Energy: taxes and transition

Prayas (Energy Group)
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ENERGY SECTOR TAXATION
Energy sector taxation

- Energy sector pretty heavily taxed
- Various kinds of taxes levied
- Indicative list of taxes applied directly to energy sources
  – Does not include other revenue sources from the energy sector (e.g. corporate taxes, dividends, royalty etc.)

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Tax</th>
<th>Customs, CVD etc.</th>
<th>Excise</th>
<th>Cess</th>
<th>Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GST</td>
<td>Sales tax / VAT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude oil</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Petroleum products</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Natural gas</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Electricity</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Price breakup of petrol and diesel in Rs/litre**

<table>
<thead>
<tr>
<th>Component</th>
<th>Petrol</th>
<th>Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Charged to Dealers (excluding Excise Duty and VAT)</td>
<td>27.7</td>
<td>28.7</td>
</tr>
<tr>
<td>Dealer Commission</td>
<td>3.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Excise Duty</td>
<td>33.0</td>
<td>31.8</td>
</tr>
<tr>
<td>VAT (including VAT on Dealer Commission)</td>
<td>19.3</td>
<td>10.9</td>
</tr>
<tr>
<td>Retail Selling Price at Delhi, 1st January, 2021</td>
<td>83.7</td>
<td>73.9</td>
</tr>
<tr>
<td>Share of Excise and VAT in final selling price</td>
<td>62%</td>
<td>58%</td>
</tr>
</tbody>
</table>

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Working paper available at: https://www.prayaspune.org/peg/publications/item/485
• Significant overall dependence on the energy sector for tax revenues (18%)
• Centre particularly dependent (25%)
• States a little less dependent on taxes but not insignificant (13%)

Working paper available at: https://www.prayaspune.org/peg/publications/item/485
Contributions of different energy sources [2019-20]

• ~92% of energy tax revenue directly from fossil fuels
• Not surprisingly, petroleum is the biggest contributor (80-84%): mostly from transport fuels (MS, HSD)
• Coal has 16% contribution to Centre, negligible to states
  – But coal-bearing states depend on coal royalty
• Reverse with electricity: 18% to states, 0% to Centre
Significant variation across states in their dependence on energy for taxes

Some states (e.g. MH, RJ) depend more than others (e.g. AS, JH, UP)

Share of petroleum in energy taxes very high in some states (e.g. AS, TN, TS) compared to others (e.g. CG, OD, WB)

Coal-bearing states (e.g. CG, JH, OD) also depend quite a bit on royalties

Both Centre and states quite heavily dependent on energy for their tax revenue
ENERGY SECTOR IN TRANSITION
Energy sector today

- Energy sector currently dominated by fossil fuels
  - 90% of total primary commercial energy supply from coal and oil
  - 80% of electricity generation from coal and gas
But a transition is under way …

• Share of renewables in electricity generation likely to rapidly increase
  – Changing economics and aggressive targets
  – Announcements by some states and companies

• Thrust on electric mobility
  – National and state level

• Announcement of ‘green hydrogen mission’

Electric vehicles to dominate in India by 2030, Mahindra says
Economic drivers of energy transition

- Changing economics
  - Rapidly falling prices of renewable sources of electricity (and storage)
  - Increasing costs of coal based electricity
  - Likely shift in other sectors such as transport
Environmental drivers of energy transition

• India among countries with worst air pollution
  – Coal-based power generation
  – Fossil fuel based transport
• Mutual reinforcement of coal-based generation & water stress
• Climate change

• Transition away from fossil fuels inevitable
Points to ponder

• Energy sector quite heavily taxed; mostly outside GST
  – Creates its own problems

• Significant contributor to Government tax revenue
  – Predominantly based on fossil fuels
  – This will be threatened with the ongoing transition

• Pressure for energy subsidies unlikely to reduce soon
  – May even increase: new electricity and LPG consumers

• How does one square this circle?
  – Some ad-hoc steps already being initiated?