

Executive Summary

In India, the government has historically determined the prices of energy products and services in view of socio-economic considerations, such as providing universal energy access at affordable prices, meeting energy demand efficiently, ensuring greater sustainability, and supporting economic growth (Niti Aayog, 2017). Energy subsidies often act as policy tools to meet these objectives but do not always deliver, and thus require scrutiny. Otherwise, they could have distortionary impacts on the energy industry and possibly on the economy. Distorted markets provide incorrect market signals, affect the level of competition, and lead to inefficient allocation of resources.

The Energy and Resources Institute (TERI), supported by the Economic Research Institute for ASEAN and East Asia, (ERIA) conducted a comprehensive study across the oil and gas and coal value chain in India. This study tried to cover the rationalisation of energy pricing over time, the identification and assessment of the subsidies for energy consumption in the oil, gas, and coal sector, and the net indirect tax contribution from each segment covered under study – crude oil, natural gas, liquefied petroleum gas (LPG), kerosene, coal – to the government revenue for the reference year 2015/16, which was the latest available data at the start of the study.

The study brings out the efforts of the Government of India (GoI) in progressively moving away from energy subsidy and in rationalising energy pricing to reduce the subsidy and its negative implications. The government has implemented various reforms in the oil and gas sector to allocate resources efficiently without any distortionary impacts. One major reform is the transfer of subsidy directly to the beneficiaries through the direct benefit transfer for LPG (DBTL) programme; targeting of the beneficiaries through a unique identification number, thereby reducing the distortions in the LPG market and benefitting oil companies to manage their cash flow. Currently, domestic LPG and public distribution system kerosene are the only two segments provided with subsidy for their consumption for domestic purposes. As a part of the study, the team developed an inventory of subsidies and explored the extent of subsidies provided for each segment.

The team investigated the indirect tax structure, total tax collection, and its flow for 2015/16 from each segment – crude oil, natural gas, LPG, kerosene, and coal. The team observed that some indirect tax components were strongly influencing the delivered price of energy, especially in certain segments, and thus its competitiveness and consumption across the country. In case of crude oil, LPG, and kerosene, taxes and subsidies were analysed at the national level through literature review and estimation. In segments such as natural gas and coal consumption in the power sector and natural gas consumption in fertiliser, the study was conducted for a sample state due to the lack of available data.

In India, affordability is the central focus of energy policy; thus, the competitive sources of energy such as coal continue to remain in the economy, especially as mainstay of electricity generation. However, the conflict between cost competitiveness and the commitment to address climate change concerns and pollution calls for the rationalisation of energy pricing and taxation.

Some key findings of the study are as follows:

- The oil and gas sector is a major contributor to government's fiscal revenues, contributing almost one-fourth of total indirect tax collection in 2015/16.
- Energy pricing in the oil and gas sector has been progressively rationalized to reduce the subsidy and distortion, but it is incomplete, particularly in the domestic LPG and PDS kerosene segments.
- The progressive rationalisation in the oil and gas sector, along with the lowered crude oil prices, led to an increased net indirect tax revenue by 61.5% between 2012/13 and 2015/16, from 31% net indirect tax revenue in 2012/13 when the crude oil price averaged at US\$108/barrel (bbl) to 92.5% in 2015/16 when the price of crude oil fell and averaged at US\$46/bbl.
- The share of under-recoveries out of the total indirect tax revenue from the oil and gas sector also decreased by 65% between 2012/13 and 2015/16. This resulted in the reduced subsidy provided under the budget of the Government of India in the oil and gas sector by almost 25.96% out of the total petroleum subsidy budgeted between 2012/13 and 2015/16.
- In India, subsidies once allocated tend to become entrenched and seem to have been rarely revised based on indicators like capacity to pay (inflation indexation, wage indexation, GDP/capita indexation).
- The fluctuation in the landed price of natural gas in India, which is the key cost component in the delivered price, leads to uncertainty of demand and affects competition within the sector.
- During 2015/16, under the gas-based power generation capacity revival scheme, an estimated subsidy of Rs300 crore was disbursed for stressed/stranded gas-based power plants in Gujarat; which is almost Rs1.5 subsidy for the unit generation from gas-based power plants.
- In the coal sector, major indirect tax components are clean energy cess and royalty, which accounted for nearly 65% of the total indirect tax collection during 2015/16.
- There exist a lot of questions regarding the rationale of implicit subsidy for coal, especially for power generation. To address that, further study is required to determine the options to reform coal subsidies and taxation and their distortionary impacts on the different sections of society.