Overview

- Azerbaijan is a net energy exporter; crude oil and natural gas production and exports are central to Azerbaijan’s economy and government revenues.
- Natural gas accounts for about two-thirds of Azerbaijan's total domestic energy consumption. Oil supplies less than one-third of total energy consumption (Figure 1).¹
- In August 2018, the five countries bordering the Caspian Sea met regarding a decades-old delimitation dispute over the maritime and seabed boundaries of the Caspian. An accord could allow for additional offshore exploration and infrastructure across what were previously contested waters. In particular, the construction of subsea pipelines from Turkmenistan could make Azerbaijan a more prominent transit country for Caspian oil and natural gas to Europe.

Figure 1. Azerbaijan primary energy consumption, 2015

Source: U.S. Energy Information Administration based on International Energy Agency
Petroleum and other liquids

- Azerbaijan's proved crude oil reserves were estimated at 7 billion barrels at the end of 2017, according to the Oil & Gas Journal (OGJ).²

Sector organization

- The State Oil Fund of the Republic of Azerbaijan (SOFAZ) manages currency and assets from oil and natural gas activities, and it had $35.806 billion in managed assets at the beginning of 2018, up 8% from the beginning of 2017.³ The national oil company, the State Oil Company of the Azerbaijan Republic (SOCAR), explores and produces oil and natural gas in the country. In 2017, SOCAR produced about 150,000 barrels per day (b/d) of oil, about 20% of Azerbaijan’s total oil output.⁴

Exploration and production

- In 2017, Azerbaijan produced an estimated 800,000 barrels per day (b/d) of petroleum and other liquids and consumed about 120,000 b/d (Figure 2).

Figure 2. Azerbaijan petroleum and other liquids consumption and production

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (b/d)</th>
<th>Consumption (b/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>600</td>
<td>100</td>
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<tr>
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</tr>
<tr>
<td>2017</td>
<td>1900</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: 2017 data is preliminary
Source: U.S. Energy Information Administration

- Most oil production occurs offshore in the Caspian Sea and is exported to the West. In 2017, the production-sharing agreement (PSA) for Azerbaijan’s main offshore Azeri-Chirag-Gunashli (ACG) fields was extended through 2049, indicating that with added investment and enhanced recovery, Azerbaijan is expected to remain a strong oil producer.⁵ Under the new PSA, SOCAR’s share in the ACG complex increased to 25%.
- In 2017, more than 70% of Azerbaijan’s total oil output—about 588,000 b/d—came from the ACG fields, down from 630,000 b/d in 2016 (Figure 3).⁶
**Pipelines**
- Most of Azerbaijan’s oil is exported through the Baku-Tbilisi-Ceyhan pipeline (BTC). However, the pipeline has recently run considerably less than its capacity of 1.2 million b/d, exporting on average 700,000 b/d in 2017, including oil from Turkmenistan and Kazakhstan.  

**Refining**
- Azerbaijan had a crude oil refining capacity of 120,000 b/d in 2017, according to the OGJ.

**Trade**
- Azerbaijan exported about 700,000 b/d of crude oil in 2017 (Figure 4).
Natural gas

- Most of Azerbaijan's proved natural gas reserves, which were estimated at about 35 trillion cubic feet (Tcf) in January 2018, are located in the Shah Deniz offshore natural gas and condensate field.¹⁰

Exploration and production

- Preliminary 2016 estimates show decreases in the country’s natural gas consumption and production of about 2.5% from 2015 to 2016 (Figure 5). In 2017, the field produced about 360 billion cubic feet (Bcf) of natural gas and 19 million barrels of condensate.¹¹
Trade

- Azerbaijan exported about 284 Bcf of natural gas in 2016.\textsuperscript{12} The country ships most of its natural gas exports from the Caspian through Georgia to Turkey and southern Europe. The expansion of the Baku-Tbilisi-Erzurum (BTE) pipeline will connect to the Trans-Anatolian Pipeline (TANAP), which will cross Turkey, and to the Trans Adriatic Pipeline (TAP), which is slated to run from the Turkish border under the Adriatic Sea to southeast Europe and Italy.

Electricity

- Azerbaijan's electricity consumption remained about 21.6 billion kilowatthours in 2016 (Figure 6).\textsuperscript{13}
- More than 90% of Azerbaijan's electric power in 2015 came from natural gas-fired generation, and less than 1% came from oil-fired generation. Hydropower accounted for about 7% of total electric generation in 2015.\textsuperscript{14}
Figure 6. Azerbaijan electricity generation by fuel type, 2015

- Natural gas: 93%
- Hydro: 6%
- Waste, wind, and solar: 1%
- Petroleum liquids: <1%

Source: U.S. Energy Information Administration, based on International Energy Agency
Notes

• In response to stakeholder feedback, the U.S. Energy Information Administration has revised the format of the Country Analysis Briefs. As of December 2018, updated briefs are available in two complementary formats: the Country Analysis Executive Summary provides an overview of recent developments in a country's energy sector and the Background Reference provides historical context. Archived versions will remain available in the original format.
• Data presented in the text are the most recent available as of December 2018.
• Data are EIA estimates unless otherwise noted.

Endnotes

1 BP, Statistical Review of World Energy 2018
8 Oil & Gas Journal, "Worldwide Refineries—Capacities as of January 1, 2018," (December 4, 2017), p. 1