The Rural Energy Policy in China

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1. The position of the rural energy in national energy policy and its development process

2. Rural energy policy in China and its effect to the rural energy development

3. Some special factors impacting the formulation of China rural energy policy

4. Conclusions and further thinking
1. The position of the rural energy in national energy policy and its development process

1.1 The position of the rural energy in China

1.2 The development process of rural energy policy

1.3 The measures for carrying out the rural energy policy
Figure.1. The History of development process of rural energy policy

1950-70’s
Indicated “Solving the peasants’ energy shortage by developing local small coal mines on the spot”;
Call for “To solve the rural energy shortage problem by biogas and solar energy”;
Emphasized “To actively develop the forest resource”
Offered a privilege policy of electric power price for agriculture

Severe shortage of rural energy

80’s
issued the policy ---- “suit measures to local conditions, multiple use of the resources, requiring for efficiency”
with the state energy policy ----
“lay equal stress on development and conservation, lay energy conservation on priority position in the near future”
* Economy development
* Development of the Township enterprises
* Open-up the energy market.
* Commercial energy in production consumption
* Drive that in residential consumption

In 1996, the rural energy construction was arranged as an important part for the realization of agricultural modernization and rural sustainable economic development.
In the Ninth Five Year Plan, the government pointed out:
“quicken the process of the rural energy commercialization, and spread the firewood and coal saving stoves and briquetting, to form the industry and service system, suit measures to local conditions to develop the mini hydropower stations, wind power, solar energy, geothermal and biomass energy”
* Riding Wind Plan
* Bright Engineering
* Straw gasification and other demonstrated engineering projects
* Reform the rural electric grid

In 2000,
The special term for the energy development in the Tenth Five Year Plan pointed out:
“considering the natural resource conditions, go all out to develop the small hydropower stations, wind and solar energy generation, for basically solving the problem of power supply to the remote and poverty no-power countryside”
* to build the synthetic rural energy construction, combining the rural energy with the economic development and ecological environment construction in every county
* “Good Ecological Environment and Rich Homeland Plan”

now
Figure 2. The sources of the commercial energy in rural areas

- Commercial Energy in Rural Area
  - Oil products
    - the petroleum and chemical companies
  - Electric power
    - State electric grid
    - Local small thermal power
    - Local small hydropower
  - Coal
    - State coal mines
    - Small coal mines
Figure 3. The Direct Reasons of Rural Energy Transition

- Agricultural Modernization Development
- Township Enterprises Development
- Increase of Energy Consumption for Production
- High Quality of Living Standard
- Transition of Energy Consumption
The main factors that accelerated rural energy commercialization,

As following:

Firstly, the environment impact

some projects as follows:

(1) Riding Wind Plan,
(2) Bright Engineering,
(3) Straw gasification and other demonstrated engineering projects.
(4) Synthetic rural energy construction for 100 counties

Secondly, the adjustment in related state energy policy ,

(1) as to rectify and shut down small coal mines,
(2) the government paid attention to natural gas and new energy development,

Thirdly, the state paid attention to the natural forest protection and ecological environment construction

furthermore, strengthened the reform of rural power grid and rural power administration system.
Figure 4. The structure of rural energy in 1995 and 2000
Figure 5. The funds for the rural energy construction

The principle:

“the builder can manage, own and get benefit”

The sources

- mainly from the rural residents and collectives
- Partly from the state government
2. Rural energy policy in China and its effect to the rural energy development

2.1 Comment on the practiced rural energy policy

2.1.1 Applications of biomass energy and biogas engineering

2.1.2 Development of small hydropower stations

2.1.3 Development of small coal mines

2.1.4 Development of wind, solar and other new energy

2.1.5 To extend the energy conservation technology
Policies in Mini Hydropower Station Construction:

"Self building, self managing and self using"
"the builders can manage, own and get their benefit"
"Self funded by the power sector"
"The small hydropower stations should have their supply areas"
"carry out the VAT 6% for small hydropower stations", etc.

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<tr>
<td>Irrigation and Drainage Area by electric Power (%)</td>
<td>55.9</td>
<td>57.3</td>
<td>65.3</td>
<td>66.7</td>
<td>66.8</td>
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<td>The number of small hydropower stations</td>
<td>55754</td>
<td>52387</td>
<td>40699</td>
<td>28558</td>
<td>29183</td>
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<tr>
<td>Capacity of small hydropower stations (MW)</td>
<td>3802</td>
<td>4288</td>
<td>5195</td>
<td>6928</td>
<td>10607</td>
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<tr>
<td>Electricity Power consumption In Rural Area (billion KWh)</td>
<td>50.89</td>
<td>84.45</td>
<td>165.57</td>
<td>242.13</td>
<td>260.98</td>
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Figure 6. **Factors Impacting the Formulation of China Rural Energy Policy**
3. Some special factors impacting the formulation of China rural energy policy

3.1 Impact of rural economic development

3.2 the economic and social impact of the urban-rural gap

3.3 Demands of the Ecological Environment
4. Conclusions and further thinking

Through the summary of China rural energy policy as above mentioned, it can be seen:

(1) **Policy includes not only the target, but also related investment** (financing, material and man-power support) organization, implementation, and supervision, it is a problem of the system. China rural energy policies have developed from the summon mode to the project mode, but it still has long way to go. At present, except the financing invested in the reform of the electric power grid in China, most projects are invested by the peasants. Even so, China rural energy policies still have rather strong influences;

(2) The structure of China rural energy is in a changing era obviously, the policy should fit with the change of situation;

(3) Further research is needed to do a deeper comment on every important policy.
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**Background**

At present, our research on rural energy policy is just start, to check up the history of the rural energy policy in China.

Along with the development of the market economy and the sufficient energy supply, it is inevitable to increase the rural energy in China and to work on the state energy development.
Recently, related departments and research units have studied and induced the rural energy policies, to consider together that the starting point of the policy should be ——

the rural energy construction must adapt with the development of market economy, to be adjusted, following the principle of sustainable development, to promote the sustainable use of natural resources, to guarantee the sustainable development of rural economy.
In the study, we have cognizance of that, the research on the transition of rural energy can not only analysis the influences of the rural energy policy.