Country Report Solar Thermal Policy and Market in Japan

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"Solar tragedy" - the case for solar hot water (SHW) market in Japan



Installed area of solar collector

source: Ministry of Economy Trade and Industry, Solar System Development Association



Key factors for Failure of "Solar tragedy"

- Oil price down in early 1980s
 - However, not responding for recent high price
- Weak competitiveness of SHW industries,
 - Industry structure; vertical separation
 - Poor product quality / energy services
 - "Push" sales scandal
- Disaster by badly designed energy policy
 - Lack of effective demand-pull policy
 - Lack of renewable heat policy framework
- Market structure
 - Competition to giant energy industries







Energy policy and market structure in Japan

- Japan's energy policy defines supply industries by promoting/regulating law
 - This structure lead lack of renewable heat policy framework, even heat policy
- Historically, each supply industry has long been enjoying its market monopoly
 - Since late 1990s, government has been introducing "de-regulation" and "competition"
 - So, each industry has try to "enclose" customers, and heat market was the most severe "battle field"
 - No intervention by the Government

Energy policy defines supply industries







Another example of policy disaster ----- PV market in Japan

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Tokyo Metropolitan Government's initiative raise new interest

New renewable energy policy (April 2006)

- Targeting 20% RES by 2020
- <u>Demand-pull</u> type policy
- Weighing on <u>renewable heat</u>

Carbon minus project (Dec. 2006)

- Targeting 25% by 2020
- 50 B-yen (300 M-euro) climate change fund

Solar Policy Committee (March 2007)

• Targeting 1GW solar within 10 years





Possible new policy package in Tokyo

Solar thermal

- Public purchasing
- Obligation for new buildings/housing
- Integration to carbon cap & trade scheme
- Green heat certificate
- Standardization
- Building/housing integration
- Integration into hot water system and heating system
- Registration of energy service provider

Solar PV

- Public purchasing
- Feed-in-tariff type incentive



Summary

- Solar thermal market in Japan was typically shown as "boom and burst"
- Such trend was resulted mainly because of badly designed policy and market structure
- Tokyo metropolitan government announced new initiatives for renewable and climate change, including solar thermal market renovation
- Solar thermal market in Japan might revival soon if Tokyo new policy package works

