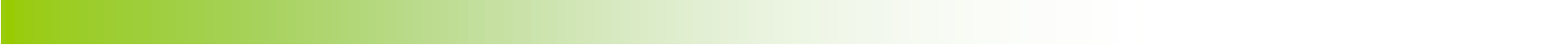


estec2009 (Munich, Germany 25-26 May)



Parallel session B1: Latest national reports from international markets
Japan: New policies to spark growth?

May 25, 2009

Tetsunari IIDA

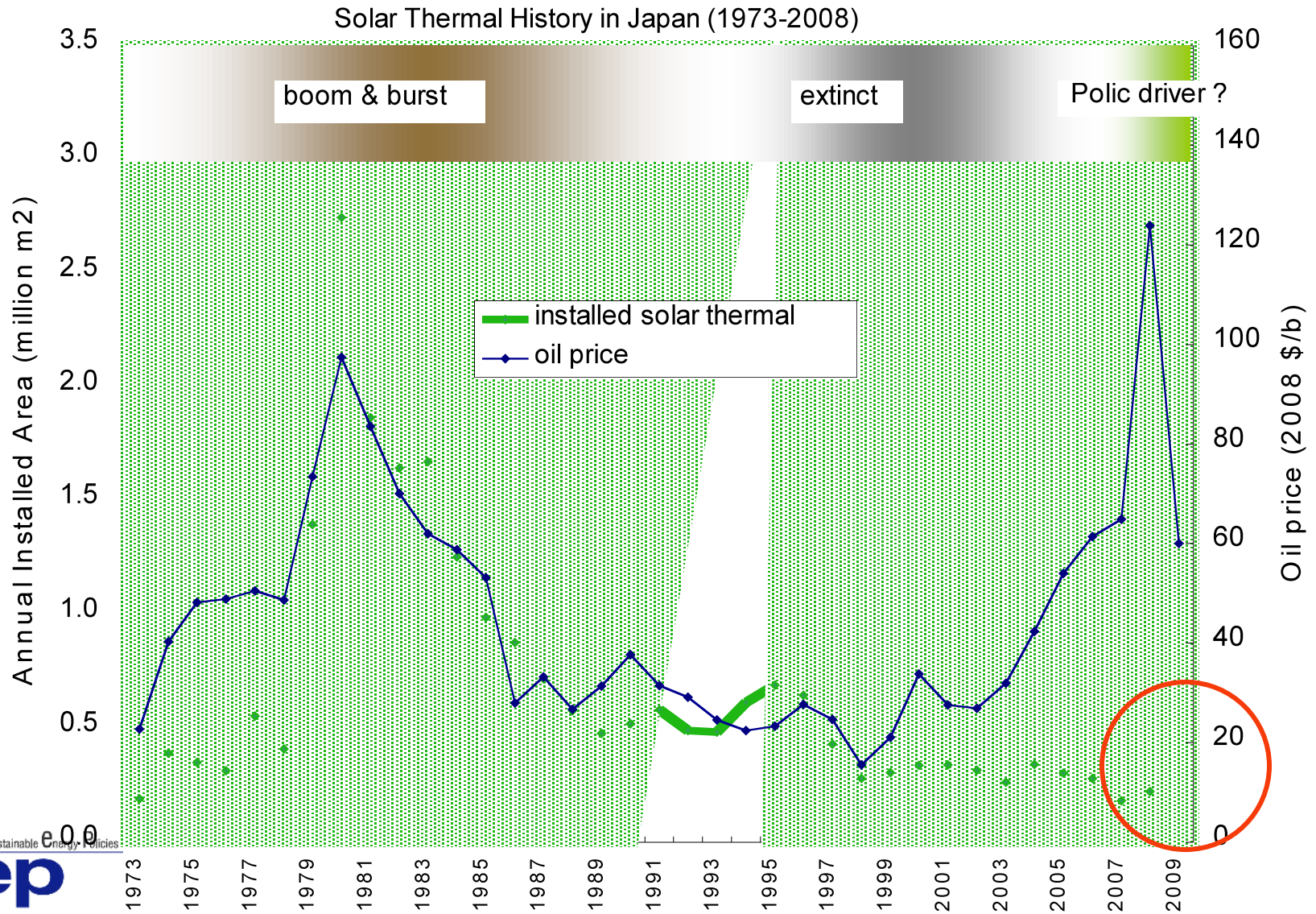
Institute for Sustainable Energy Policies (Tokyo, Japan)

tetsu@isep.or.jp

Back to 2007 : Concluding remark on June 20 2007

- 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 (TMG) 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

3 stage of solar hot water (SHW) market in Japan



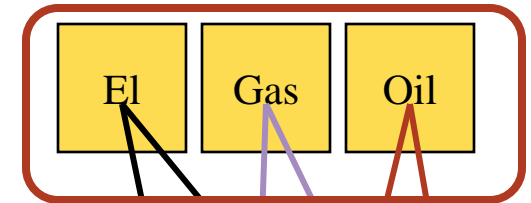
“Solar tragedy” through stage 1 and stage 2

QuickTime[®]
TIFF (LZW) compressed image
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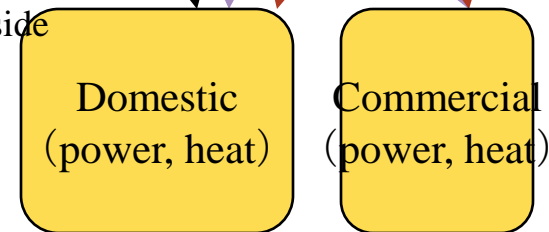
- Oil price down in early 1980s
 - However, not responding for recent high oil price
- Weak competitiveness of SHW industries,
 - Industry structure; vertical separation
 - Poor product quality / energy services
 - “Push” sales scandal
- Lack of “RE heat policy”
 - Lack of effective demand-pull policy
 - Lack of renewable heat policy framework
- Market structure
 - Competition with giant energy industries

Lack of RE head policy

Supply side



Demand side

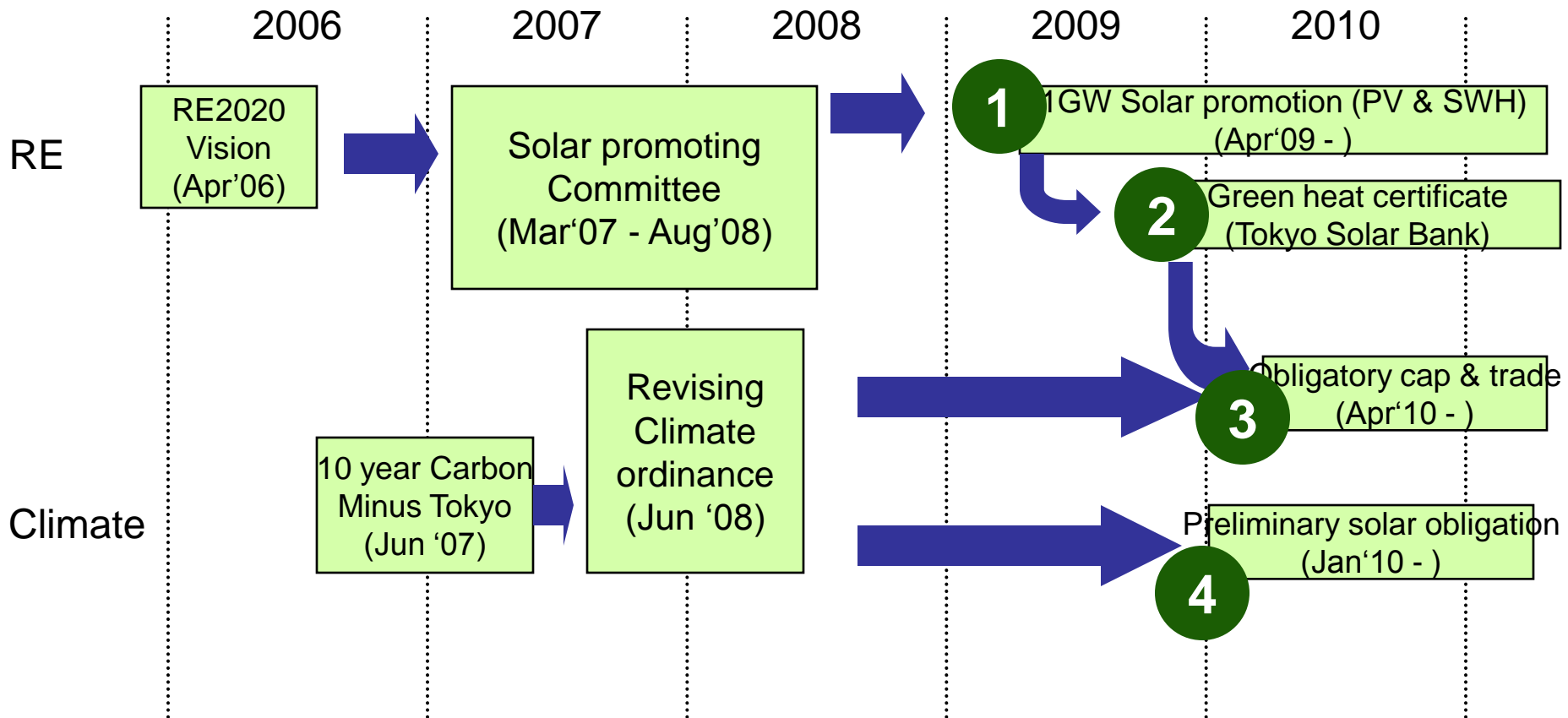


Stage 3 : the rise of policy driver to promote SHW

What happened since 2007;

1. Tokyo initiative in collaboration with ISEP support
 - 1GW solar program both for solar PV and solar thermal
 - Introducing “preliminary solar obligation” as new policy tools
 - Realizing “green heat certificate” as new policy tools
 - The first obligatory cap & trade create new green market
2. Other local governments stimulated by TMG
 - Solar thermal got attention in other local Govs
3. Increased interest because Kyoto protocol and G8 summit
 - Solar and “green heat certificate” regards as new tools

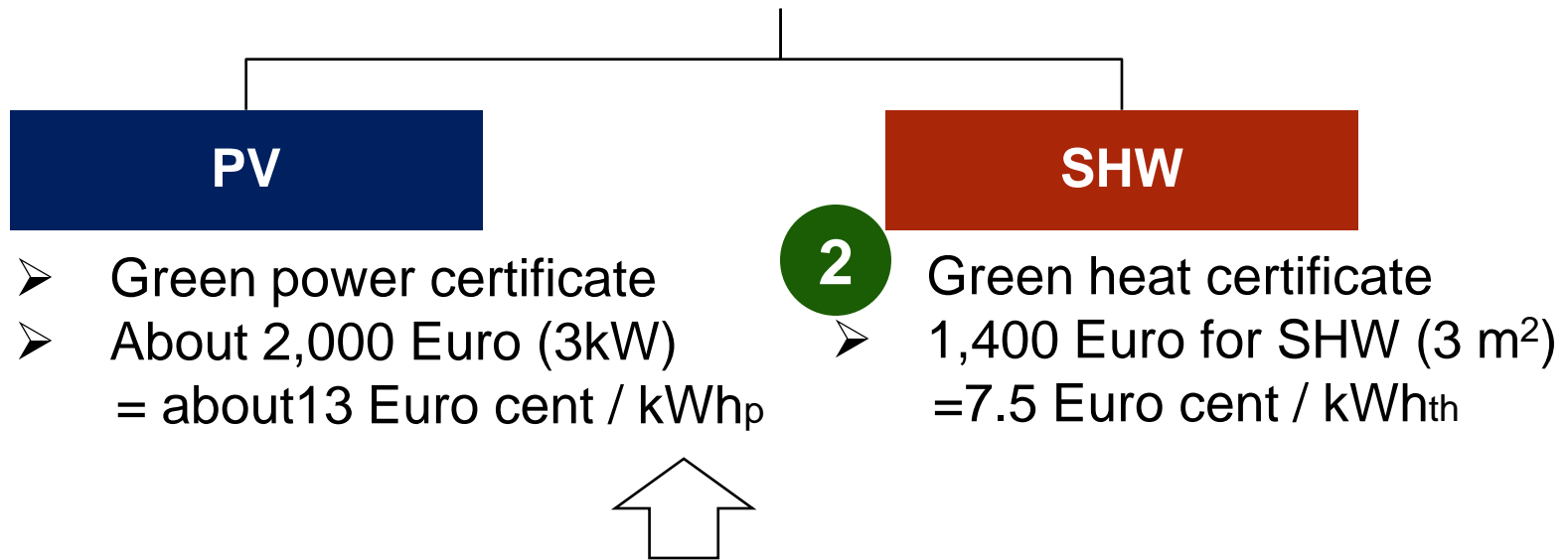
Tokyo initiative development



1 Apr.2009: new policy tools for solar promotion

1 GW Solar program both for PV and SHW

- Aiming 1GW installation in 2009 and 2010
- Upfront payment for 10 years certificate
- With development of “green heat certificate”



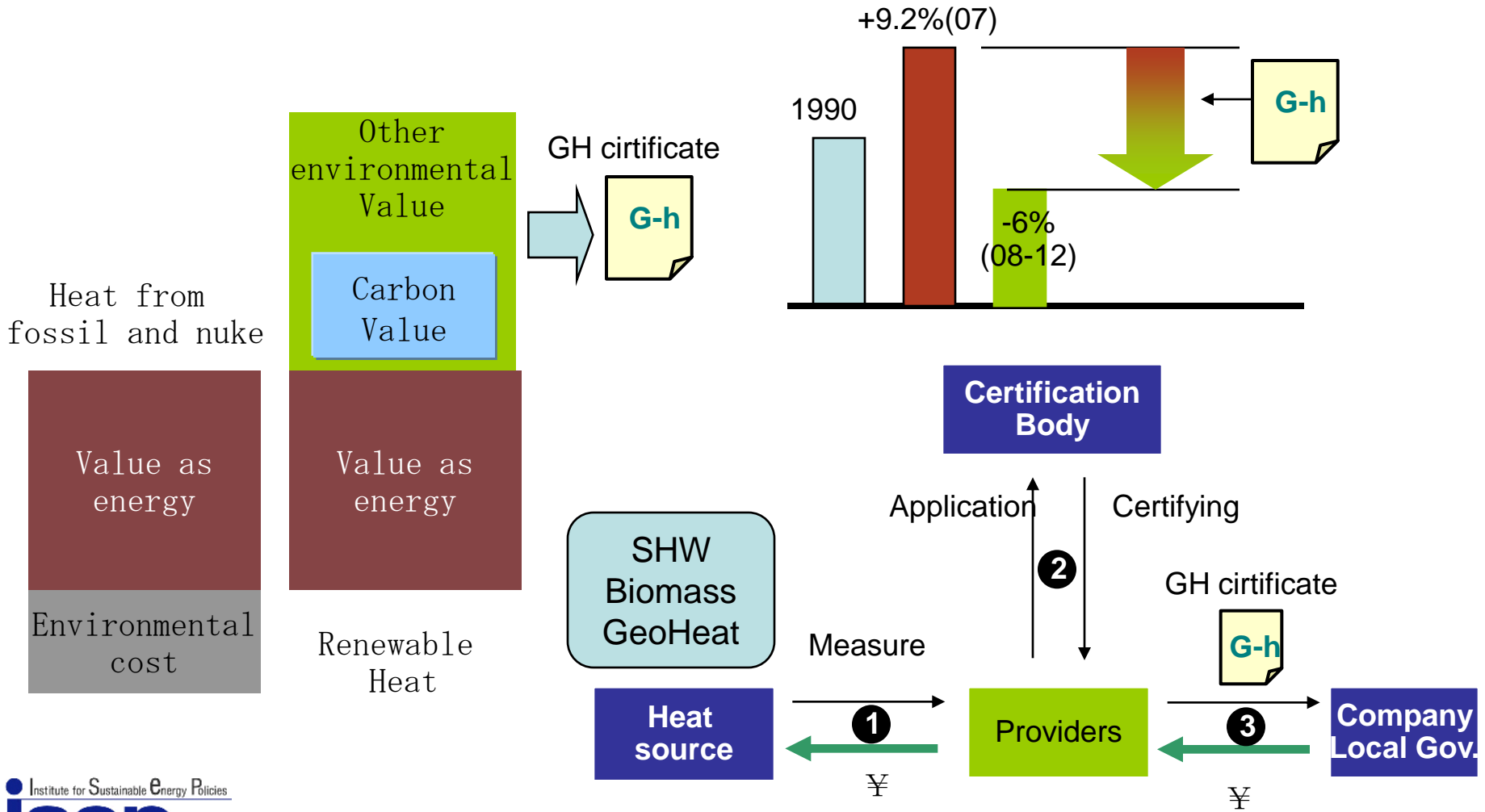
- Source of Revenue

- Tokyo Climate Change Fund (300 M euro)
- (in future) Local Environmental Tax

2

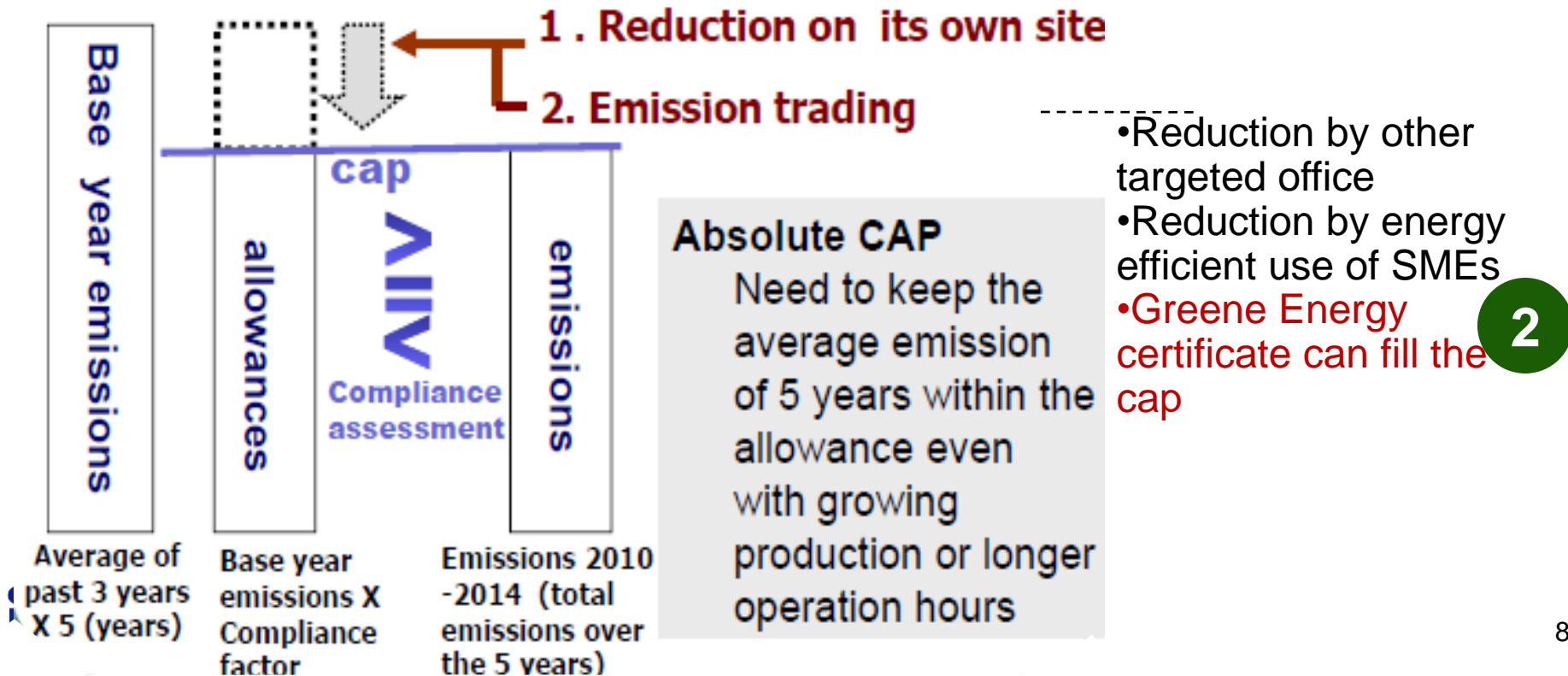
Other developments stimulated by Tokyo initiative(2)

- Green heat certificate would play a role to achieve Kyoto target



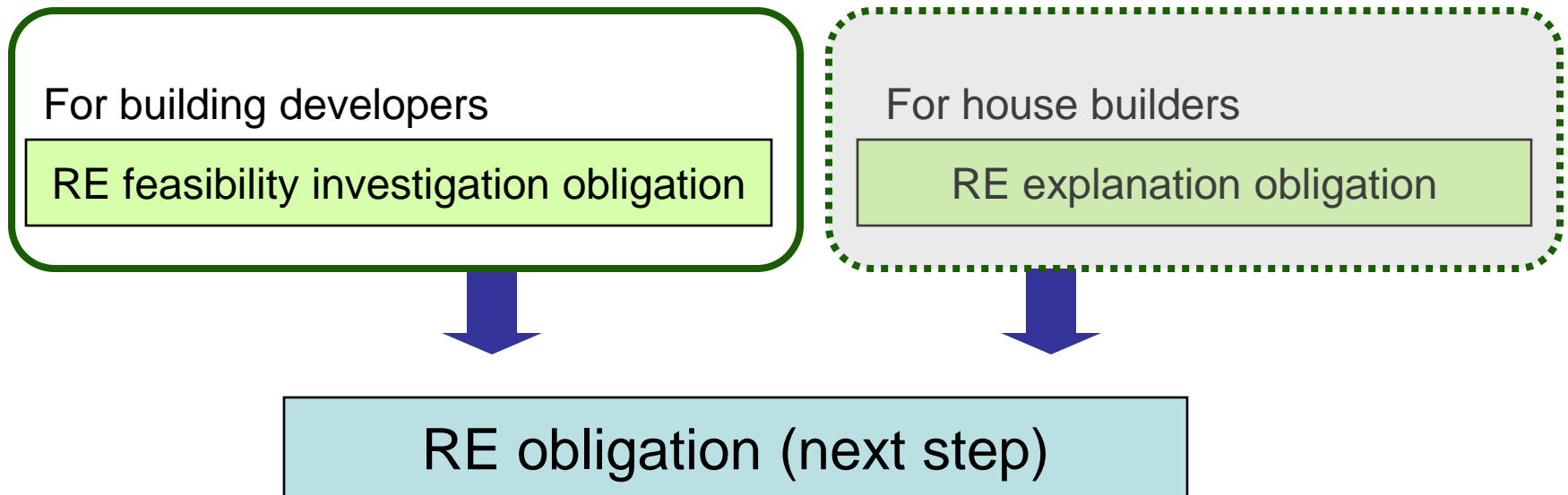
3 TMG's Cap & Trade scheme as a new market for green certificate

- Cap & Trade scheme (2010-)
 - Amount of emission * Reduction rate = amount of reduction obligation
 - Amount of emission are decided considered 3 years average emission
 - Reduction rate are decided within this fiscal year
~15% by 2014?, 25% by 2020?



4 Japan's first preliminary RE obligation for building

- TMG explicitly intend to introduce **solar-obligation-type policy**
- As a first step, TMG introduce “**investigation obligation**” instead of “**introduction obligation**” for building developers
- Another possibility is to introduce “**explanation obligation**”



Other developments stimulated by Tokyo initiative(1)

Local governments and others stimulated by TMG

- New and restarted policy support for SHW
 - ✓ Ministry of Environment, Kanawaga-pref., Yokohama-city, Fukuoka-city, Kumamoto-city ...
 - ✓ Most of them are initial subsidy
- “solar-obligation-type” policy (RE investigation obligation)
 - ✓ Yokohama-city
- Tokyo GAS Co.Ltd announced their SHW products integrated gas water boiler

Observation

- Tokyo initiative has really influential on other actors
- However, so far it is limited because “idea of new policy tool” seems to be difficult to transfer

Concluding remark

- Solar thermal market in Japan had been “boom and burst” along with oil price fluctuation, even become diminishing until recently, without any effective policy measures nor even political will
- Tokyo Metropolitan Government (TMG) has developed and implemented new policy measures to stimulate solar thermal market.
- Solar thermal market in Japan seems to be beginning of revival because of Tokyo initiative on new policy package