

GWREF

China Policy Framework to Support Renewable Energy Development

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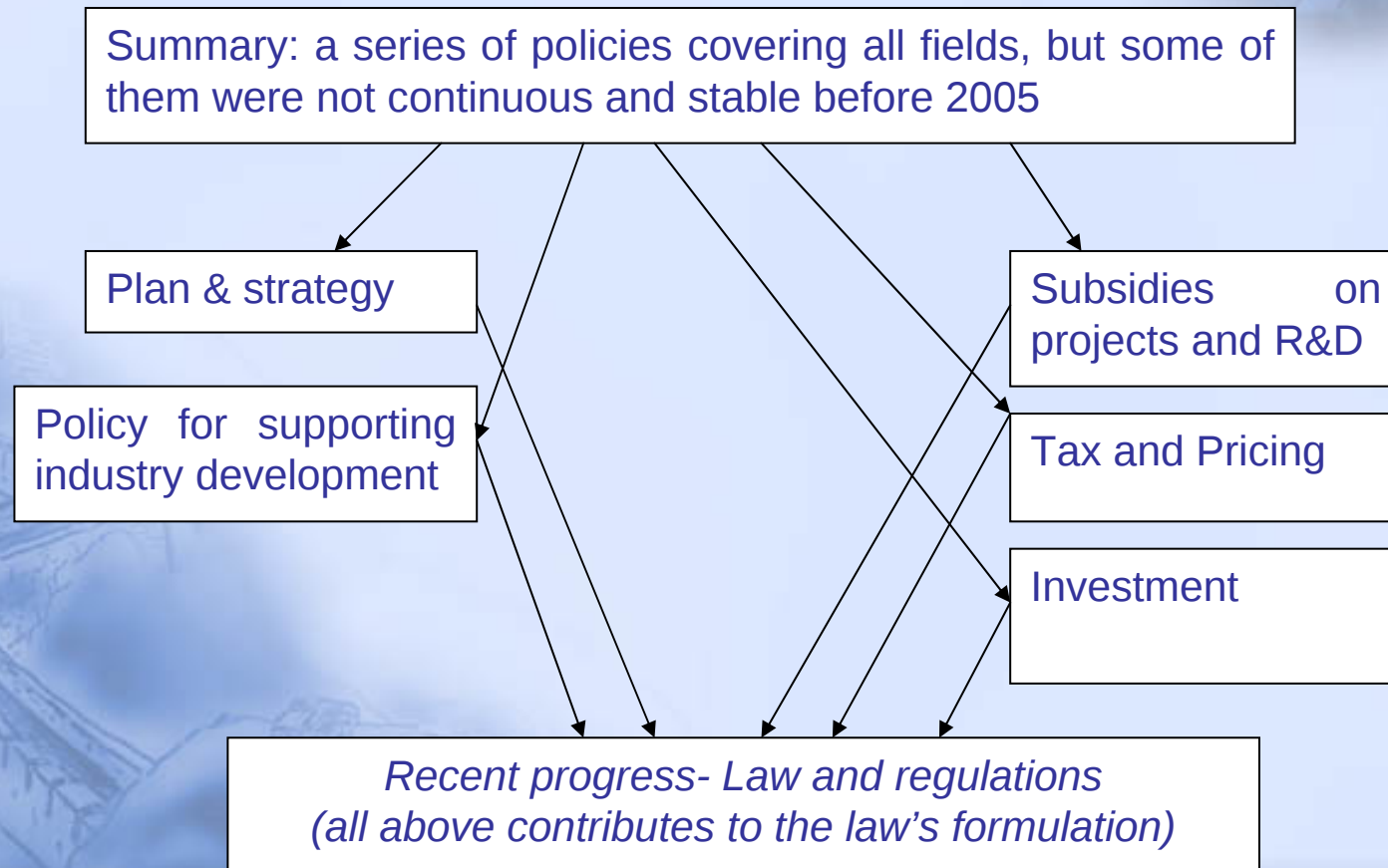
Content

- Previous Policy framework
- China Renewable Energy Law
- Implementation regulations under the law



1. Policy Framework for Promoting Renewable Energy Development in China

Previous Policy Framework





2. China Renewable Energy Law

Milestones

- Listed in national legislation plan in June 2003
- Issued by Chinese People's Congress and the President of China on Feb. 28, 2005
- Became effective on Jan. 1, 2006

Basic principles

- Integration of government's responsibilities and entire citizens' obligation
- Integration of governmental promotion and market guidance
- Integration of current demand and long-term development
- Integration of domestic practice and international experience

Systems Established in the RE Law

- Establishing national targets
- Grid connection priorities
- Classifying tariffs for Renewable Power
- Sharing cost at national level
- Renewable energy special fund
- Policy on favorable credit and favorable tax treatment



3. Implementation Regulations Under RE Law

12 Major Tasks for regulations' formulation (a)

1. National General Targets
2. National RE Plan
3. Grid-connection pricing mechanism
4. Cost-sharing measures
5. Concrete economic incentives
6. Financing backup measures in rural regions

12 Major Tasks for regulations' formulation (b)

7. Renewable Energy Development Special Fund
8. Guided Catalog for the Renewable Energy Industry Development
9. Technical criterions— Solar integrating building
10. Technology criterions --RE resource investigation and assessment
11. Technology criterions --RE grid connection and other national standards
12. Make clarification for hydro power how to be applicable for the RE Law

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 (e.g. National Biomass Conference)
 - 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 grid-connection
- 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 Renewable Power Pricing 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
- all technologies have same price in a certain province
 - MSW and landfill gas: with relative large benefit
 - Stew, stalk, wood residue for power: uncertain profit rate, (depend on cost of fuel)

2. Regulation on Renewable Power Pricing and Costing Sharing (d)

- 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-grid 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 31st 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
- Key areas: biofuel, wind, solar energy

Thanks for attention

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