

STORY 8

The Evolution of the Clean Energy Cess on Coal Production in India

Remove subsidies for fossil fuel consumption

Support clean energy

FEATURED COUNTRY(S)



INDIA

- A lower-middle-income, non-OECD country
- A net importer of oil, gas and coal
- The world's second-largest producer of coal

Key numbers

Over USD 1 trillion globally in 2016

The World Bank estimate of the combined global rents from oil, gas and coal extraction in 2016 is USD 1.059 trillion, or 1.3 per cent of the global GDP. These rents represent the approximate amount of revenue that governments receive in the form of taxes, state-owned enterprise (SOE) revenues, royalties and other fees on fossil fuel extraction. Of this total, USD 822 billion came from oil rents, USD 122 billion from gas rents and USD 115 billion from coal rents (author calculations based on World Bank, n.d.a, n.d.b, n.d.c).

USD 12 billion in India over FY 2010–2018

This revenue was collected in India in the form of the Clean Energy Cess on coal production between fiscal years (FY) 2010/11 and 2017/18 (Department of Expenditure, 2018)

FEATURED REFORM AND ITS PERIOD

- Evolution of the Clean Energy Cess on coal production between 2010 and 2018

STAGE OF FOSSIL FUEL LIFE CYCLE

- Extraction

SECTORS AFFECTED BY REFORM

- Coal extraction industry

Context

India's Intended Nationally Determined Contribution (INDC) includes fiscal policies in its climate action toolkit, in particular "instruments like coal cess, cuts in subsidies, increase in taxes on petrol and diesel" (Republic of India, 2015). India imposed a cess on domestically produced and imported coal and set up the National Clean Energy and Environment Fund (NCEEF) back in 2010. The policy design was to earmark part of the revenues from the coal cess for the NCEEF that, in turn, funded research and innovative projects in clean energy. The coal cess revenues were also used for other needs such as the rejuvenation of the Ganga (Republic of India, 2015). The coal cess is levied on the dispatch of coal and lignite by coal producers and discourages coal consumption by increasing its cost. For this reason, India's INDC further specifies that "the coal cess translates into a carbon tax equivalent" (Republic of India, 2015).

Change in the mechanisms of fossil fuel taxation

Since its inception, the coal cess has been increased three times, from INR 50 (USD 0.8) per tonne in 2010 to INR 200 (USD 1.6) per tonne in March 2015 and INR 400 (USD 3.2) per tonne in March 2016 (Garg et al., 2017). The cess was also called "Clean Energy Cess" and "Clean Environment Cess." In terms of a carbon tax equivalent, the 2016 increase in the Clean Energy Cess translates to a carbon price of around USD 2 per tonne of carbon dioxide levied at the point of production (Republic of India, 2015). With the introduction of the Goods and Service Tax (GST) in India in July 2017, the Clean Energy Cess was abolished by the Taxation Laws Amendment Act, 2017. A new cess on coal production, called the GST Compensation Cess, was put in its place at the same rate of INR 400 per tonne. The GST Compensation Cess is aimed at filling in the budget deficits that Indian states faced following the GST introduction. This last round of changes effectively means continued taxation of coal production as a source of funding for various regional development needs.

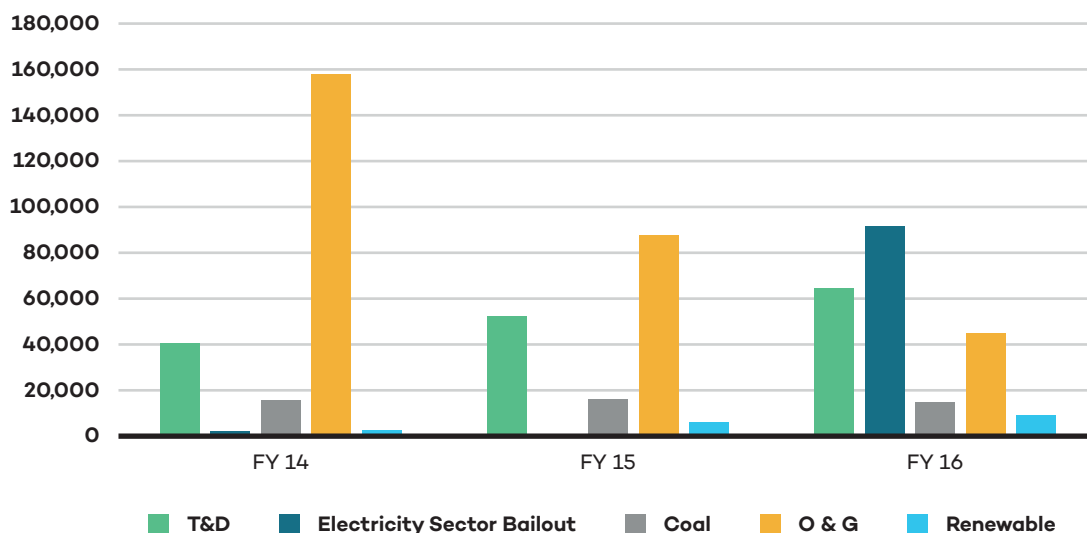
Drivers of reform

In the Indian taxation system, a cess is a fee levied to raise funds for a specific purpose (Comptroller and Auditor General of India, 2017). In this case, the purpose was to mobilize funds for supporting renewable energy through the NCEEF.

Complementary policies

India has a swath of policies supporting energy access, clean energy transition and also fossil fuels under its strategy of ensuring universal energy access by March 2019 by using all energy types for this goal. In FY 2014, India's oil and gas subsidies, mainly in the consumption sphere, were by far the largest of all energy subsidies in India, at INR 157,678 crore (USD 26 billion). In FY 2016, oil and gas subsidies were reduced by almost three quarters to INR 44,654 crore (USD 6.8 billion), partially due to India's reforms and partially due to the decrease in the world price for oil. Subsidies to electricity transmission and distribution increased from INR 40,331 crore (USD 6.7 billion) in FY 2014 to INR 64,896 crore (USD 9.9 billion) in FY 2016, and this grouping became the main recipient of energy subsidies in India. The total subsidies to coal have remained relatively stable over the reviewed years and amounted to INR 14,979 crore (USD 2.3 billion) in FY 2016. Subsidies to renewables have significantly increased from INR 2,607 crore (USD 431 million) in FY 2014 to INR 9,310 crore (USD 1.4 billion) in FY 2016. Overall, the scale of support to fossil fuels (coal, oil and gas) remains more significant than subsidies to renewables in India (Garg et al., 2017; see figure below).

Subsidies to coal, oil and gas, renewables and electricity transmission and distribution in India, FY 2014 to FY 2016 (Indian crore)



Source: Garg et al., 2017

Did the reform generate fiscal or financial space? How was it used?

Over FY 2010–2018, India collected INR 86,440 crore (almost USD 12 billion) worth of the coal cess (Department of Expenditure, 2018). However, as a low-middle-income country, India has many competing development needs, and not all revenue from the coal cess went to support renewables through the NCEEF. For example, in FY 2015/16, only 24 per cent of the coal cess receipts went to the NCEEF and were redirected to support clean energy and environment projects (Department of Expenditure, 2018).

In 2017, large-scale and solar renewable energy reached grid parity costs in India, meaning that these were competitive without subsidies. Meanwhile, the GST reform caused large budget deficits at the state level (Garg et al., 2017). This situation made Indian policy-makers re-prioritize the use of revenues from taxation of coal production despite the fact that many renewable energy technologies, especially small-scale energy access solutions such as distributed solar or clean cooking stoves, need financial support from the government and could be funded from the NCEEF.

Watching brief

Missed opportunity: A bigger share of the Clean Energy Cess receipts could have been used according to the initial design, that is, for supporting renewable energy and clean environment technologies.

Other countries in and outside of the G20 that implemented similar reforms

China reformed its coal resource tax in mid-2016 to an ad-valorem model, simplifying tax administration procedures. The tax rate now follows price developments and avoids excessive windfall profits of coal producers. After this reform, which was implemented at a moment of very low coal prices, prices picked up and generated an increase in the government revenue stream from coal resource tax (Xinhua, 2017). The reform also resulted in a shift of revenue from the central government to the coal-mining provinces. However, this change may create mixed signals for provincial governments: on the one hand, the central government requests them to consolidate the coal industry and close down certain coal mines (Bridle, Kitson, Duan, Sanchez, & Merrill, 2017); on the other hand, increased revenue from the coal sector may motivate provincial leaders to keep mines open longer than requested by the central government.

Sources

Bridle, B, Kitson, L., Duan, X., Sanchez, L. & Merrill, T. (2017). *At the crossroads: Balancing the financial and social costs of coal transition in China*. Retrieved from <https://www.iisd.org/library/crossroads-balancing-financial-and-social-costs-coal-transition-china>

Comptroller and Auditor General of India. (2017). *Report No. 44 of 2017 – Financial Audit of Accounts of the Union Government*. Retrieved from <https://cag.gov.in/content/report-no44-2017-financial-audit-accounts-union-government>

Department of Expenditure. (2018). *National Clean Energy and Environment Fund (NCEEF)*. Retrieved from https://doe.gov.in/sites/default/files/NCEF%20Brief_post_BE_2017-18.pdf

Garg, V., Gerasimchuk, I., Beaton, C., Bandyopadhyay, K., Whitley, S., ... Tripathi, S. (2017). *India's energy transition: Mapping subsidies to fossil fuels and clean energy in India*. Retrieved from <https://www.iisd.org/library/india-energy-transition-mapping-subsidies-fossil-fuels-and-clean-energy-india>

Republic of India. (2015). *India's Intended Nationally Determined Contribution: Working towards climate justice*. Retrieved from <http://www4.unfccc.int/ndcregistry/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf>

World Bank. (n.d.a). Coal rents as percentage of GDP. Retrieved from <https://data.worldbank.org/indicator/NY.GDP.COAL.RT.ZS>

World Bank. (n.d.b). Natural gas rents as percentage of GDP. Retrieved from <https://data.worldbank.org/indicator/NY.GDP.NGAS.RT.ZS>

World Bank. (n.d.c). Oil rents as percentage of GDP. Retrieved from <https://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS>

Xinhua, (7 November 2017). *The comprehensive promotion of resource tax reform has been effective for more than a year*. Retrieved from http://www.xinhuanet.com/2017-11/07/c_129734509.htm