#### RE Law Training Workshop



# Progress of the Implementation Regulations for China Renewable Energy Law

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renewable energy & energy efficiency partnership



## Major aspects to be identified by the implementation regulation

- Establishing national RE general targets and plan
- 2. Grid connection priorities
- 3. Classifying tariffs for Renewable Power
- 4. Sharing cost at national level
- 5. Renewable energy special fund
- 6. Policy on favorable credit and favorable tax treatment





#### Tasks for regulations' formulation

- Make clarification for hydro power how to be applicable for the RE Law
- Technology criterions for renewable energy resource investigation
- 3. National General Targets
  - The related departments of the State Council with the local people's government of province, municipality and the municipality directly under the Central Government develop the local renewable energy development middle and long-term target
- 4. Develop the National RE Plan
  - The Energy Authority of the local people's government of province, municipality and the municipality directly under the Central Government is responsible for the local plan of the development and utilization of renewable energy
- 5. Guided Catalog for the Renewable Energy Industry Development





### Tasks for regulations' formulation(2)

- Technology standards on renewable energy power grid connection and other national standards on renewable energy technology and product which need uniform requirements in the national level
- Economic technology policies and technical criteria on 7. integrating building with the solar system
- Concrete methods for providing financial supports to the 8. related renewable energy projects in rural regions
- Grid-connected electricity prices 9.
- Concrete method for the national cost sharing to the grid 10. connecting electricity payments for the renewable energy power generating projects
- System of the Renewable Energy Development Special 11. Fund
- Study and establish the concrete methods on interest 12. subsidy from finance and favorable revenue for renewable **energy** 2006-9-15





#### Regulations Progress

#### Issued so far

- Regulation and Management Measure of RE power (Jan. 2006 by NDRC)
- Regulation on Renewable Power Pricing and Cost Sharing (Jan. 2006 by NDRC)
- Guided Catalog of RE industry (Jan. 2006 by NDRC)
- Some national standards (Standard for solar building, Geothermal heat pump by Ministry of Construction, Standard for Solar PV power and wind turbines etc by Standardization Administration of China.)
- Fund earmarked for RE (May 2006, by Ministry of Finance)
- RE surcharge (July 2006, NDRC)





#### Regulations Progress

#### To be issued

- National Middle and Long-term Plan for Renewable Energy Development
- 11th-five-year Renewable Energy Development Plan
- Solar Building Economic Policy etc.





#### Regulations Progress

- Under draft
  - Other national standards to be improved (Standardization Administration of China, Ministry of Construction)
  - Resource survey
  - Management regulations on various RE technologies
  - Financing policies (tax, loan etc)





## 1) Regulation and Management Measure of RE Power Generation

- Overcome the barrier of grid-connection for renewable power
  - Utilities must provide the service for renewable power gridconnection
- Overcome the barrier of renewable power generators selling RE power and price
  - Utilities must purchase RE power with the tariff of Government Fixed Price
- Overcome the barrier of grid-extension issues
  - Cost for grid extension for RE power generation is included in the scope of nationwide cost sharing
- Quota system on generators (regulation ongoing)
- Regulated that hydropower is included



## 2) Regulation on Renewable Power Pricing and Costing Sharing (a)

- For Renewable power's pricing
  - Define the principle for renewable power pricing
  - The IRR of renewable power project should be more than the average IRR of conventional energy power project
  - Government fix price and Government guiding price (tender price)
  - prices for various renewable power technologies



## 2) Regulation on Renewable Power Pricing and Costing Sharing (b)

- Price for Wind Power: tender price
  - Implementing Government Guiding Price
    - For large wind power projects, tender power pricing is effective
    - How to handle the price issue of small wind power projects:still unclear
  - Some issues: tariff level is not a fix level for all project nationwide
    - Increase the risk for project development
    - Increase the difficulty for financing, especially for small scale project developer
    - Rising the cost on personnel and capital in preparation stage, as a result increase the cost of the whole project
    - Low price level restricts the development of manufacturing

# 2) Regulation on RenewablePowerPricing and Costing Sharing (c)



- Price for biomass power: feed-in-tariff
  - Coal fire plant plus 0.25Yuan/kWh, the range of biomass for power will be about 0.50-0.72 RMB/kWh
  - In the first 15 years, adopt the subsidy Price
  - After first 15 years, RE power subsidy price will be cancelled
  - Bi-fuel and multi-fuel biomass power projects
- Effects
  - Provide a long-term PPA and ensure the fixed price
  - Beneficial for financial and economic assessment for projects
- Problem: Whether current price for biomass power is reasonable for all technologies of biomass power
  - all technologies have same price in a certain province
    - MSW and landfill gas: with relative large benefit
    - Strew, stalk, wood residue for power: uncertain profit rate, (depend on cost of fuel)





- Price of solar, geothermal and ocean power
  - Government approval price
  - Determine power price levels according to individual project
  - Price determination principle: cost plus rational benefit
  - Payback rate should be similar with that of wind/biomass power projects
  - Most are demo projects



## 2) Regulation on Renewable Power Pricing and Costing Sharing (e)

- Cost Sharing for Renewable Energy Power
- All the end-users should share the extra cost, include:
  - Incremental cost of grid-connected RE power
  - O&M cost of off-gird renewable power (government invested)
  - Cost for grid extension for RE power generation
- Power Grid Corporations will play a key role in the system





## 3) Cost Sharing--- Renewable Power Surcharge

- Implementation for Cost Sharing
  - Surcharge: 0.001 Yuan/kWh (0.4~0.6 Yuan/kWh for residential electricity) to cover the aforementioned costs
  - Grid corporations collect Renewable Power surcharge
  - Tax free for surcharge
- Systems for record, report, monitor (regulation ongoing)





## 4) Renewable Energy Development Fund

- In 31<sup>st</sup> of May, Ministry of Finance issued special documentation, supporting following activities
  - R & D, standard formulation, project demonstration
  - RE development in rural and pastoral areas
  - Isolated RE power projects in remote areas
  - Resource assessment, information system
  - Enhance local manufacturing capacity
- 2Key areas: biofuel, wind, solar energy





### Thanks for attention

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