
Policies that Promote Environmental Industry in China

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Introduction

In spite of its huge efforts in combating environmental pollution, China is still plagued with serious and increasingly challenging environmental issues

- largest producer of COD and SO₂ , biggest energy consumer
- 27.6% of global CO₂ emissions VS US 14.5% EU 9.6%

The government has to intensify efforts in environmental protection for future sustainable and clean development:

- controlling the growth of polluting industries
- increasing pollution abatement investment
- developing environmental industry

In this paper, we focus on policies that promote the environmental protection industries.

Introduction

- The existing literatures only analyze these policies for a descriptive purpose through categorizing them(Ren,2009; Zhao,2010)
- They don't provide much insights on policy effectiveness and don't attempt to reveal the linkage between policy approach and its effectiveness.
- Our study is a step to fill this gap , to look at the impacts of these policies from a comparative perspective

Chinese environmental policies: looking at the EU and moving globally

- Promoting environmental industries was started in early 1980s, and seriously explored by all levels of governments since 2010.
 - the Decision of the State Council on Accelerating the Development of Strategic Emerging Industries ,2010
 - the Twelfth Five-Year Plan,2011
 - 550 policies regarding energy conservation and environmental protection were published from 2010 to2013, occupying nearly half of the total 1195 ones Since 1978 (Zhang et al., 2014)
- Co-operating with Europe

Table 1 Policies Issued by MEP

Content	Number
Environmental laws	33
Regulations	180
Rules	489
Environmental economic policy	123
Environmental credit system policy	5
Environmental fiscal policy	58
Green taxation policy	7
Green credit policy	10
Polluting responsibility insurance policy	2
Green security policy	4
Green price policy	7
Environmental trade policy	4
Government green purchase policy	6
Eco-compensation policy	7
Emission trade policy	3
Others	9
Sum	825

Source: China's Ministry of Environmental Protection Official Website
www.mep.gov.cn

Table 2 Environment cooperation program between Europe and China: main initiatives

Channels of cooperation	Specific Programs
<p>1. The Environment Policy Dialogue, at ministerial level. Since 2003 meetings have been taking place regularly, alternating between Brussels and China.</p> <p>2. Bilateral cooperation mechanism on forests (BCM), between the Chinese State Forestry Administration and director level at the EC (since 2009);</p> <p>3. The Climate Change Partnership, developed by Directorate General of the EC on climate action.</p>	<p>1. EGP, The EU-China Environmental Governance Program(2011-2015) In partnership with the Chinese Ministry of Environmental Protection, EGP aims to contribute to the strengthening of environmental governance in China through enhanced administration, public access to information, public participation, access to justice and corporate responsibility in the environmental field (http://www.ecegp.com/index_en.asp)</p> <p>2. ESP, The EU-China Environmental Sustainability Program Launched in September 2012, the project aims to support China's efforts to meet the environmental and climate change targets defined in the 12th Five Year Development Plan. The specific objectives focus on the achievement of environmental sustainability through improved water quality and the prevention and control of heavy metal pollution and implementation of sustainable solid waste management.</p>

Source: http://ec.europa.eu/environment/international_issues/relations_china_en.htm

Research method

Method :

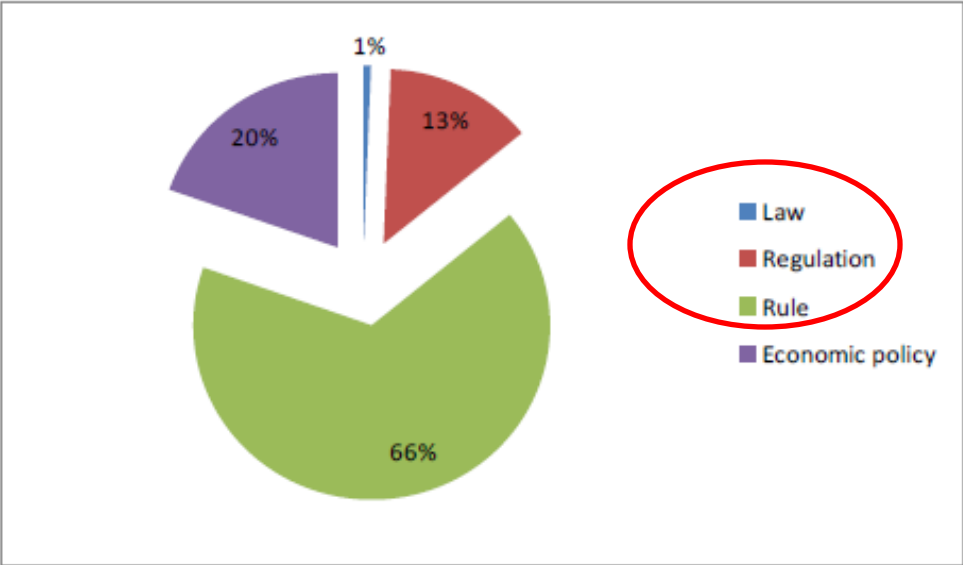
- text study
- searching the official website of Ministry of Environmental Protection
- developing a policy database
- 1979 ----- 2015
- 469 policies published to promote environmental protection industries
- China's central government

Environmental industry :

industries whose development clearly contribute to environmental protection

Policy analysis : an official typology

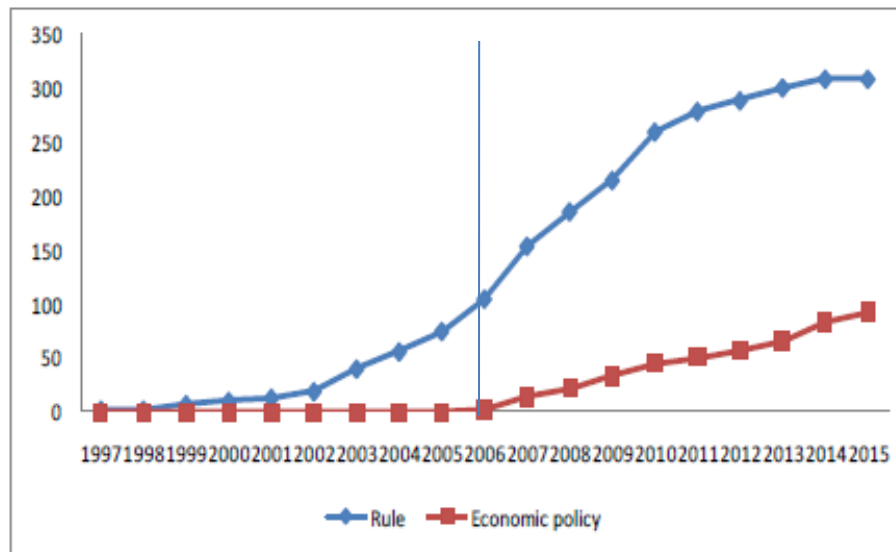
Fig. 1: Laws, Regulations, Rules and Economic Policies



Command&control policy

Source: MEP website www.mep.gov.cn

Fig.2: Number of Rules and Economic Policies Over Time

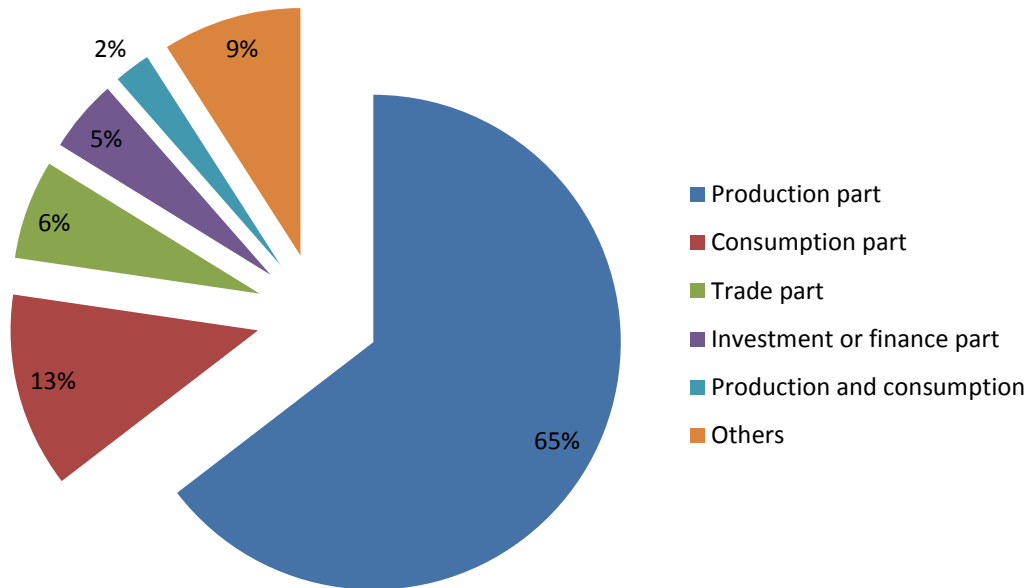


Source: Authors' Coding of Policies at MEP website.

Suggestion : economic policies should be expanded

Policy analysis: a “value chain perspective”

Fig. 3: A Value Chain Perspective of Environmental Industry Policies



- excessive supply

- photovoltaic industry: highly polluting production, but environmental consumption

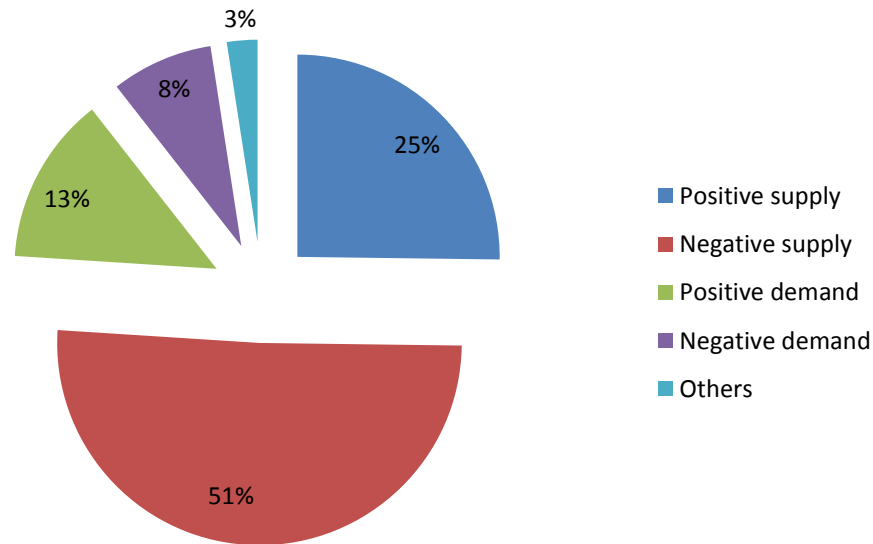
Source: Authors' Coding of Policies at MEP website

Policy analysis: an incentive approach

Positive incentives : companies would be rewarded for their efforts of developing environmental industries.(subsidies given to environmental industries , eco labels)

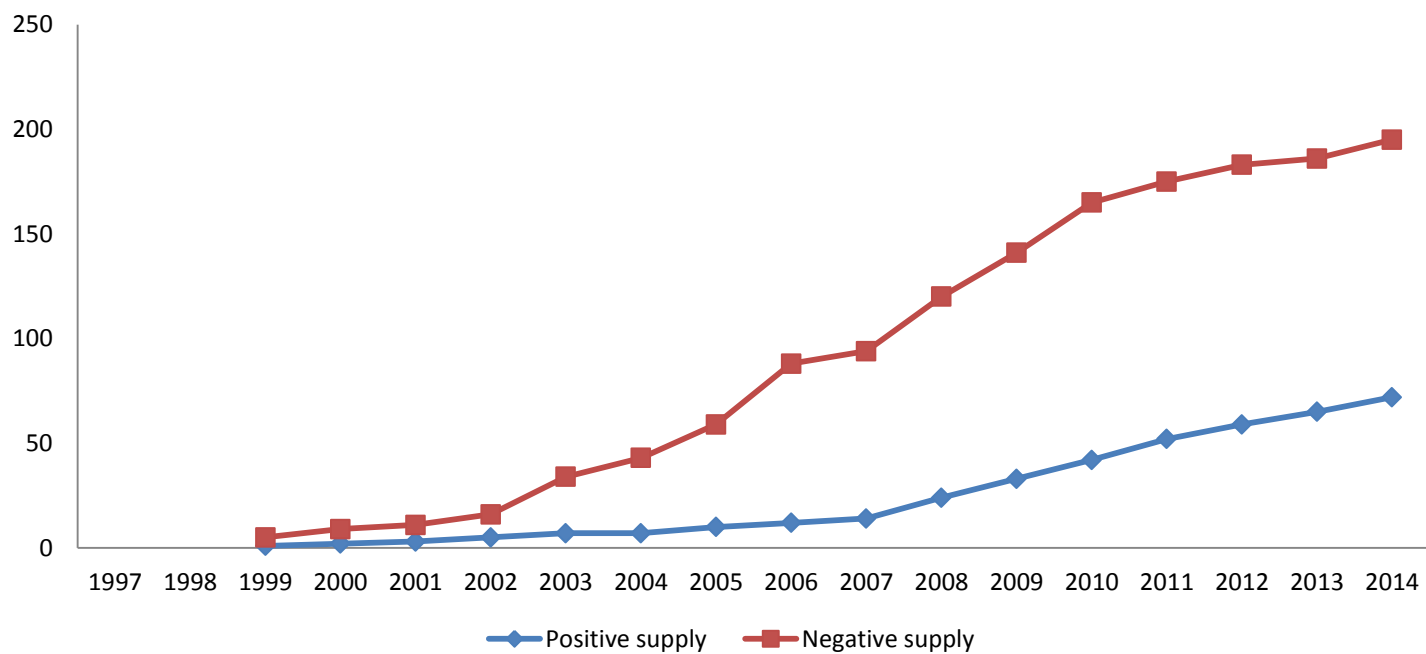
Negative incentives : companies would be penalized for hinging upon environmentally questionable industries. (Charge pollution fee)

Fig.4:Incentive Types of Environmental Industry Policies



Source: Authors' Coding of Policies at MEP website

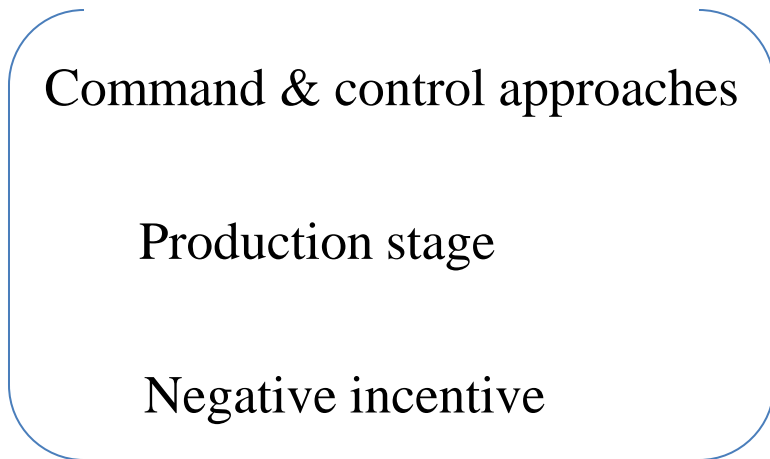
Fig.5:Growth of Negative and Positive Supply Policies



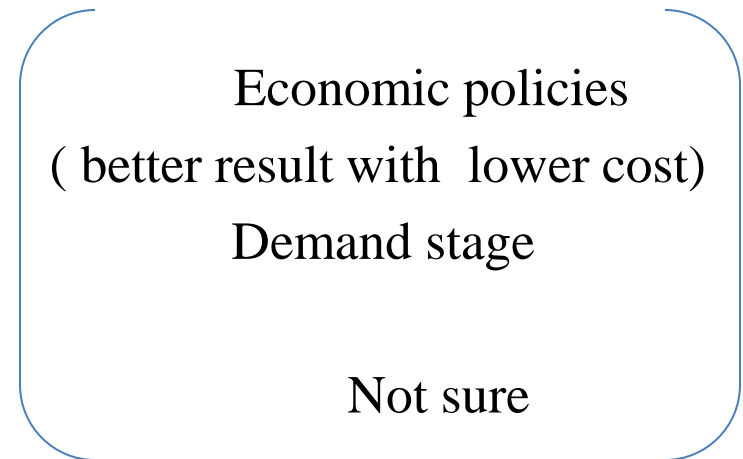
Source: Authors' Coding of Policies at MEP webst ie

Conclusion and suggestion

Current policies focus primarily on



Future suggestion



Challenges:

- Large number of policies
- Complexity of the policies.(A policy could target multiple stages along the value chain, and could use both positive and negative incentives)
- Few similar literature

Thank you!