Minister Dimitris Avramopoulos and Albanian Deputy Prime Minister Edmond Haxhinasto celebrate an agreement in February 2013 to build the Trans-Adriatic Pipeline.

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too expensive. As originally conceived, at 3,900 kilometers, Nabucco would have cost 8.4 billion euros, more than three times the cost of the nearly 1,800 kilometer Baku-Tbilisi-Ceyhan oil pipeline and twice the cost of TAP.

When Azerbaijan and Turkey announced the planned construction of TANAP, eliminating the need for another new pipeline across Turkey, the grand Nabucco proposal was scaled back to a 1,300-kilometer “Nabucco-West,” which would have carried gas from the Turkish-Bulgarian border through Bulgaria, Romania, Hungary and Austria. But even the more modest Nabucco-West would still have cost 6.6 billion euros, 50 percent more than TAP.



A helicopter lands on an oil platform in the Caspian Sea, about 100 kilometers east of Baku, in 2013. Oil contributed more than half of Azerbaijan's gross domestic product in 2011.

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TAP also offered 11.5 percent cheaper transit fees. At the November 2012 Atlantic Council Energy and Economic Summit in Istanbul, Al Cook, BP vice president heading the Shah Deniz field development, emphasized the need to balance cost efficiency and scalability in choosing a pipeline option. Cook said that TAP is “seriously more efficient than Nabucco-West from the gas price and tariffs points of view.”

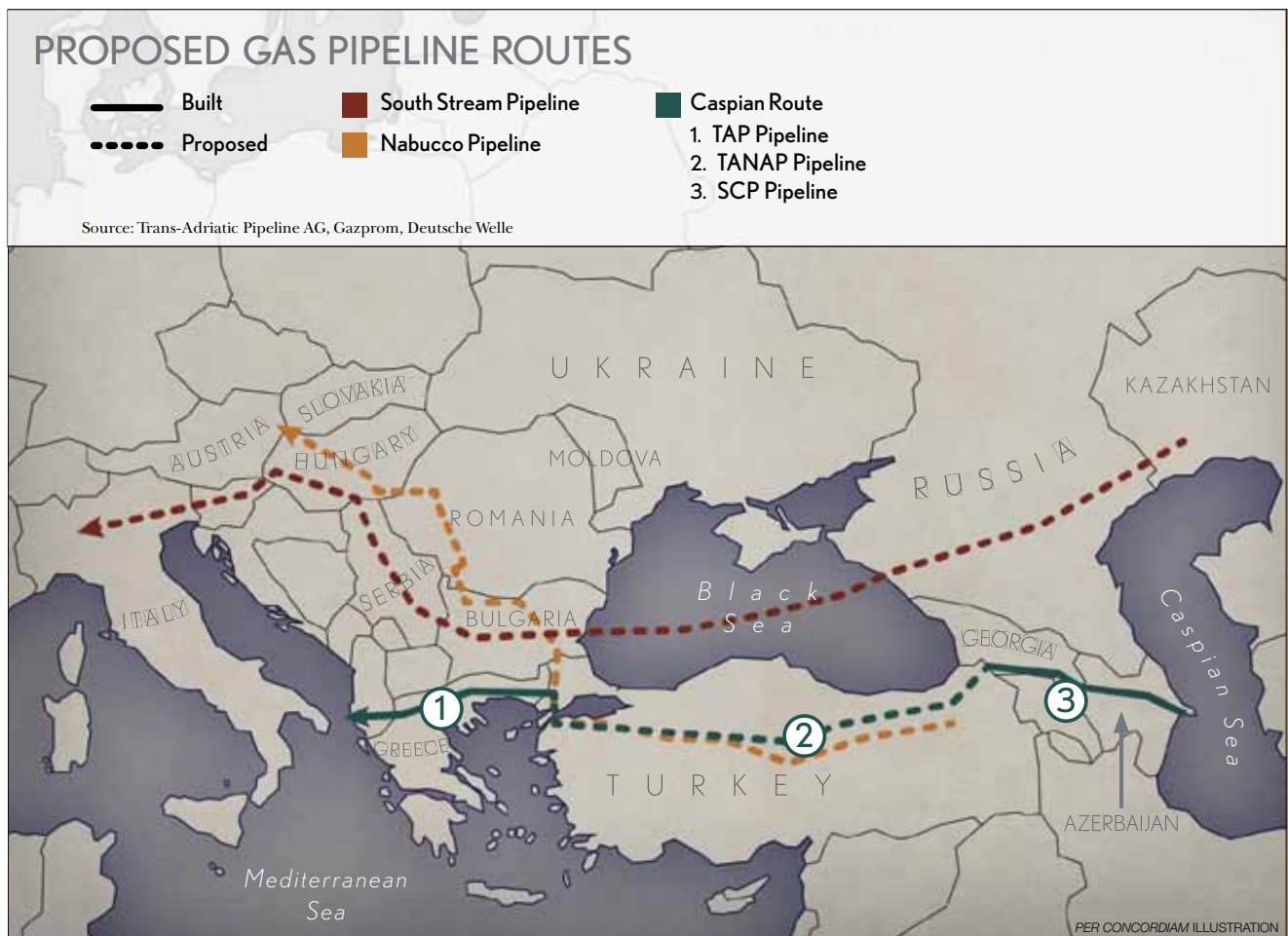
The EU has made developing a southern corridor gas pipeline a strategic priority since 2002. According to the BP Statistical Review of World Energy, Russia's state-owned Gazprom provided 34 percent of the EU's gas in 2012, a situation made ever more uncomfortable by Russia's periodic use of its energy resources as a geopolitical pressure tactic. Gazprom limited

its gas shipments to Europe in the winters of 2006 and 2009 in a dispute with Ukraine — a dispute that simmered again in November 2013 as Ukraine prepared to sign an association agreement with the EU. Diversification lessens the threat of geopolitical manipulation and reduces the risk of potential supply shocks caused by instability in energy producing countries in the Middle East and elsewhere.

TAP will also offer economic benefits to the countries it crosses. According to analytical website Global Risk Insights, Greece will receive 1.5 billion euros and create 2,700 jobs from construction and profit from billions in transit fees during the expected 50-year lifetime of the pipeline. The feasibility of a 50-million-cubic-meter gas storage complex in Albania is being examined. Turkey may benefit most. In addition to an estimated 6 billion euros invested in Turkish companies, Turkey's share of the gas will help reduce dependence on Russian and Middle Eastern gas and link it more closely with the EU.

Although TAP's energy diversification benefits are evident, some observers see its selection instead of Nabucco as a setback, especially for Central European and Balkans countries that are most dependent on Russian gas. “Because TAP avoids Central Europe and the Balkans, its selection over Nabucco constitutes a clear victory for Russia, which wants Central and Eastern Europe dependent on it and not on Azerbaijan for energy,” online energy newsletter Natural Gas Europe argued in November 2013. Elkhan Shahinoglu, director of the Baku-based Atlas Research Center agrees. TAP “does not cross Moscow's interests in Europe,” he said.

Russia has been wary of Azerbaijan infringing on profitable European markets. It has aggressively defended market share by inhibiting independent pipeline routes as much as possible. Moscow pressured Central Asian energy producers Turkmenistan, Uzbekistan and Kazakhstan to continue to transport their gas and oil through a Russian-controlled, Soviet-era pipeline network. In 2007, in a direct challenge to Nabucco, Russia proposed South Stream, its own southern corridor pipeline across the Black Sea to Bulgaria and on to Central Europe. By creating competition for Nabucco, Russia lent an advantage to TAP.



The selection of TAP has caused many observers to sound the death knell for Nabucco, but others think Nabucco has a future. Shah Deniz's current production may be designated for TAP, but abundant unexploited gas remains in the Caspian basin. Estimates for future Azeri gas production are as high as 32 billion cubic meters, nearly twice TAP's capacity. Reduced use of coal in Europe is expected to increase gas demand by 20 percent by 2020.

Other suppliers will also increasingly serve Europe in the future. Turkmenistan is one of the world's most prolific gas producers, but neighboring Uzbekistan and Kazakhstan also have substantial reserves. Most Central Asian gas now goes east to China, but in November 2013, EU officials announced they were finalizing a deal with Turkmenistan and Azerbaijan to build the long-delayed Trans-Caspian pipeline to supply Europe.

Pipelines are not the only option. Technological innovations are raising the profile of domestically produced shale gas

and North American liquid natural gas transported aboard ships. Europe will need to increase natural gas usage as it transitions toward a renewable energy future. Wind and solar power are insufficient to meet European energy needs, and gas is much cleaner than coal. Germany's post-Fukushima decision to shutter its nuclear power plants has created more reliance on coal. That has increased carbon dioxide emissions at a time when the continent is trying to reduce them.

The European Commission forecasts that the EU will import more than 80 percent of its natural gas by 2030. Diversification is necessary for energy security. "The southern corridor is critical, not just from a commercial standpoint, but also from a strategic standpoint," Richard Morningstar, U.S. ambassador to Azerbaijan, told the Atlantic Council energy summit in November 2012. "At the end of the day, what is most important is for Europe to have a competitive market and to have as many diverse sources of supply as possible." □