Chapter **7**

Conclusions and Recommendations

October 2019

This chapter should be cited as

ERIA (2019), 'Conclusions and Recommendations', in Phoumin, H., S. Kimura and R. G (eds.), *Energy Pricing in India: A Study on Taxes and Subsidies.* ERIA Research Project Report FY2018 no.15, Jakarta: ERIA, pp.78-80.

Chapter 7

Conclusions and Recommendations

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. Energy subsidies often act as policy tools for meeting these objectives, but do not always deliver against them and require scrutiny. Otherwise, they could create distortions to the energy industry and possibly to the economy. Distorted markets provide incorrect market signals, affect the level of competition, and lead to inefficient allocation of resources.

Over the years, the GoI has taken various steps in progressively moving away from energy subsidy and in rationalising energy pricing to reduce subsidy and its negative implications. Most importantly, the government has implemented various reforms such as DBTL in the oil and gas sector to allocate resources efficiently, duly eliminating duplicate and bogus LPG beneficiaries and preventing leakage into the secondary market. However, there has been a progressive albeit incomplete rationalisation of energy pricing to reduce the subsidy and distortion, particularly in the domestic LPG and PDS kerosene segments. Once allocated the subsidies tend to become entrenched and do not get revised based on indicators like capacity to pay (inflation indexation, wage indexation, GDP/capita indexation).

The petroleum sector is a major contributor to government's fiscal revenues, contributing 23% of indirect tax collection. The progressive rationalisation in the oil and gas sector, along with 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/bbl to 92.5% in 2015/16 when it fell and averaged at US\$46/bbl (Figure 7.1). The share of under-recoveries out of the total indirect tax revenue from the petroleum sector also declined by 65% between 2012/13 and 2015/16, from 68% in 2012/13 to just 3% in 2015/16 under the prevailing crude oil prices which significantly reduced the impact on oil companies in realising their cash flows in a timely manner. The extent of subsidy provided under the budget of the GoI in the oil and gas sector also decreased by almost 20% out of the total petroleum subsidy budgeted between 2011/12 to 2015/16.

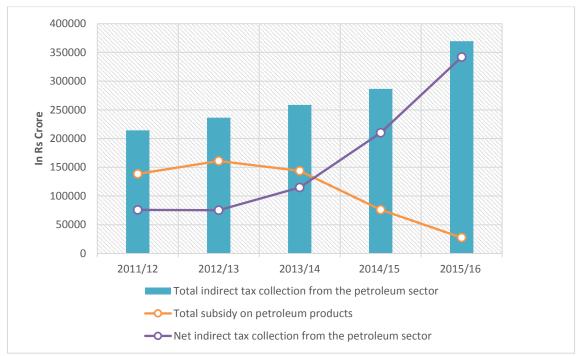


Figure 7.1. Trend in Net Indirect Tax Collection from the Petroleum Sector

Source: Authors' compilation.

In short, data shows that between 2012/13 and 2015/16, the increased demand for petroleum products and rationalised subsidies altogether improved the indirect tax collection in a favouring environment of low crude oil prices.

On the natural gas side, the key issues and challenges for sectoral development were pricing, infrastructure development, and domestic gas availability. The supply infrastructures such as natural gas pipelines and LNG import terminals were mature only in certain parts of the country, which led to a skewed consumption. Also, the decline in production of cheap domestic gas and delays and lack of new developments led to increased dependency on imported LNG over the years. The natural gas price indexed to the crude oil price for the Asian region is another challenging factor making the gas price in Asia higher than European and United States. The fluctuation in international crude oil prices impacted the landed price of natural gas, which is the major cost component in the delivered price of gas. Also, the sales tax/VAT varying from 0% to 25% from state to state led to an increase in the delivered price of natural gas in many states. These factors resulted in the constrained supply of natural gas, led to the creation of stranded/stressed assets, loss of revenue for value chain entities, lack of new investments in the sector, uncertainty in demand and un-competitiveness within the sector, thus requiring new policy intervention. The aforementioned factors were evident from the spatially distributed consumption of natural gas in India, along with the variation in state-wise indirect tax collection.

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 in 2015/16. Over the past decades, coal continued to be the dominant source of energy for generating power, but coal prices are determined by CIL and are indirectly subsidised by pricing it lower in regulated sectors such as power and fertilisers compared to unregulated sectors such as industries. A lot of questions exist regarding the rationale of providing implicit subsidy on the consumption of coal in the regulated sector. To address the same, further study is required to determine the options for reform regarding coal subsidies and taxes and their distortionary impacts on different sections of the society while ensuring affordability in the electricity produced.

In many of these segments under the study, the study team experienced a lot of challenges in data collection especially in the plant-wise, grade-wise consumption of coal, coal linkage data to each power plant, mode of dispatch data from coal mines, etc. which limited the scope of research in these areas.

This study led to the following high-level recommendations:

- Subsidies should be revised based on indicators such as capacity to pay (inflation indexation, wage indexation, GDP/capita indexation) duly taking note of the socioeconomic development in a developing country like India.
- As natural gas is a modern, cleaner and 'bridge' fuel for clean energy transition, it should be preferentially taxed and the landed price rationalised based on regional gasto-gas competition which requires international cooperation between countries to facilitate the development of a natural gas hub. Government also needs to give adequate support for the development of infrastructure in the country in a timely manner.
- A centralised portal for energy data management, with data inputs from national and state agencies, should be set up for proper analysis and decision making.