

# PAKISTAN



Last Updated: September 2015

---

## Overview



- Pakistan's economy has continued to struggle with underemployment, slow economic growth, and high inflation. Expensive energy sources, circular debt, and insufficient transmission and distribution systems have caused a major energy crisis. According to the Asian Development Bank, prolonged power shortages have cut GDP by about 2%. Pakistan's government has indicated that addressing the energy crisis is a top priority.
- The Pakistani government has proposed plans to increase domestic production and exploration of hydrocarbons, increase natural gas imports, diversify the installed capacity mix of electricity generation, improve domestic energy efficiency standards, phase out natural gas subsidies, and resolve the circular debt issue in the energy industry.
- Roughly 62% of the Pakistan's population uses biomass for cooking (about 112 million people) due to inadequate electricity and gas supply.

---

## Oil

- Pakistan is a net importer of crude oil and refined products. Crude oil imports grew an annual 11% from July 2013 to March 2014, according to Pakistan's statistics.
- In 2014, the country produced 98,000 barrels per day (b/d) of total oil, up from a below 70,000 b/d before 2012. Most of the increase in oil production stems from additional discoveries and production of condensates from the Tal block.
- Oil consumption has grown over time and averaged 437,000 b/d in 2013. Pakistan currently has six oil refineries, running mostly on imported crude oil, and a total crude oil distillation capacity of 186,000 b/d.

---

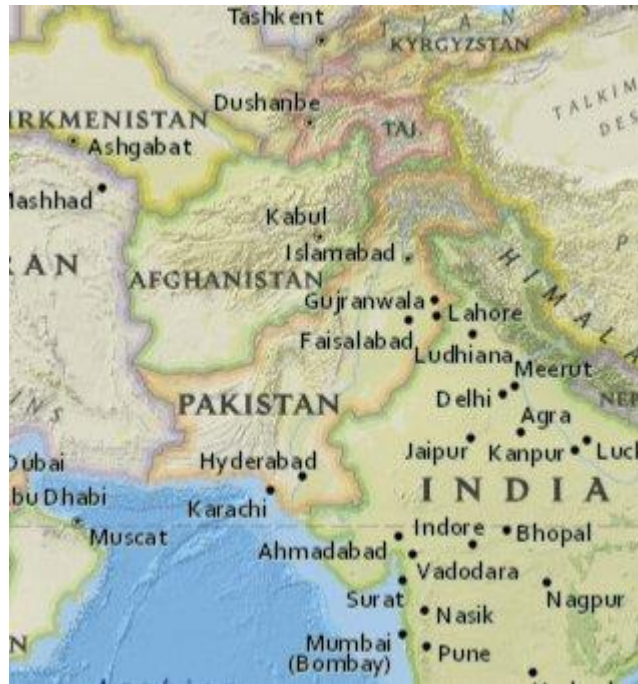
## Natural gas

- The Oil and Gas Development Company Limited (OGDCL) dominates Pakistan's oil and natural industry. The Pakistani government owns a majority share in OGDCL, with the remainder owned by the public. BP and Eni are the leading foreign oil firms operating in Pakistan.
- Natural gas accounted for an estimated 32% of Pakistan's primary energy supply in 2012, second only to biomass and waste, according to the International Energy Agency. Dry natural gas production has grown by more than 80% over the past decade, from 809 billion cubic feet (Bcf) in 2002 to 1,412 Bcf in 2013. However, according to a report by the Pakistan government, Pakistan faced a natural gas shortfall of 912 Bcf in 2013. Natural gas shortages have forced citizens to use firewood for heat, leading to vast deforestation issues. According to the World Bank only 2.1% of Pakistan has forest cover compared with 23% in [India](#).
- Pakistan's domestic natural gas reserves are declining, and Pakistan currently lacks the infrastructure to import more gas. Pakistan holds sizeable shale gas reserves of 105 trillion cubic feet (Tcf), according to the EIA's Technically Recoverable Shale Oil and Shale Gas Resources report published in 2013, and the Pakistani government has provided investment incentives for shale gas development. However, companies face many challenges to develop such resources because of complex geography, environmental constraints, and low natural gas prices in Pakistan.
- Pakistan's main natural gas producers include Pakistan Petroleum Ltd. (PPL) and OGDCL, as well as international companies such as BP, ENI, OMV, and BHP. The leading gas distributors are Sui Southern Gas Company (SSGC) and Sui Northern Gas Pipelines (SNGP).
- The Pakistani government supports the construction of the Turkmenistan-Afghanistan-Pakistan-India (TAPI) natural gas pipeline. The TAPI pipeline has the multilateral agreements and financial support necessary to move forward. However, the TAPI pipeline faces serious geopolitical and security concerns and the start construction is uncertain.
- [China](#) has agreed to fund and build a natural gas pipeline from Iran to Pakistan following the end of international economic sanctions imposed against Iran as a result of its nuclear program.
- In July 2014, the Pakistani government approved the construction of three LNG terminals, including the Engro Elengy LNG Terminal. The first shipments of LNG began to arrive at the terminal in July 2015, via a floating, storage and regasification unit (FSRU).

---

## Electricity

- Electricity net generation increased from 69 billion kilowatthours (kWh) in 2001 to 93 billion kWh in 2012. However, according to the Pakistani government, available capacity was only 85% of installed capacity in 2012, and utilization rates for power plants were less than 60%. As a result, according to the latest International Energy Agency estimates, less than 70% of the Pakistani population had access to electricity in 2012, with 56 million people without access to electricity.
- The electricity industry faces problems with power generation theft, insufficient collection rates, line losses, high natural gas subsidies, the high cost of furnace oil used in place of natural gas, and insufficient natural gas supply. These problems have resulted in the poor financial position of generation companies, leading to widespread power shortages.
- Electricity price subsidy is another issue that keeps the Pakistani government trapped in a system of circular debt. According to the Pakistani Ministry of Finance, depending on the fuel source the state utility may charge the consumer less than half of the cost of producing the electricity, which leaves the utility unable to pay for additional fuel.
- The fuel supply and payment issues have forced many of the power plants to run below peak capacity. While the installed capacity of Pakistan is 23,500 MW, the available capacity is a mere 14,000 MW which is far short of the 17,000 MW average annual electricity demand.



Map of Pakistan