



Presentation By
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April 20, 2006
New Delhi, India

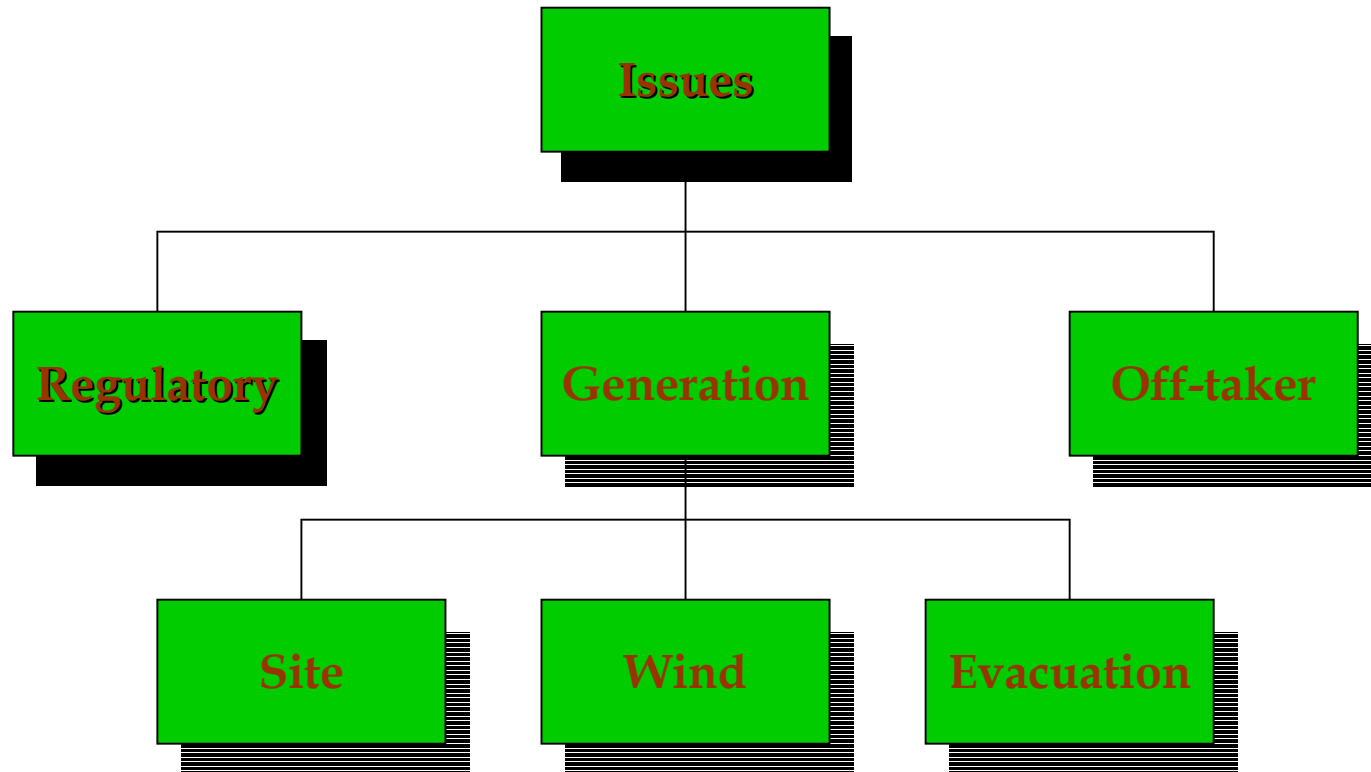


Introduction

- The Purpose of this seminar clearly illustrates that all present here are completely convinced about furthering the growth of the Wind Energy Sector
- The initial estimate of 45,000 MW wind potential in India was carried out by the Indian Institute of Tropical Meteorology in 1998 through a committee headed by Dr S Rangarajan
- In reality, the Wind Potential in India at the right hub height can be substantially large
- To harness this potential and to work towards the “**energy security**” of the country, we need to address certain issues to attract larger investment and long term project finance



Wind Energy Financing – *Issues*





Wind Energy Financing – *Regulatory Issues*

- Power is on the concurrent list and different states announces their own policy for Renewable Energy
- Consistency – There should not be any ad-hoc changes
- Central level directive – As the policies are long term in nature, a new policy should be in place at least one year before the expiry of the existing policy
- Tariff – There should be pre-defined tariff for 20 years as against the current structure (in some states) whereby the tariff is pre-defined for the first 10 years and thereafter to be mutually decided, which bring uncertainty for cash flow planning
- Minimum Purchase – The Indian Electricity Act 2003, puts an obligation on State Electricity Regulatory Commission (SERC) to announce a minimum quantum of energy to be purchased by state utilities from renewable energy sources but 3 years have passed and just a handful of SERCs have made the announcement or are in the process of making the announcement
- Must Run Status – In the interest of '**Energy Security**' of the country there should be a central government directive to accord '**Must Run Status**' for renewable energy

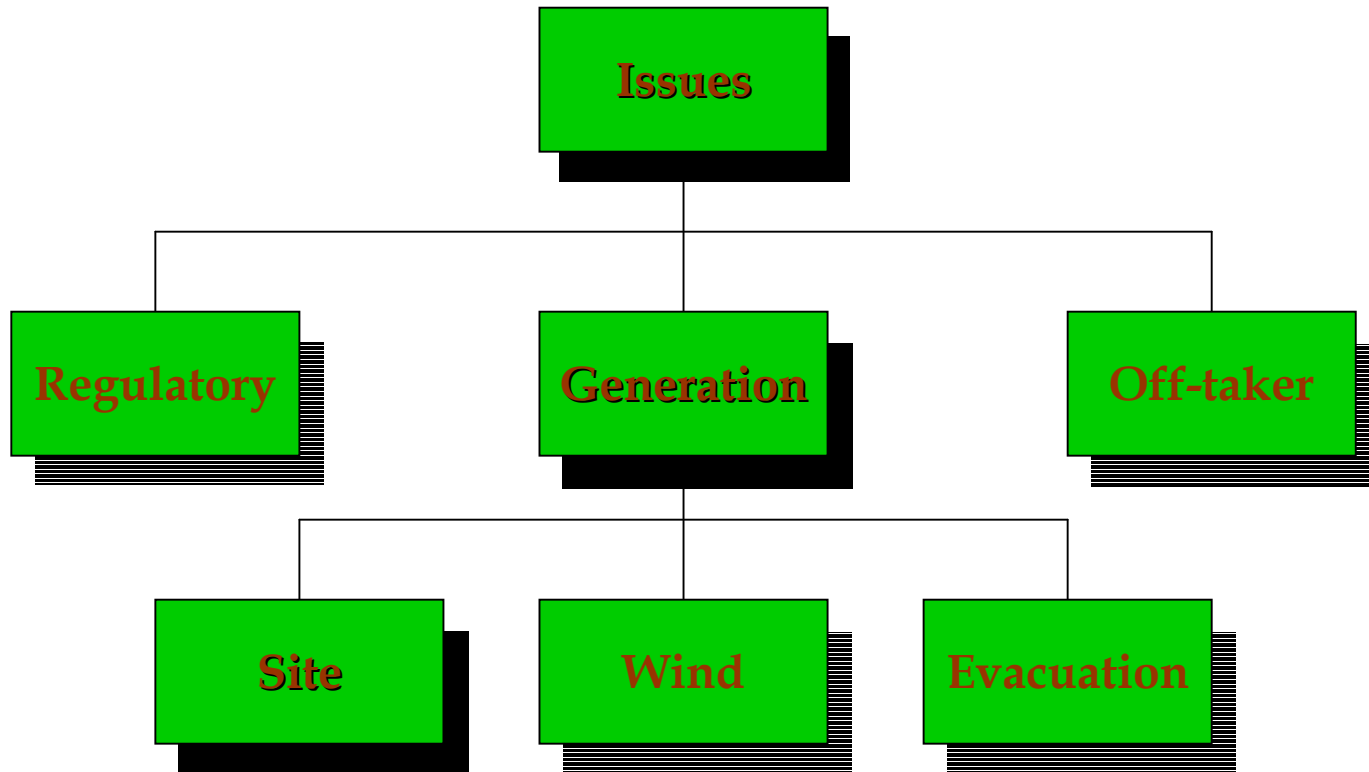


Wind Energy Financing – *Regulatory Issues*

- Fiscal Benefits – There should be specific time frame for validity of fiscal benefits instead of annual uncertainty for e.g. accelerated depreciation changes from 100% to 80% and the sudden removal of income tax benefit u/s 10(23)G of Indian Income Tax Act
- Under a specific entry Wind Energy Converters (WEC) are entitled for excise duty exemption whereas for part of the project billing such as erection, installation and commissioning service tax is levied
 - In the interest of the sector such service tax should be exempted
- Presently for every import by the manufacturer of WEC an entitlement certificate for concessional import duty has to be obtained from MNES
 - The same can be made simpler if a specified value and specific items are allowed to be imported under the concessional duty by the WEC manufacturer on the annual declaration basis
- In case of conventional power projects, benefits of mega power projects are available for 500 MW capacity and above, similar benefit could be made available to Renewable Energy Projects for 100 MW and above



Wind Energy Financing – *Issues*



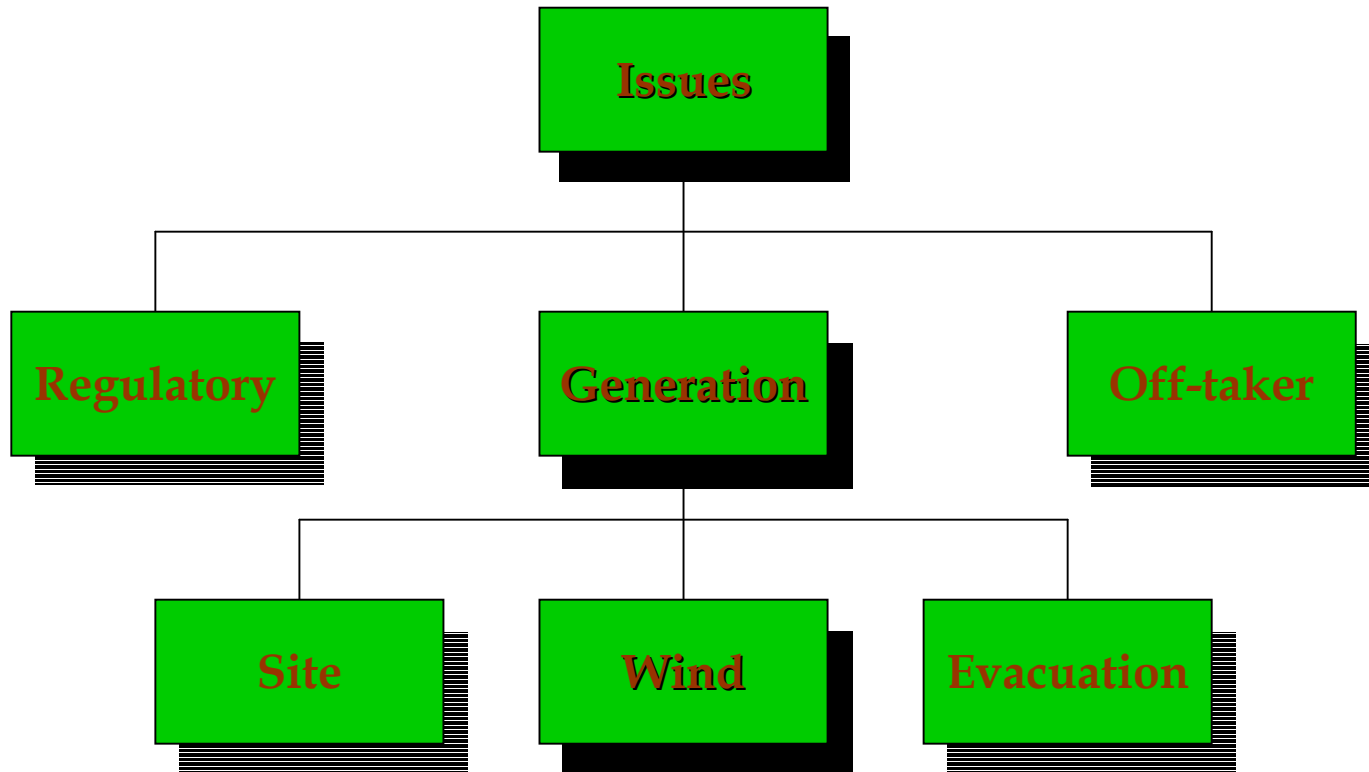


Wind Energy Financing – *Generation Issues (site)*

- Proper site is a pre-requisite for a Wind Energy Project to succeed
- Most of the identified high wind sites are/being utilised
- The country has lot of untapped potential in different states and if proper and reliable wind studies are carried out, it can help the Wind Energy Industry to contribute more towards the energy security of the country
- MNES through IREDA/any other agency can extend financial resources at a concessional rate to a nodal agency for e.g. C-WET/TERI for identification of new sites
- C-WET/TERI can offer wind monitored data of various sites on commercial terms
- The realisation thus received can be utilised by C-WET/TERI for re-payment to IREDA/such other agency
- The transfer of land (forest/revenue) should be simplified and time bound



Wind Energy Financing – *Issues*



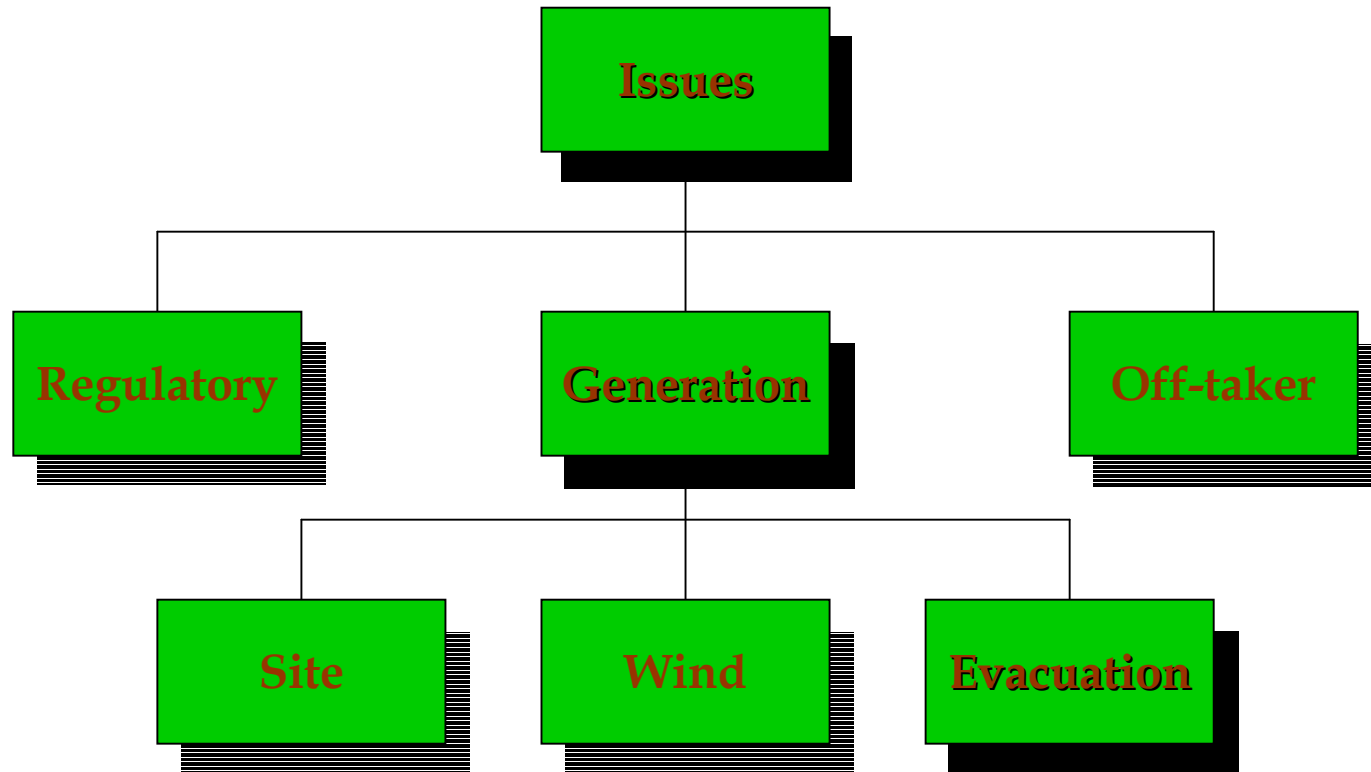


Wind Energy Financing – *Generation Issues (wind)*

- An un-hedged/un-insured wind farm is exposed to under performing the levels assumed at the time of financing
- We should aggressively pursue Wind Insurance in India
- Wind Farms could purchase protection against adverse wind events
- Requirements for Wind Insurance
 - Availability of reliable Long Term data at site
 - Long Term reliable data on wind pattern in the region
 - Sophisticated software requirement for simulation
 - Quantification of risk to be covered
 - Presently the General Insurance Policy is valid only for 1 year, therefore a special approval should be obtained from IRDA permitting long term covers
- Possible creation of a derivative market on Wind Index
- Creation of a separate fund by the MNES which could be contributed by Wind Energy Generation Projects and can be utilised in case of an abnormal wind variation in a particular state



Wind Energy Financing – *Issues*



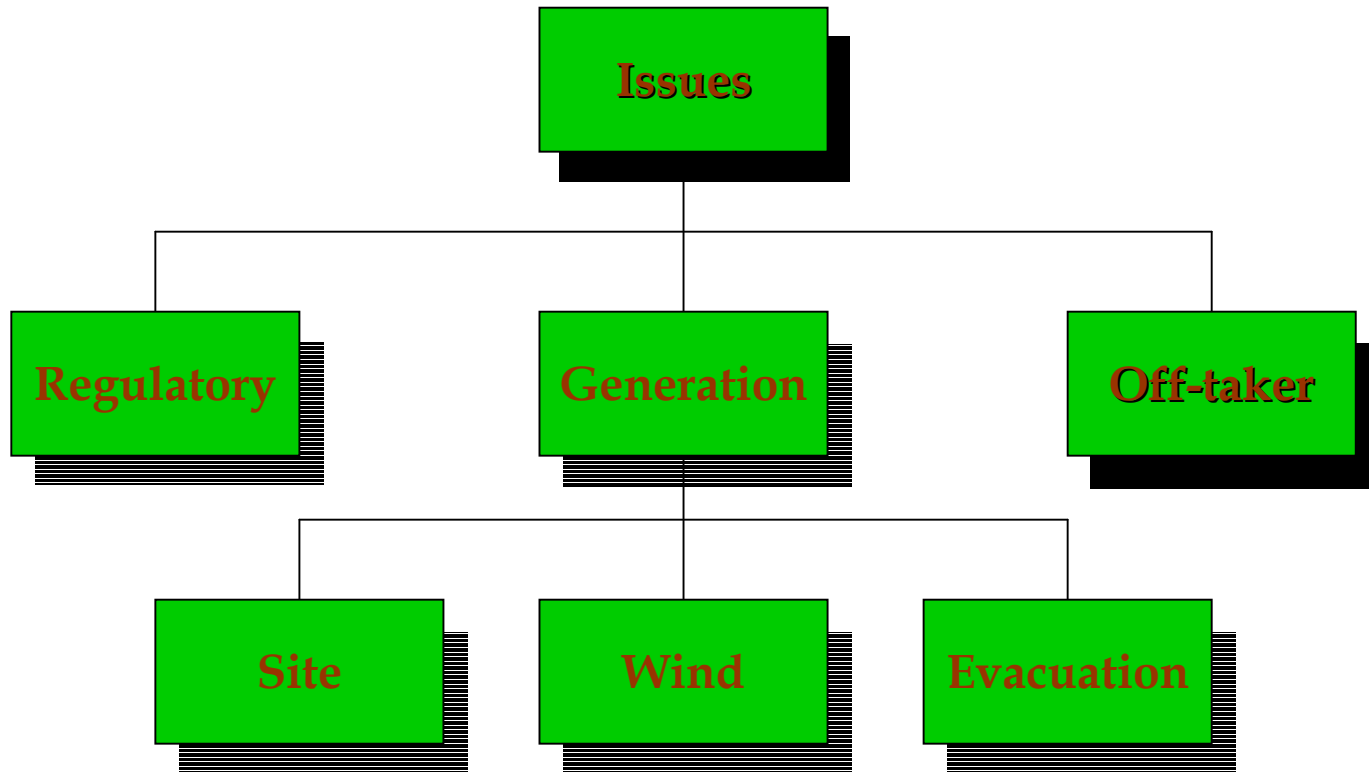


Wind Energy Financing – *Generation Issues (evacuation)*

- In a power starved nation huge amount of Energy is wasted due to unavailability of proper evacuation facilities
- Mostly Wind Energy Projects are in remote areas hence proper evacuation facilities needs to be created in such areas
- Back-down instructions during high wind season from Load Dispatch Centres is another critical concern
- In view of the seasonality of Wind Power Generation initiative should be taken for creating evacuation facilities by offering concessional funding to the state utility or private developer
- In view of the seasonality and resultant consequential loss in case of non-availability of Grid, substantial resources needs to be allocated for developing cost-effective technology for storage of Wind Power
- With the above we can achieve the proposed '*Must Run Status*' for Wind Energy Projects



Wind Energy Financing – *Issues*





Wind Energy Financing – *Off-taker Issues*

- Integration of mainstream financial markets is most desirable
- State Utilities (SU) are by far the largest buyers of Electricity in India
- Very few Financial Institution (FI) consider non-recourse long term Project Finance with SU as off-taker
- Funding of Wind Energy Projects must be done on Project Finance Basis
 - IREDA has taken the initiative in this regard and development FIs such as, IDBI, ICICI, IL&FS, IDFC etc should consider Project Finance in case of large renewable energy projects at competitive cost
 - Multilateral Agencies (MA), like The World Bank, International Finance Corporation, Asian Development Bank who have clear mandate to develop Wind Energy should come forward with non-recourse Project Funding
 - Large FI and/or MA can extend guarantees on behalf of SUs or securities future cash flows of projects after proper due diligence of technology
- Funding on collaterals hamper the growth of the industry because of Balance Sheet constraints, thereby developers are forced to set up small projects
- FIs (Indian & International) have substantial financial exposure to SU for e.g. public sector power generation companies IPO gets over subscribed when majority of its revenue comes from sale of power to SU but for small wind energy projects of 50-100 MW with SU as off-taker, the developer finds it difficult to identify lenders who can fund on project finance basis



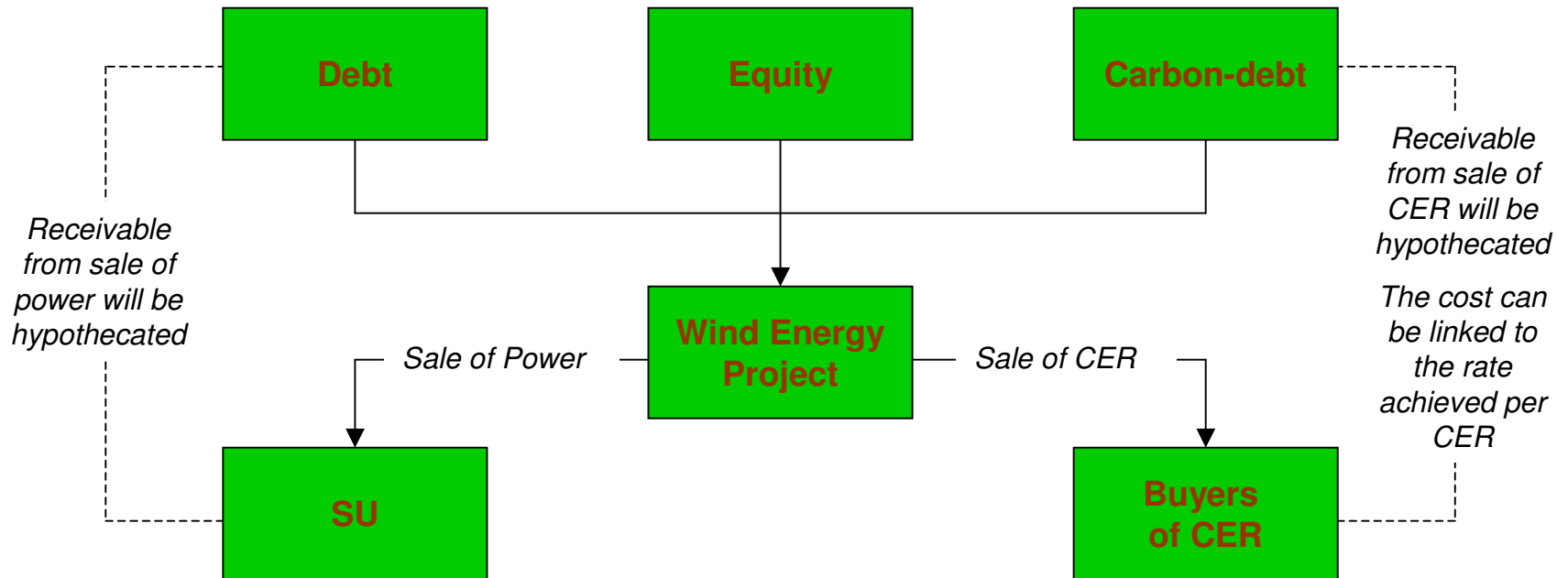
Wind Energy Financing – *Off-taker Issues*

- Although the process of reforming SUs has already begun, lot needs to be done
 - Receiving reward for default – At present if SUs default in their commitment under the PPA, the project developer is required to find a third party buyer and need to have a Wheeling & Banking (W&B) Agreement and **pay the W&B Charges**. This certainly leads a double reduction in the cash flow
 - W&B Charges
 - Lower realisation due to distress sale of power
 - In case of a default by the SU there should be no W&B Charges
- Tariff declaration for the life of the project with no uncertainty
- Implementation of minimum procurement from Renewable Energy sources should apply to all states and in case any state is unable to meet the directive, should contribute through a central mechanism, for procuring the energy from Renewable Sources from states where the same can be harnessed
- A time bound dispute resolution mechanism should be enforced if there is a difference/dispute between the SU & the SERC



Wind Energy Financing – *Initiative*

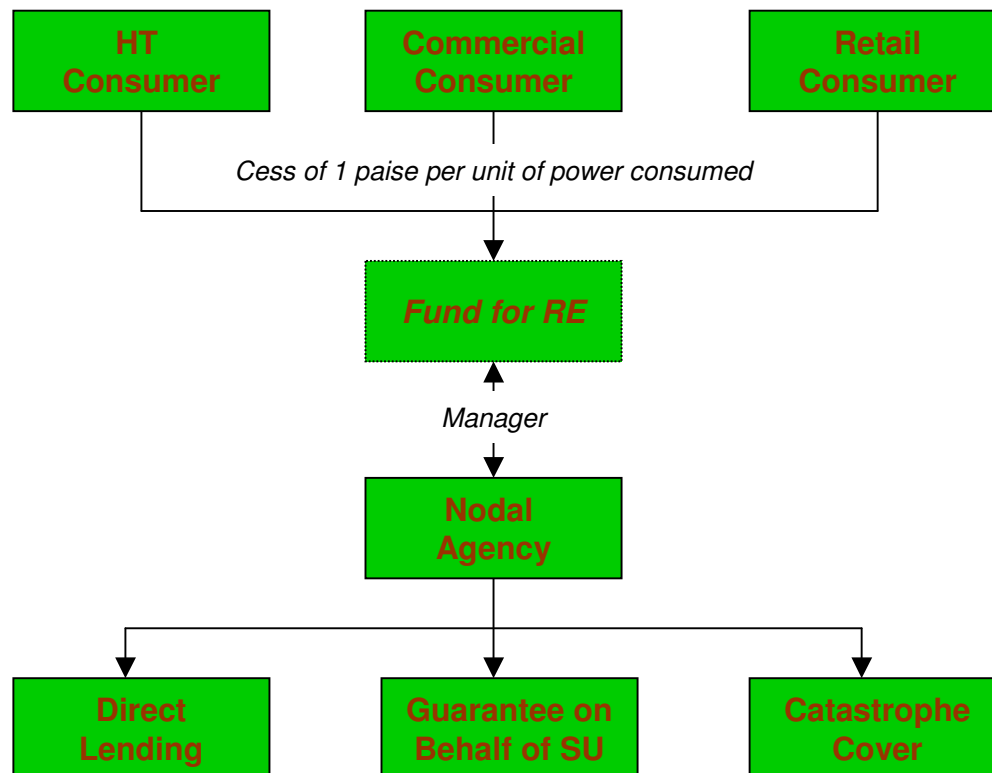
- Carbon Reduction Financing





Wind Energy Financing – *Initiative*

- Green Energy Cess – Like the cess used by National Highway Authority of India for highways infrastructure project, a nominal cess can be levied for e.g. 1 paise per unit of power consumed, which can be utilised by a nodal agency nominated by MNES





Wind Energy Financing – *Initiative*

- The Govt. of India has accorded 80% accelerated depreciation for Renewable Energy Devices
- In case of large Wind Power Project set up in a separate company which has no other business, loses the benefit of accelerated depreciation
- As the investment is made and in the event the entity has other business income it could have set-off the accelerated depreciation against its other business income
- If the Project Company can be issued a “**tradable depreciation certificate**” and the realisation of money thus received can be treated as business income u/s 80IA of Indian Income Tax Act, large Independent Renewable Power Projects can be fructified
- Alternatively, if the asset is created in a separate company, then the holding company of such assessee should be entitled for the accelerated depreciation under Income Tax



Wind Energy Financing – *Initiative*

- At a meeting of the National Credit Council held in July 1961, it was emphasized that commercial banks should increase their involvement for financing of priority sector
- The description of the priority sector was later finalized in 1972 on the basis of the report submitted by the informal study group on statistics relating to advance to the priority sector constituted by the Reserve Bank of India (RBI) in May 1971
- Although initially there were no specific targets fixed in respect of priority sector lending, in November 1974 the banks were advised to raise the share of these sectors in their aggregate advance to the level of 33 1/3rd % by March 1979
- Subsequently at a meeting of the Union Finance Minister with the Chief Executive Officers of Public Sector Banks held in March 1980, it was agreed that banks should aim at raising the proportion of their advances to priority sectors to 40% by March 1985



Wind Energy Financing – *Initiative*

- At present the priority sector broadly comprises the following
 - Agriculture
 - Small Scale industries
 - Other activities / borrowers (such as small business, retail trade, small transport operators, professional and self employed persons, housing, education loans, micro-credit etc.)

Source: Reserve Bank of India website

- With the robust growth happening in the Indian economy and poised for a 7% to 8% GDP growth, an extremely important factor for sustaining these growth is to ensure a matching steady growth of the power sector.
- Financing at competitive rate is imperative for the growth of any sector
- We believe that if Priority Sector Status in terms of lending by Schedule Commercial Banks is accorded to Wind Energy Projects in India, it will increase the availability of credit and will also increase larger participation by commercial banks to the sector

THANK YOU FOR YOUR TIME

