On the Improvement of Bioenergy Law in China

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Outline

1. Overview of bioenergy in China
2. Existing bioenergy law and policy
3. Improvement of bioenergy legislation in China
1. Overview of bioenergy in China

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3. Improvement of bioenergy legislation in China
Energy security

Environmental protection

Rural development
Output of China’s bio-ethanol production

x $10^5$

- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009

bio-ethanol
• 11th five year plan
  ▶ 2 million tons of non-grain based bio-ethanol
  ▶ 0.2 million tons of bio-diesel
  ▶ 1 million tons of solid biofuel
  ▶ 13 million KWH

• 12th five year plan
  ▶ 3 million tons of bio-ethanol
  ▶ 10 million tons of bio-diesel

2010
  ▶ Failed to be achieved

2015
  ▶ Have been achieved
  ▶ 20 million tons of solid biofuel
  ▶ 55 million KWH
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Renewable energy law, 2005

- Article 2: “bioenergy except utilization of straw, firewood, excrement etc. through direct burning in low-efficiency stove is regulated by the law.”
- Article 16: “the state encourages clean and efficient exploitation of bioenergy and the development of energy plants. Also, the State encourages production and utilization of biological liquid fuel. Petroleum sales enterprises shall, in compliance with the regulations of energy administration department under the State Council or people’s governments at the provincial level, include biological liquid fuel that conforms to state standards in their fuel-selling system.”
- Article 31: liability provision
Administrative regulations and departmental rules

- Notice concerning Taxation Policy to Fuel Ethanol Licensed Producer, 2005;
- Rules for Financial Assistance on Bioenergy and Biochemistry Development, 2006;
- Interim Measure for Administering Renewable Energy Development Fund, 2006;
- Interim Measure for Subsidy to Biomass Base of Bioenergy and Biochemistry, 2007;
- Interim Measure for Administering Encouragement Fund for Non-grain Biofuel and Bioenergy, 2007;
- Interim Measure for Collection and Use of Renewable Energy Fund, 2011;
- Interim Measure for Feed-in Tariff to Renewable Power Generation, 2012;
Plans and other policies

- Long and Mid-term Planning for Renewable Energy, 2007;
- 11th Five-year Plan for Renewable Energy, 2006;
- 11th Five-year Plan for Bio-industry; 2007;
- Plan for Agricultural Bioenergy;
- 12th Five-year Plan for Renewable Energy, 2012 (forthcoming)

- Whitepaper on China’s Energy Situation and Policy;
- China’s National Program on Climate Change
- Policies for Products Generated from Comprehensive Utilization of Resources, 2008.
Main deficiencies of existing bioenergy law and policy

- overlook
- negative environmental impact
- social impact
- legally binding legislations
- enforcement
- effective provisions
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Comprehensive bioenergy law?

Legal hierarchy of new bioenergy legislation

- National Development and Reform Commission (NDRC) and relevant administration departments
- Joint departmental rules
- The third layer of national energy legal system
Guideline

Energy security

Sustainable development

Basic principles and criteria

Prudence principle

Diversification principle

Reference the relevant principle and criteria
Mechanisms

• Life-cycle assessment

Planning ↔ Site selection ↔ Production

Recycle ↔ Trade ↔ Transportation

Indicators

Strategic environmental assessment
Environmental assessment
GHG emissions
Conservation

Social development
Human / labor rights
...
Mechanisms

• Product standards and certification
  Improve existing bioenergy standards
  Label and certification

• Public participation
Thank you