

***Implications of GST on  
delivered cost of renewable  
energy***

Ministry of New and Renewable  
Energy

# Glossary

<b>S.No.</b>	<b>Abbreviation</b>	<b>Meaning</b>
1	ACD	Additional Duty of Customs (levied in lieu of excise duty)
2	BCD	Basic Customs Duty
3	CERC	Central Electricity Regulatory Commission
4	CGST	Central Goods and Services Tax
5	COG	Cost of goods
6	CST	Central Sales Tax
7	GST	Goods and Services Tax
8	GTA	Goods Transport Agencies
9	GST Bill	Constitutional (One Hundred and Twenty Second Amendment Bill) 2014
10	IGST	Integrated Goods and Services Tax
11	MNRE	Ministry of New and Renewable Energy
12	O&M	Operation and maintenance
13	OMC	Oil Marketing Company
14	SAD	Special Additional Duty of Customs
15	SGST	State Goods and Services Tax
16	VAT	Value Added Tax

# Rating criteria

Impact		Meaning
	Positive Impact	Signifies positive impact under GST as compared to current tax regime
	Negative Impact	Signifies negative impact under GST as compared to current tax regime
	Neutral	Signifies no substantial change in GST as compared to current tax regime

---

## **Impact on GST on renewable energy sector**

The power to legislate is engrafted under Article 246 of the Constitution of India and the various entries in the three lists of the Seventh Schedule are the 'fields of legislation' which provide power to the Central and State Government to govern various matters.

To enable levy of GST (which would be under a dual structure), various entries of the Constitution of India are proposed to be amended<sup>1</sup>/ modified and accordingly, various articles as well as entries of the Seventh Schedule are being subsumed and replaced by Articles enabling the GST implementation.

The power to levy taxes on consumption or sale of electricity has been provided to the State Government vide entry 53 of List II of Seventh Schedule of Constitution. However, such entry is not being subsumed and accordingly taxes on consumption or sale of electricity have been proposed to be kept outside GST. Therefore, the electricity generated by renewable sources would continue to be outside the GST regime and the State Government would have the power to continue to tax the same.

However, Entry 54 which empowers the States to levy tax on sale of goods has been subsumed as part of GST. The term 'goods' has been defined in the Constitution as 'goods include all materials, commodities, and articles'. Given the wide definition of the term 'goods', it may be argued that electricity qualifies as 'good'. This is also supported by judicial precedents and the fact that in various State VAT laws, electricity has been included in the category of 'exempted goods'. Also, electricity has been mentioned in the Excise Tariff. In light of the discussions, it is possible to consider electricity as goods and accordingly, technically possible to tax electricity under GST (as sale of goods).

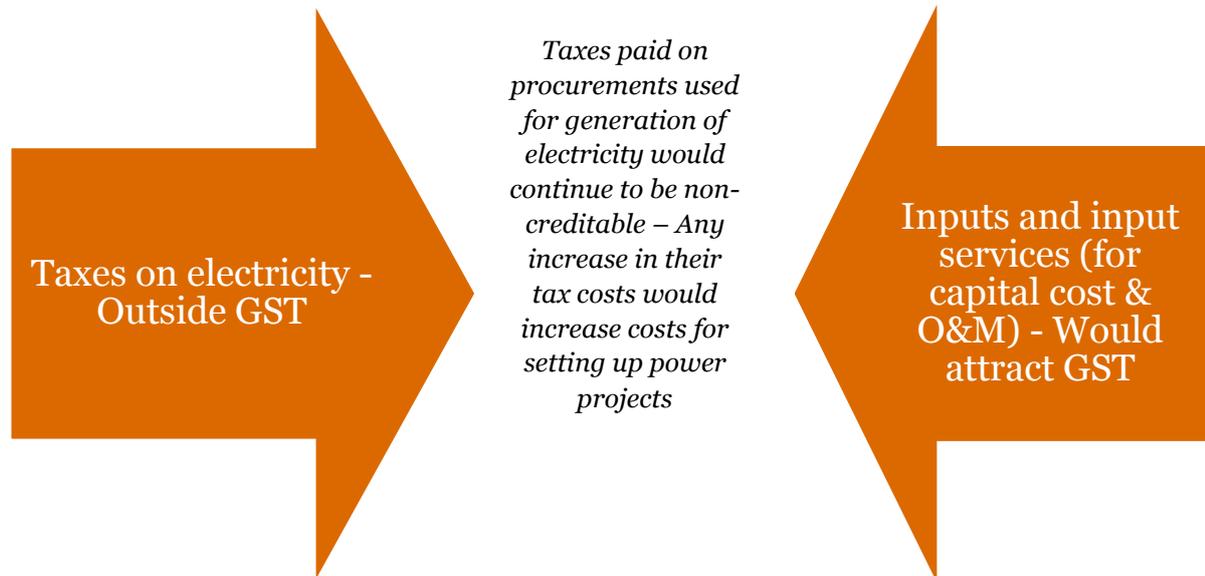
Currently, tax on electricity is levied only under Entry 53 and it's specifically exempted/ excluded from levy under Entry 54.

It may be highlighted that for the purpose of this report has assumed that the same dispensation would continue (ie States would continue to tax electricity as presently under Entry 53 as this Entry has not been subsumed in GST) and that there would be no levy under GST on output electricity although Entry 54 has been subsumed in GST.

---

<sup>1</sup> Vide the Constitution (One Hundred and Twenty Second Amendment) Bill 2014

However, taxes on various inputs and input services (both capital cost as well as operation & maintenance costs) used for generation of renewable energy would be subject to GST.



GST is based on the foundation of credit fungibility and reduction of exemptions. Considering the fact that renewable energy sector currently benefits from various exemptions and concessional duty, the impact on the 'delivered cost of renewable energy' needs to be examined under the GST regime which is likely to eliminate/ reduce exemptions.

Further, specified petroleum products (such as petroleum crude, high speed diesel, petrol, aviation turbine fuel and natural gas). The outputs of the bio-fuel sector are also supplied as inputs to such OMCs for blending. Any GST charged on bio-fuels would become a cost to the OMCs.

Provided below are assumptions and comments on how the 'delivered cost of renewable energy' as well as the impact on the bio-fuel sector could be impacted in the GST regime.

## 5. Key issues and recommendations

Per the aforesaid analysis, it is evident that the cost of renewable energy would increase under the GST regime. Analyzed below are the key factors under GST which lead to a potential negative impact for the renewable energy sector and recommendations for the same.

### 7.1.1 Key factors for negative impact under GST

#### (i) Increase in tax costs due to removal of exemptions

##### Current regime

Electricity generated by renewable energy sources is generally exempt from electricity duty in most of the States<sup>10</sup>.

However, various taxes are levied on procurement of goods and services (on both capital procurements as well as O&M charges). The taxes paid against such procurements become a cost as there is no output liability (and in any case such taxes cannot be utilized against electricity duty).

The Government has always strived to promote the renewable energy sector and accordingly, various exemptions have been provided to the sector. A few of these include:

- Customs duty exemptions/ concessions on import of goods required to be used in specified renewable energy sector. Few examples include:
  - Concessional rate of BCD of 5% is provided to import of all goods used for Project Imports
  - Solar - Exemption from BCD on solar panels, cells and modules. Also, exemption from ACD and SAD provided to all items of machinery, transmission equipment, auxiliary equipment etc used for setting up of solar power plant. Further, import of various other solar components has been exempt or provided concessional rate
  - Wind – Concessional rate of BCD of 5% and exemption from ACD and SAD provided to import of various components used by a wind power plant (such as wind operated electricity generators, wind turbine controllers etc)
  - Small Hydro – No specific exemption for small hydro projects
  - Bio Mass – Concessional rate of BCD of 5% and exemption from ACD provided to all items of machinery, auxiliary equipment etc for setting up a project for generation of power or generation of compressed bio-gas
- Excise duty exemptions/ concessional rates on production of renewable energy as well as procurement of goods to be used in production of renewable energy. Few examples include:
  - Solar – Excise duty exemption provided to all items of machinery, transmission equipment, auxiliary equipment etc used for setting up of solar power plant
  - Wind – Excise duty exemption provided to specified goods/ parts used for manufacture on products which may be used in a wind operated power plant
  - Small Hydro- No specific exemption for small hydro projects

---

<sup>10</sup> Few States such as Maharashtra have recently imposed electricity duty on electricity generated through renewable energy

- Bio Mass- Exemption from excise duty provided to all items of machinery, auxiliary equipment etc for setting up a project for generation of power or generation of compressed bio-gas using non-conventional materials, namely, agricultural, forestry, agro-industrial, industrial, municipal and urban waste, bio waste or poultry litter
- Bio-fuel – Excise exemptions provided to bio-fuels (ethanol as well as bio-diesel) as well as its key inputs (such as molasses and palm stearin)
- Exemption/ concessional rate have been provided under various State VAT legislations on sale of goods to be used for generation of renewable energy. For example:
  - Tamil Nadu – Concessional rate of VAT of 5% available to renewable energy devices and spare parts other than few specified goods
  - Gujarat - Concessional rate of VAT of 5% available to renewable energy devices and components and parts thereof
  - Rajasthan – Exemption provided to solar energy equipment and plant and Machinery including parts thereof, used in generation of Electricity, from- (a) Solar Energy;(b) Wind Power
  - Further, lower rate of VAT has also been provided on various inputs for bio-fuel sector in few States
- Various other exemptions/ concessions under both State as well as Central Indirect Tax legislations – exemptions under Entry tax law, incentives under State industrial policy etc

The above tax exemptions/ concessions help in reducing the procurement cost incurred for setting up/ operating a renewable energy project.

### GST regime

GST is based on the foundation of providing a one tax regime, seamless credit chain (through cross utilization of credits *inter se* goods and services) and reduction of exemptions. However, electricity is expected to continue to be an exempted product under GST regime. Considering the same, for renewable energy projects, the GST paid on inputs, capital goods and services would continue to be a cost. Therefore, if exemptions/ concessional rates are pruned under the GST regime, there would be a substantial increase in the cost of procurements.

Since electricity duty would be outside GST, the GST paid on such procurements would continue to be a cost and would have an adverse impact on the cost of renewable energy. Similarly, taxes charged on bio-fuel would become a cost to OMCs (as they would be outside GST).

Further, it is imperative to note that the adverse impact of tax cost would vary from project to project (as well as from one source of renewable energy to another) based on the procurement pattern (import vs. domestic purchase) as well as extent of exemptions available currently (For eg – Solar has more exemptions currently than Small Hydro plants. Hence, impact on Solar would be more adverse than on Small Hydro plants).

For the purpose of computation, it has been assumed that all exemptions available currently would be removed and the BCD rate would continue to remain as in current regime (whether concessional or otherwise).

## **(ii) Increase in tax rates**

### Current regime

Currently, different tax rates are applicable depending on the nature of procurement. For example, generic Excise duty rate is 12.5%, Service tax is 14.5% and VAT is 5%-14%. All such rates could be reduced/ exempted basis the actual nature of goods and purpose.

### GST regime

GST aims to provide a single rate for goods and services. The Select Committee has recommended that the standard GST rate should not exceed 20%. For the purpose of computation, it has been assumed a CGST rate of 10%, SGST rate of 10% and IGST rate of 20% (for inter-State transactions). Further, an additional tax 1% may be levied for 2 years on inter-State sales/ purchases.

A GST rate of 20% would also be substantially higher than the rates applicable currently on procurement of goods and services in the renewable energy sector. For example:

- Concessional rates (both excise duty as well as VAT) are available on procurement of goods within India. GST rate of 20% would be substantially higher than the taxes which are paid on domestic procurement of goods currently
- Service tax is paid at 14.5% currently while GST would be applicable at 20%. This clearly shows a significant increase in tax costs which would be paid on procurement of services such as installation, transportation etc
- Operation and Maintenance – Both VAT and service tax is applicable currently on operation and maintenance activities. However, concessional rate and valuation provisions are provided for under VAT as well as Service tax laws. Accordingly, the effective tax generally is lower than the proposed GST rate of 20%

Hence, an increase in tax rate<sup>11</sup> would have an adverse impact on the taxes which would be paid on procurements as the same would increase the tax cost burden for the renewable energy sector.

## **(iii) Removal of statutory forms**

### Current regime

Currently, inter-State procurements are liable to CST. A concessional rate of CST of 2% is provided against issuance of statutory form (Form C) in case the goods are to be used in generation or distribution of electricity.

Hence, the tax cost on account of CST is limited to 2% in case of inter-State procurements for renewable energy projects.

### GST regime

It is expected that statutory forms would be done away with in the GST regime. Hence, concessional rate of tax would not be available even if the goods are to be used in generation or distribution of electricity.

In such case, IGST at 20% would be applicable on inter-State procurements along with an additional tax of 1%. This showcases a substantial increase in tax costs as compared to the current regime which would directly impact the cost of renewable energy.

---

<sup>11</sup> Please note that tax impact for vendor selling to a renewable energy developer would also need to be analyzed and his costs may increase/ decrease based on rate of tax under GST and credit fungibility

## 7.1.2 Key recommendations

The Government has always strived to boost the renewable energy sector. This is also evident from the current Government policies and initiatives.

Current tax concessions play an important role to make renewable energy competitive.

Under GST, increase in tax cost for renewable energy sector could not only have a possible negative impact on cost of setting-up renewable energy plants but also increase the working capital requirements for the renewable energy sector leading to higher financial as well as operating costs. Further, the renewable energy sector benefits every strata of the society (including various rural areas) and hence, any increase in tax costs would also have an adverse social impact.

In line with the endeavour of the Government to promote the renewable energy sector and to ensure that there is not a substantial increase in the delivered cost of renewable energy, the following recommendations may be taken into account:

### **For renewable energy sector**

- Current tax exemptions provided to the renewable energy sector should be continued under the GST regime as well. In addition even the services rendered to a project owner for setting up and operation of renewable energy plant/ project should be exempt from levy of GST. This would ensure that there is no adverse impact on the procurements made for generation of renewable energy due to increase in tax costs
- Exemptions should be provided for all categories of goods supplied to a renewable energy project (whether meant used in setting up or are parts/ components of the plant or are used for O&M). If exemption is provided HSN classification wise, detailed HSN classification should be provided, to eliminate ambiguity.
- Sale of goods and services to renewable energy projects should be zero-rated, ie the vendors providing such goods and services at nil GST rate should be eligible to avail credit of the GST paid on inputs, capital goods and services used.
- Wherever, exemptions are not available, concessional rate of GST (both at Central and State level) should be applicable on goods and services used by renewable energy sector
- Currently, the VAT rate in respect of renewable energy sector vary from state to state. It is recommended that the SGST rate on such goods should be uniform across states under GST regime
- Currently, a lot of ancillary products (such as battery, transformers) meant for renewable energy projects are liable to taxes at normal rates. Under GST, it is recommended that all the goods used for setting up or operating a renewable energy project should be eligible for relevant exemptions.
- The project developer should be eligible to claim refund of GST paid (both at Central and State level) on goods and services used for setting up and operating renewable energy project.