

# Energy: taxes and transition

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# ENERGY SECTOR TAXATION

# Energy sector taxation

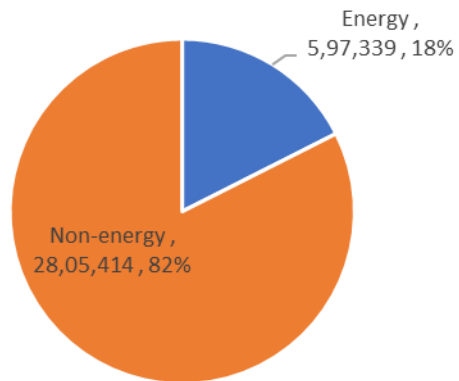
- Energy sector pretty heavily taxed
- Various kinds of taxes levied
- Indicative list of taxes applied directly to energy sources
  - Does not include other revenue sources from the energy sector (e.g. corporate taxes, dividends, royalty etc.)

Price breakup of petrol and diesel in Rs/litre	Petrol	Diesel
Price Charged to Dealers (excluding Excise Duty and VAT)	27.7	28.7
Dealer Commission	3.7	2.5
Excise Duty	33.0	31.8
VAT (including VAT on Dealer Commission)	19.3	10.9
Retail Selling Price at Delhi, 1st January, 2021	83.7	73.9
Share of Excise and VAT in final selling price	62%	58%

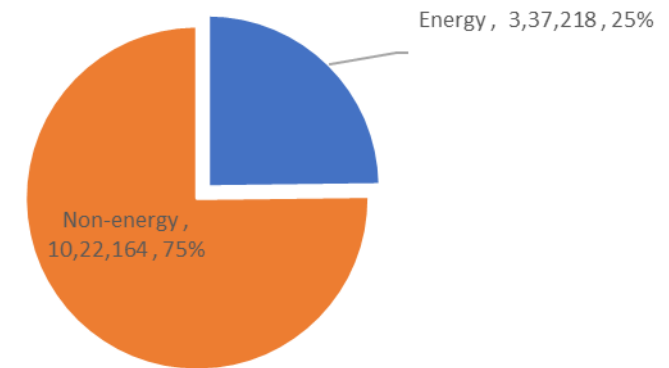
	Tax		Customs, CVD etc.	Excise	Cess	Duty
	GST	Sales tax / VAT				
Crude oil		✓	✓	✓	✓	
Petroleum products	✓	✓	✓	✓	✓	
Natural gas		✓	✓	✓		
Coal	✓		✓		✓	
Electricity		✓				✓

# Dependence on energy for tax revenues [2019-20]

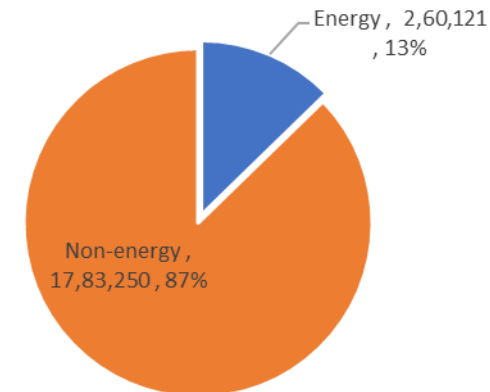
Energy and non-energy tax revenue:  
Union+state governments, 2019-20



Energy and non-energy tax revenue:  
Union government, 2019-20

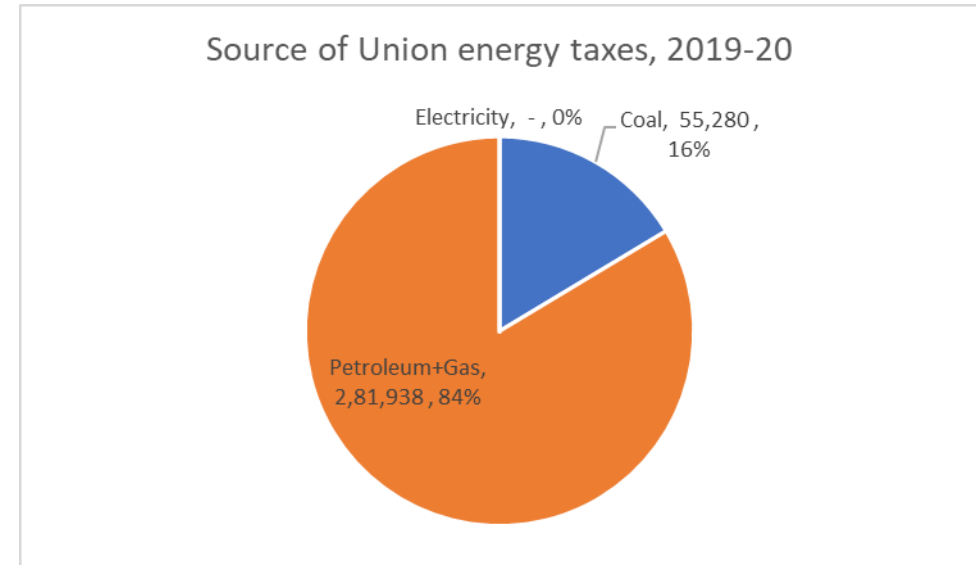
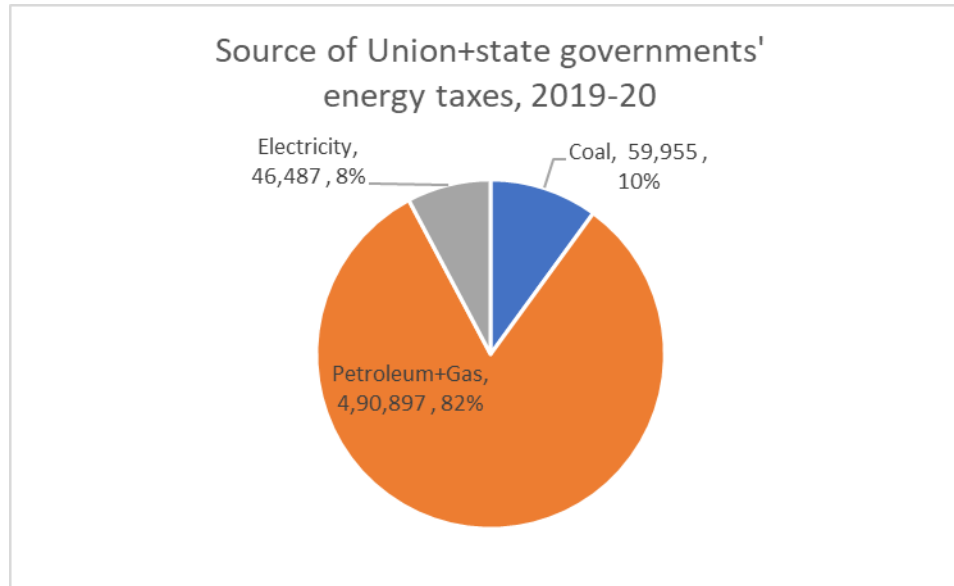


Energy and non-energy tax revenue:  
state governments, 2019-20

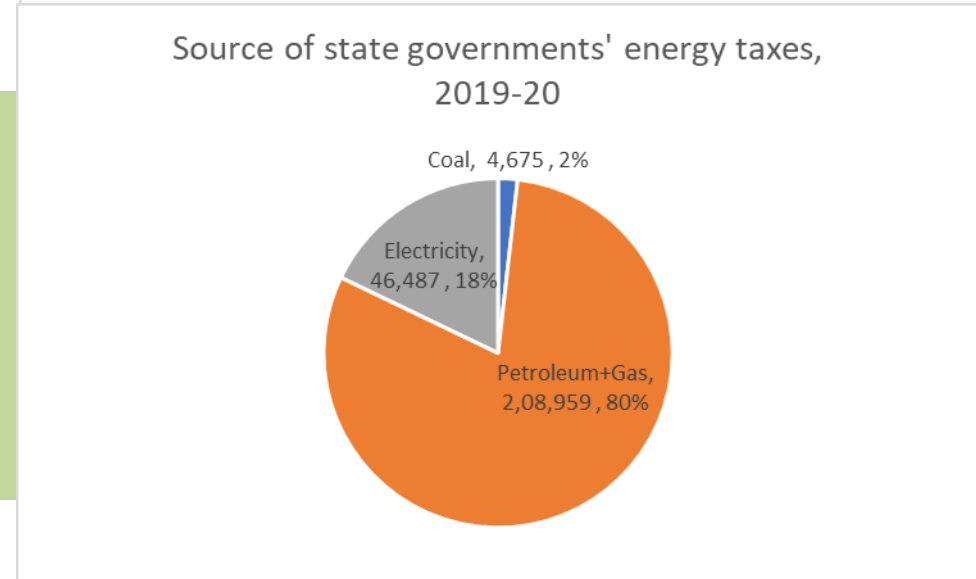


- Significant overall dependence on the energy sector for tax revenues (18%)
- Centre particularly dependent (25%)
- States a little less dependent on taxes but not insignificant (13%)

# 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



# State level figures [2019-20]

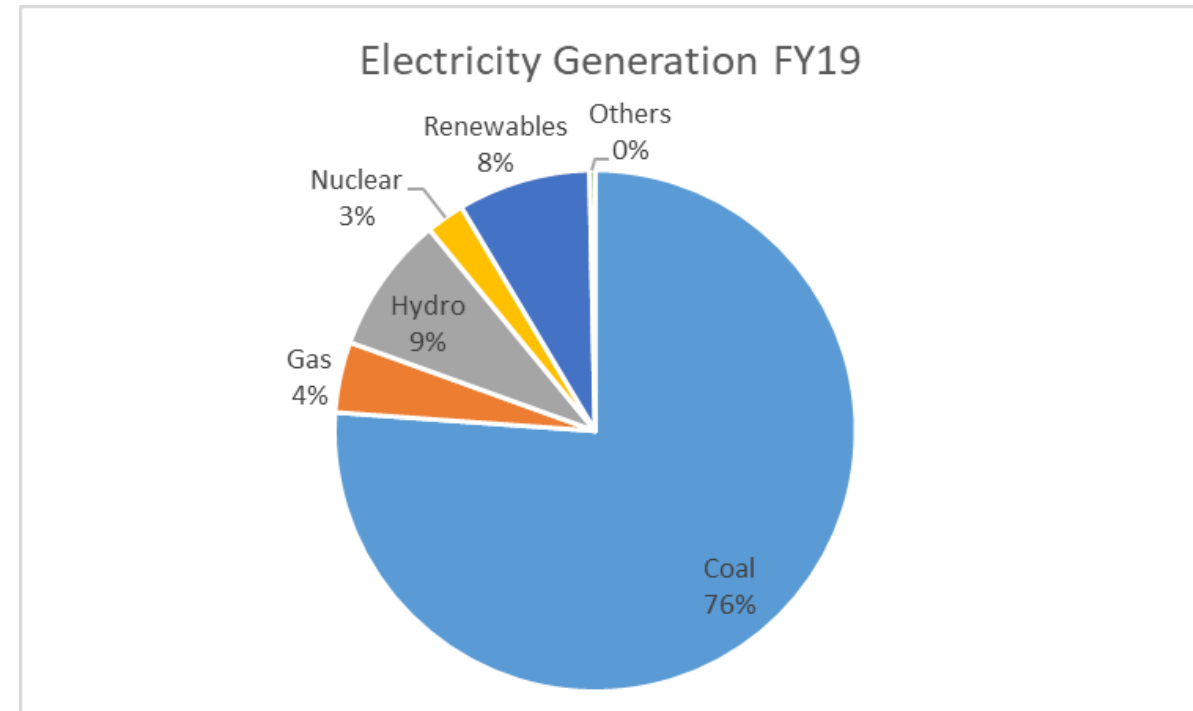
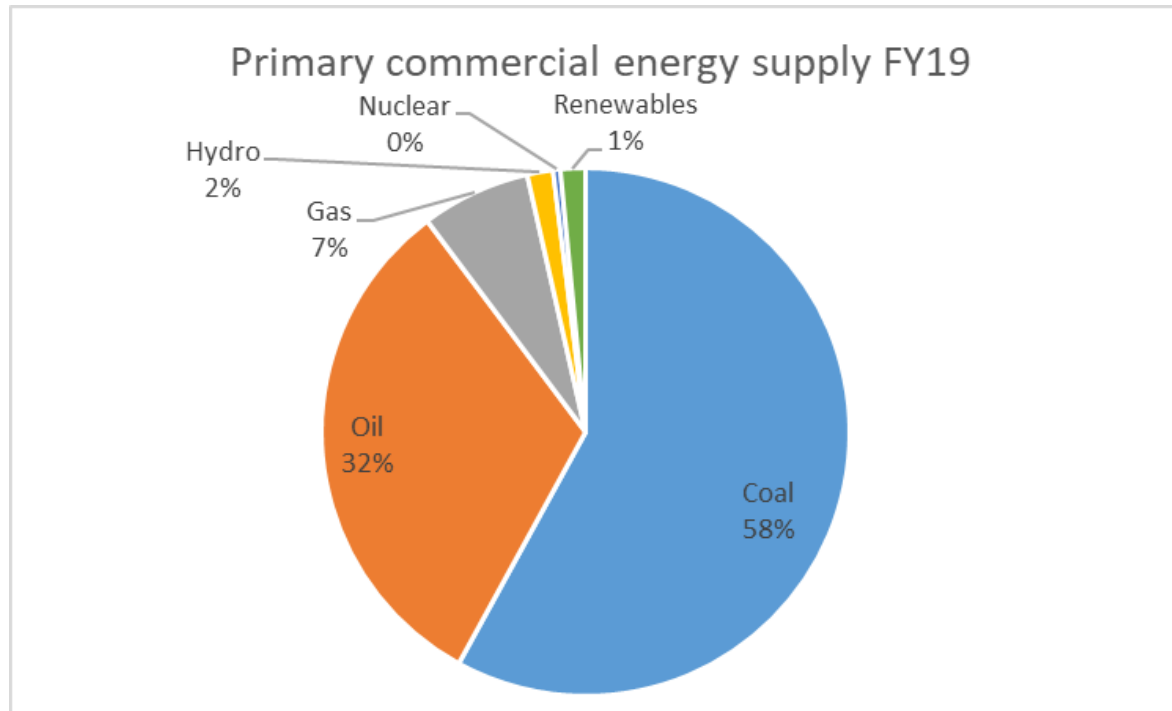
	All States	AS	CG	JH	KA	MP	MH	OD	RJ	TN	TS	UP	WB
Share of energy in total tax revenue	13%	8%	15%	9%	14%	14%	16%	14%	15%	14%	12%	9%	10%
Share of petroleum in energy taxes	80%	96%	58%	80%	85%	73%	74%	64%	83%	93%	98%	87%	63%
Energy royalties as % of energy tax	11%	1%	48%	90%	0%	19%	4%	31%	0%	2%	18%	2%	1%

- 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'

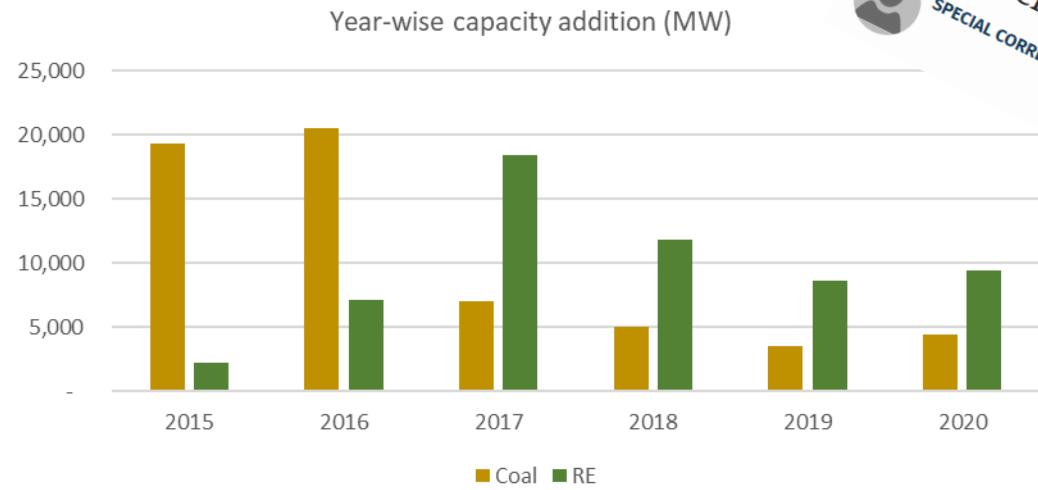
Electric vehicles to dominate in India by 2030, Mahindra says

POWER SURPLUS  
**One of India's largest coal-mining states says it will not build new coal power plants**

**NTPC pivots from thermal to green**  
2 min read. Updated: 24 Sep 2020, 09:11 PM IST  
Utpal Bhaskar

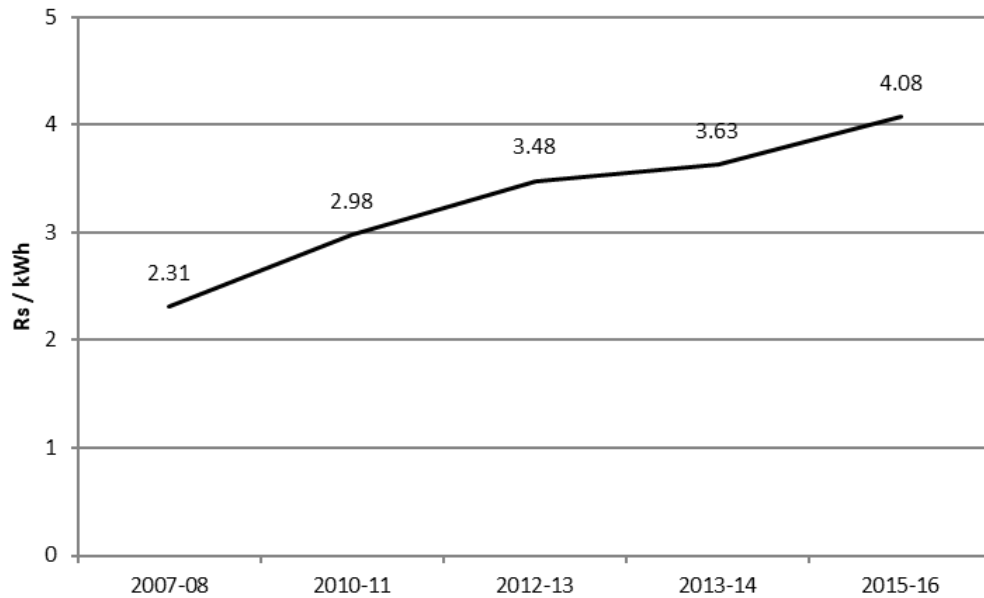
**Maharashtra: No new thermal power units in state, says Raut**

INDUSTRY  
**Tata Power puts coal on the backburner**  
SPECIAL CORRESPONDENT

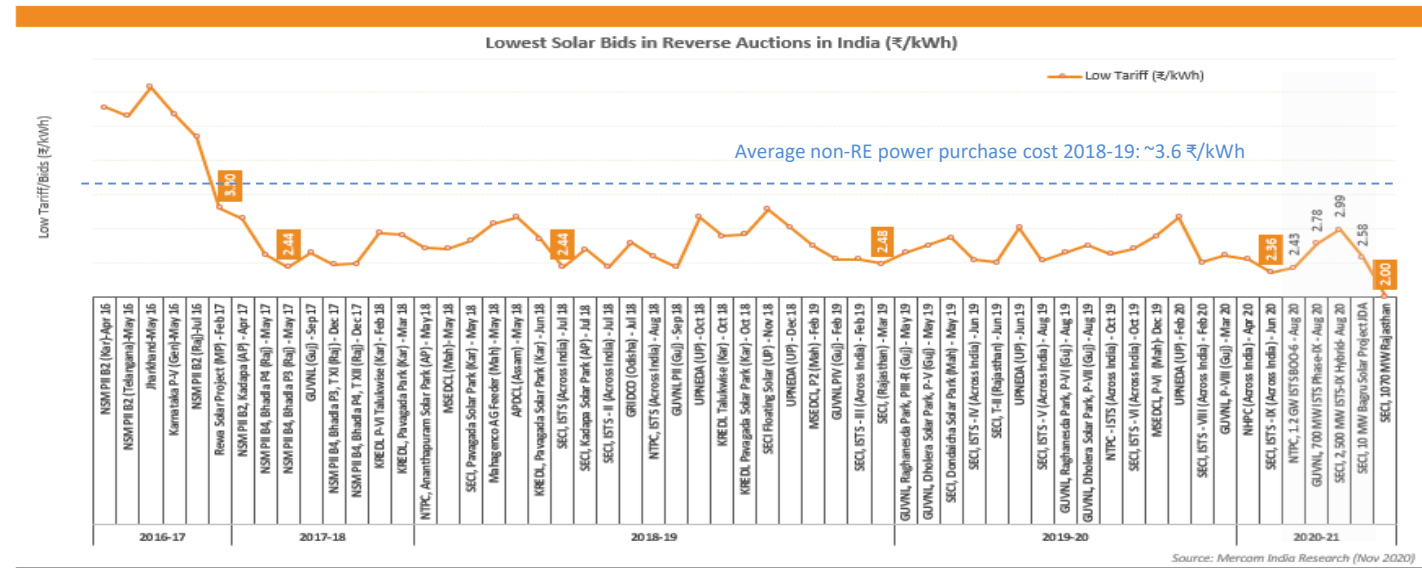


# Economic drivers of energy transition

- 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



Coal-based power price trend

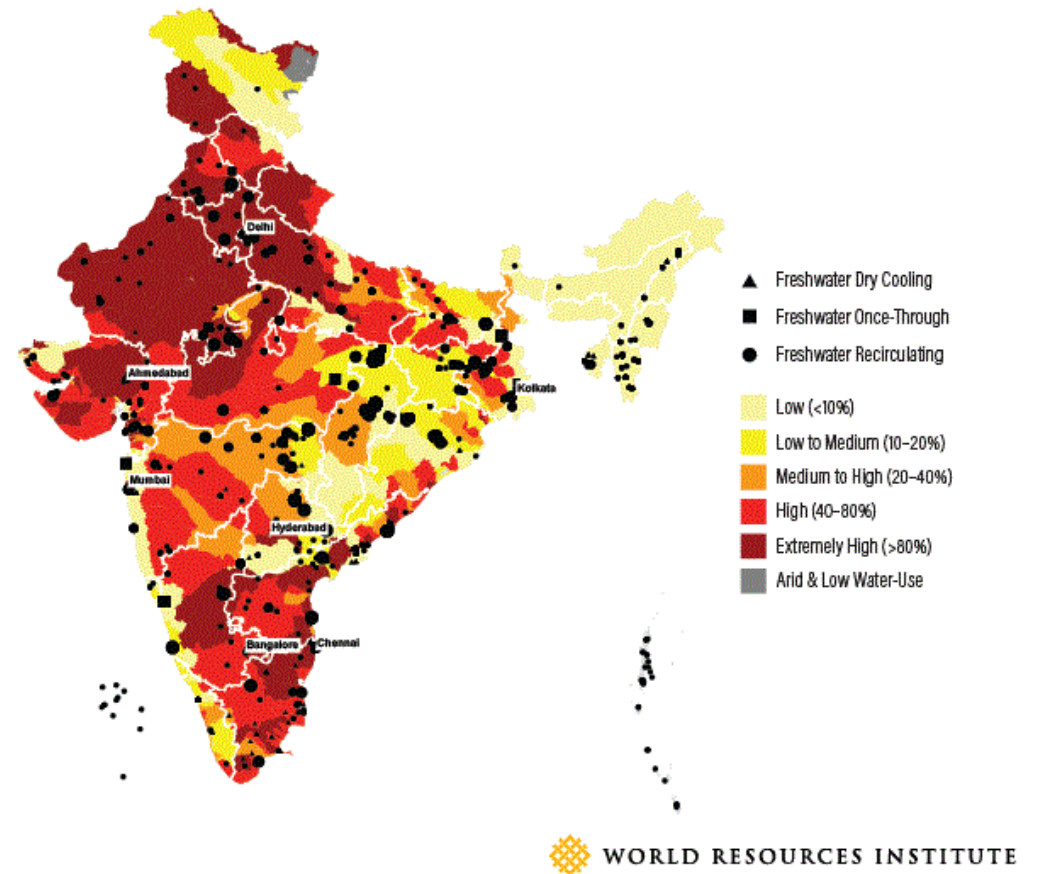


Discovered solar tariff trend

# 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

40% of India's Thermal Power Plants Are in Highly Water-Stressed Areas



# 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?

*Green tax to be imposed on vehicles over 8 years in bid to clean environment*

*Rajasthan levies Rs 2-5 lakh cess on solar projects, registration fee up 5x*