Gains in hydrocarbon production and exports spurred economic recovery in 2022. Inflation remained in double digits, and the current account registered a large surplus. Growth will increase slightly in 2023 and moderate in 2024. Inflation will remain elevated because of foreign exchange imbalances and large credits directed to state-owned enterprises. With the evolving agenda on climate change, Turkmenistan needs to foster energy efficiency, develop renewable energy sources, and advance technological innovation to shrink its carbon footprint and ensure sustainable growth.

Economic Performance

Economic growth continues to come from both within and outside of the large hydrocarbon sector. According to the government, growth reached 6.2% in 2022, reflecting higher hydrocarbon exports and rising domestic demand following the end of a protracted lockdown that occurred in 2020 and 2021. Expansion was spurred by the opening of borders, a gradual resumption of international flights, greater domestic mobility, increased trade, and revitalized services in 2022. Higher volumes of hydrocarbons, mainly natural gas, exported at higher prices added considerably to growth. Exports expanded mainly to satisfy demand from the People’s Republic of China (PRC) and, to a lesser extent, from Azerbaijan and Iran.

On the supply side, industry was reported to have expanded by 6.3%, particularly in hydrocarbons. After 20% growth in 2021, gas production expanded further by an estimated 7.2% (Figure 2.7.1). Also contributing to industry expansion were higher output of crude oil, oil products, chemicals, and electricity, as well as gains in construction and manufacturing, food processing, construction materials and textiles, and other products, including those produced under import-substitution programs. Agriculture grew by 5.7% as targets for cotton and wheat production were achieved, and from expansion in horticulture production for domestic and foreign markets. Services expanded by 7.0% with the relaxation of restrictions on external and domestic transportation and enhanced activity, notably in trade and catering.

On the demand side, public investment and net exports were the main drivers of growth. Gross investment in various production facilities and social infrastructure under the President’s program for socioeconomic development in 2022–2028 increased notably to reach an estimated 20% of GDP in 2022 (Figure 2.7.2). The government reported commissioning during the year 76 production units and social facilities: new health centers, educational establishments, cultural centers, and, one of the largest

Figure 2.7.1 Natural Gas Production

Natural gas production rose in 2022.

<table>
<thead>
<tr>
<th>Year</th>
<th>Billion cubic meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>50</td>
</tr>
<tr>
<td>2019</td>
<td>60</td>
</tr>
<tr>
<td>2020</td>
<td>70</td>
</tr>
<tr>
<td>2021</td>
<td>80</td>
</tr>
<tr>
<td>2022</td>
<td>90</td>
</tr>
</tbody>
</table>


This chapter was written by Jennet Hojanazarova of the Turkmenistan Resident Mission, ADB, Ashgabat.
The state budget reversed a deficit equal to 0.3% of GDP in 2021 with a 1.0% surplus (Figure 2.7.4). This does not include substantial extrabudgetary spending that continued to finance most investment. According to the latest report by Fitch Ratings in February 2023, off-budget transfers and the role of off-budget entities and funds complicate any assessment of the government’s fiscal position, particularly in regard to capital spending. However, Fitch did not see evidence of rising public debt, which is estimated to have declined from the equivalent of 11.1% of GDP at the end of 2021 to 6.1% a year later.

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Inflation remained in double digits despite some easing. Preliminary estimates show average annual inflation declining from 12.5% in 2021 to 10.0% in 2022 because of price controls, tighter credit policy, and base effects (Figure 2.7.3). The Central Bank of Turkmenistan maintained its fixed exchange rate regime, which limits foreign currency sales and international money transfers. Demand for foreign exchange on the parallel market maintained a large gap between the official and parallel exchange rates. According to the United Nations’ Common Country Analysis Update 2022, consumer prices have adjusted to the parallel exchange rate, degrading the purchasing power of incomes earned in national currency. Most bank lending involved soft loans to state-owned enterprises in the government’s priority sectors, with some credit provided to private firms engaged in import substitution.
The current account remained in surplus. The surplus equaled 6.0% of GDP in 2022, reflecting higher energy prices and export volumes as imports were restrained by controls. Export revenue is estimated to have risen by 43.6%, mainly on exports of gas to the PRC but also with additional exports to Iran and Azerbaijan under gas swap agreements. With extensive repayment of external loans, external debt declined from an estimated 8.4% of GDP at the end of 2021 to 6.3% a year later (Figure 2.7.5).

The government projects growth rising to 6.5% in 2023, then decelerating in 2024 off a high base (Table 2.7.1). This forecast assumes higher capital spending and continued strong demand for hydrocarbon exports. Oil and gas production and exports will continue to sustain growth during this period, with expectations of continued high prices and higher export volumes. Meanwhile, activity outside of the large hydrocarbon economy will continue to depend on government support for state-owned enterprises and private firms engaged in import substitution and on export promotion programs.

Economic Prospects

The President’s socioeconomic development program for 2022–2028 will guide activity in 2023 and 2024. The program contains plans to diversify the economy through private sector development. It aims to develop innovative industries and digitalize the economy, foster job creation, improve social conditions, narrow disparities between urban and rural areas, and transition to greener and more sustainable growth. Additional measures are expected to meet infrastructure and social concerns, with more efforts to attract foreign direct investment. Turkmenistan’s 2023 investment program calls for outlays of $10.7 billion, near 20% of GDP, with 55.6% of this sum allocated to constructing industrial units and the rest for other infrastructure: residential buildings, health centers, kindergartens, highways, telecommunications, and social facilities.

Projected higher revenue from hydrocarbon exports will keep the state budget near balance this year and next. However, most government investment projects are expected to continue being financed off budget.

Inflation is projected to remain elevated at about 10.0% in both years. The outlook assumes no change in foreign exchange policy or banks’ practice of lending mainly to state-owned enterprises.

Higher gas shipments are projected to maintain export growth in the coming years. Anticipated increases in imports will supply industrial inputs to export-oriented industries and consumer goods to the domestic market. Anticipated relaxation of import constraints is projected to narrow the current account surplus to the equivalent of 4.0% of GDP in 2023 and 3.4% in 2024 (Figure 2.7.6). External debt is projected to be minimal with scheduled debt amortization and government aversion to new borrowing.
Fitch has upgraded its outlook for Turkmenistan to positive B+ from its earlier stable rating. This reflects the strengthening of fiscal and external balance sheets from higher prices for hydrocarbon exports and the country’s willingness to service and repay debts. Among the factors that could garner a further rating upgrade are improvements in governance standards and the business environment, a more consistent economic policy that reduces macroeconomic distortion, and greater data transparency.

Policy Challenge—Transitioning to a Sustainable, Low-Carbon Energy Environment

Attaining global carbon neutrality by 2050 demands urgent climate action to cut carbon dioxide emissions. The devastating effects of climate change felt most keenly in the Central Asia are spreading desertification, water scarcity, heat waves, and droughts.

The evolving climate change agenda has implications for hydrocarbon-rich Turkmenistan. Turkmenistan is among the most energy-intensive economies in the subregion because of its large oil and gas industry. Continuing heavy reliance on fossil fuels under a scenario of business as usual could become unsustainable in the long run without the adoption of environmentally sustainable practices. While presenting considerable investment opportunity, the hydrocarbon sector is expected to be subject to more stringent environmental controls on its operations as a condition for receiving financing.

Continued heavy reliance on fossil fuels poses considerable challenges to the country. Hydrocarbon reserves are estimated to exceed 50 trillion cubic meters of natural gas and 20 billion tons of oil. According to British Petroleum, Turkmenistan has the world’s fourth-largest natural gas reserves, as well as substantial oil reserves. Hydrocarbons are 90% of all exports and the main source of budget revenue (Figure 2.7.7). Gas alone comprises more than half of exports and is essentially the only fossil fuel used in Turkmenistan to generate electricity. Installed renewable energy is minimal despite considerable potential for solar and wind energy.

The government plans to expand hydrocarbon production and exports in the short and medium term. The government’s national development programs to 2030 call for increasing oil and gas production and exports. Expanded gas exports through current pipelines to the PRC, Russia, and Iran and through planned pipelines—the Turkmenistan–Afghanistan–Pakistan–India pipeline and the Trans-Caspian pipeline—could contribute to regional energy security and decarbonize the region by replacing coal with gas.
According to the Central Asia Regional Economic Cooperation Energy Outlook 2030, Turkmenistan ranked 103rd out of 172 countries in the global ranking of carbon intensity of energy. Moreover, the country’s oil and gas methane emissions are rising and need to be addressed (Figure 2.7.8). The United Nations’ Common Country Analysis Update 2022 for Turkmenistan said 75% of these methane emissions could be eliminated by modernizing infrastructure, and more than half of this reduction would come at no net cost.

**Figure 2.7.8 Methane Emissions**

*Methane emissions from oil and gas operations are increasing.*

The government recognizes the importance of the global climate agenda. It committed to tackling climate change through its National Program on Climate Change in 2012. In 2016, Turkmenistan ratified the Paris Agreement to restrain global temperature rise. In line with this, it adopted policies under the State Program for Energy Saving for 2018–2024, Program for the Development of Energy Diplomacy of Turkmenistan for 2021–2025, and National Strategy for the Development of Renewable Energy in Turkmenistan until 2030. The government demonstrated its further alignment with global efforts to reduce greenhouse gas (GHG) emissions by submitting its updated nationally determined contribution in 2022. The update established the ambitious goal of reducing GHG emissions by 2030 to 20% below 2010 emissions. Various means of reducing GHG emissions have been identified for application in several sectors of the economy, notably energy, industry, transport, housing, and municipal infrastructure.

As the energy sector produces 85% of GHG emissions, the government has prioritized reducing fossil fuel emissions. The first measure under consideration is to improve energy efficiency in the production, consumption, and transportation of hydrocarbons, including the prevention of methane leaks. Second, Turkmenistan has vast potential for developing renewable energy such as solar and wind power, so investments to diversify sources could bring gains. Third, in fostering technological advances, the country plans to explore the development of green hydrogen by learning and adopting modern practices used in developed countries. Further it intends to introduce various technologies for carbon capture, use, and storage to reduce harmful emissions into the atmosphere.

Implementing these measures requires further policy reform and institutional strengthening. These steps would improve the current regulatory and legislative framework, develop financial and tax mechanisms to promote GHG reduction, stimulate investment in research and development, and encourage private sector investment. Achieving technological advances would require access to global finance and technology to facilitate the adoption of global best practices. With an improved business and investment climate, Turkmenistan would be able to make itself more appealing to foreign investors.