

Design and Evaluation of Technologies and Policies

Panel discussion : Innovative policy instruments and capacity-building for stakeholders

Session III: Promoting and upscaling industrial energy efficiency

Thematic dialogue: industrial energy efficiency and material substitution

TT:CLEAR

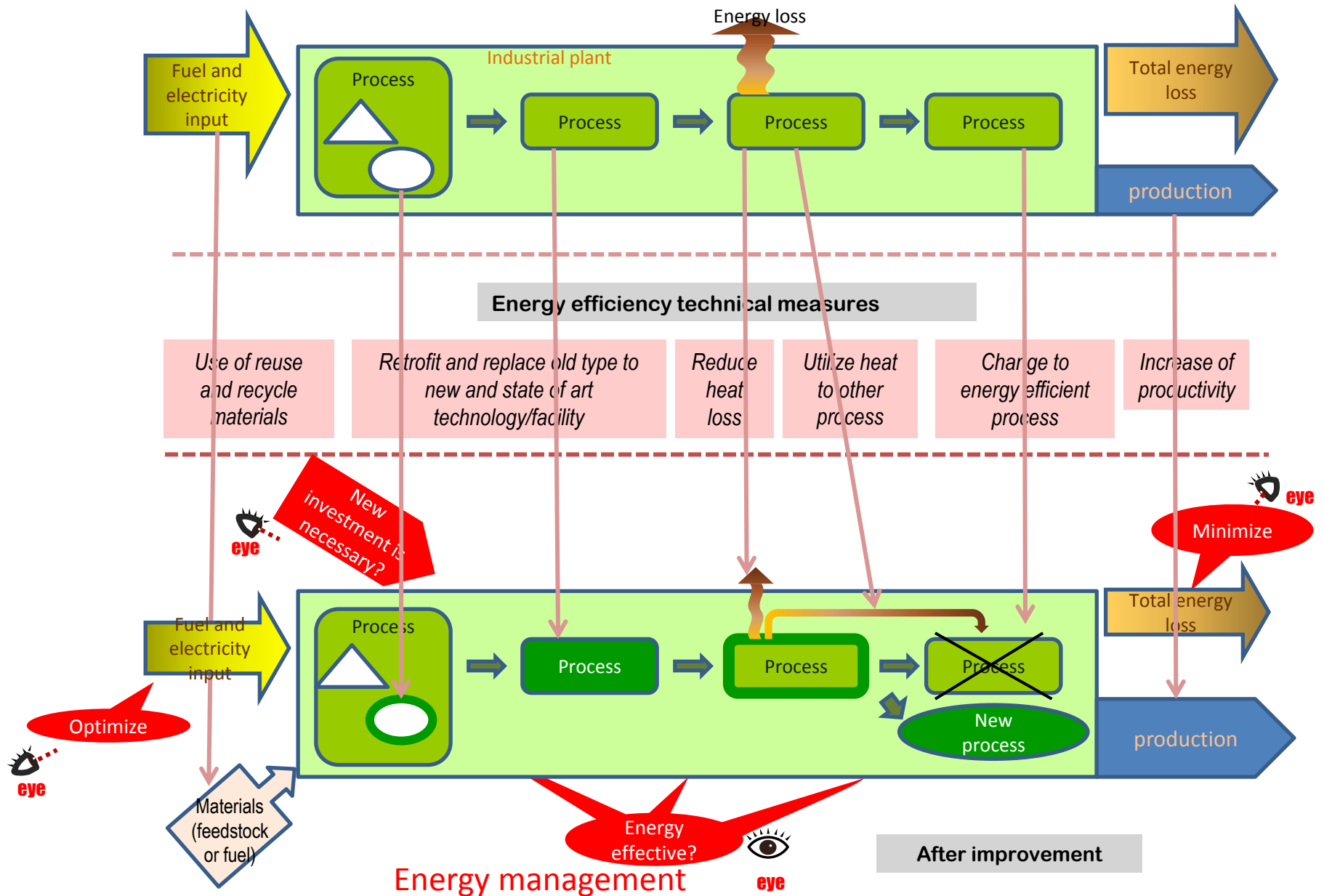
29 March 2017, Bonn, Germany

Kanako Tanaka

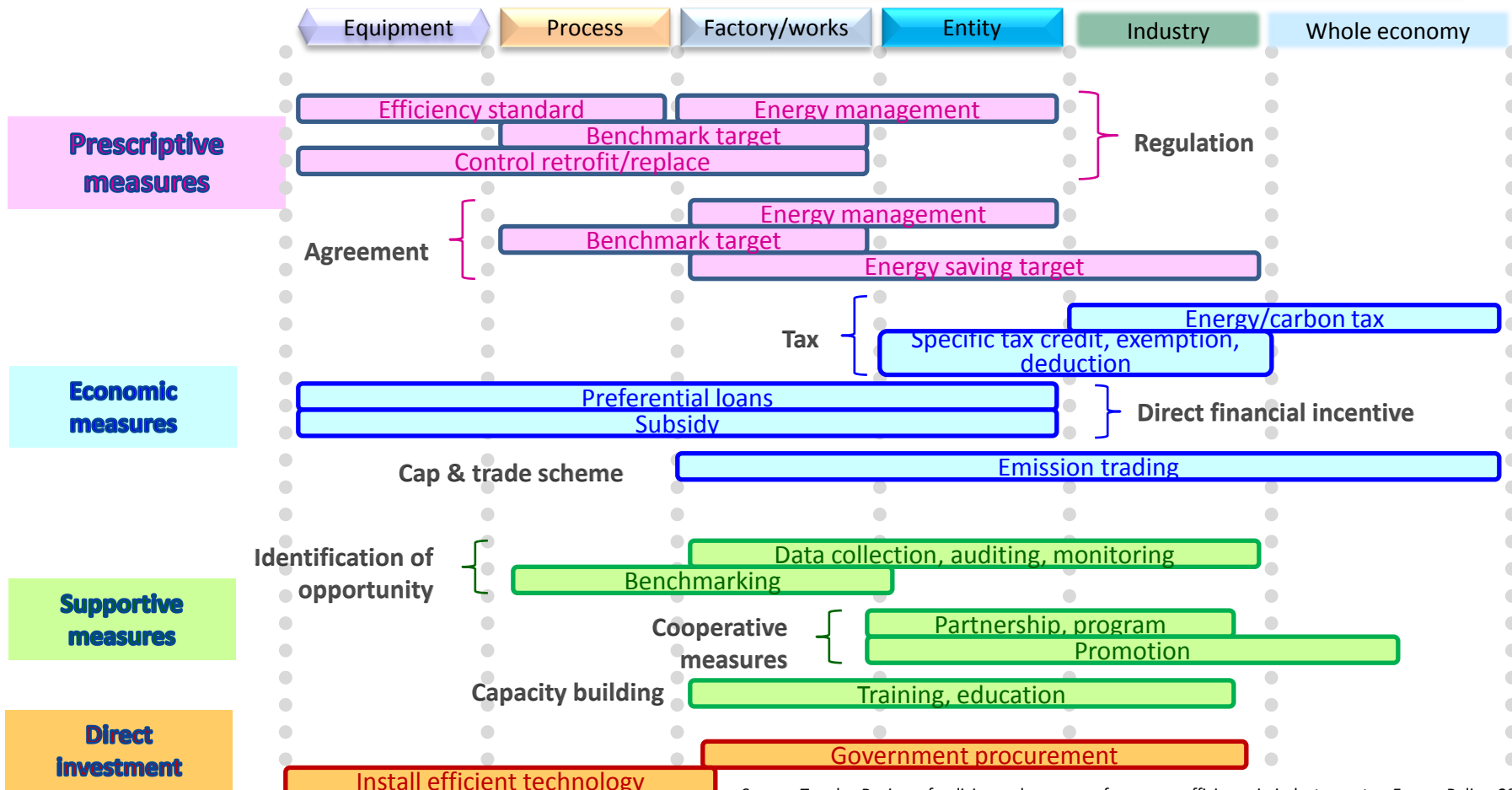
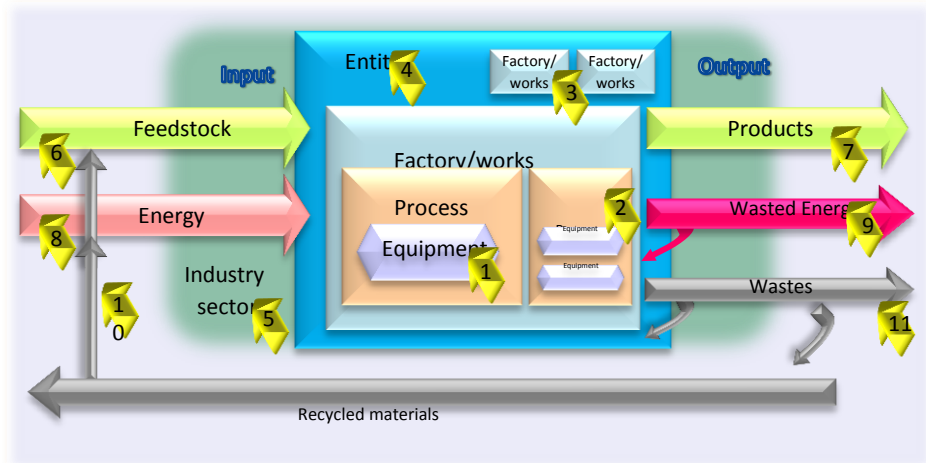
Center for Low Carbon Society Strategy (LCS)

Japan Science and Technology Agency (JST)

Technical Opportunities of Energy Efficiency



Energy Efficiency Policies and Measures for Industry

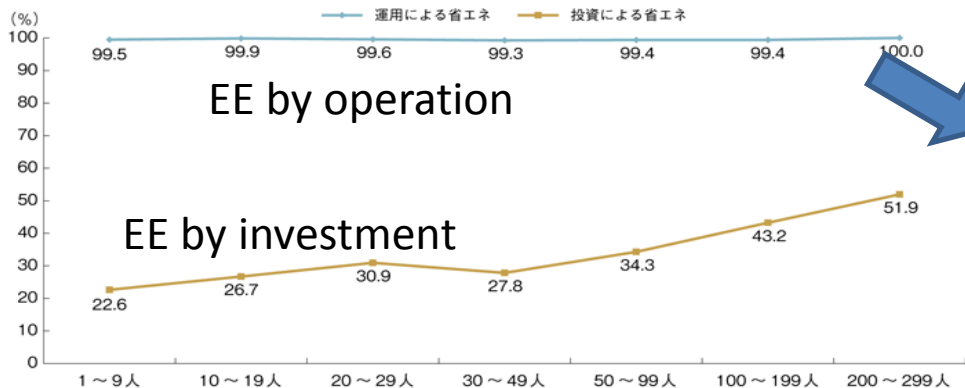


Overviews of Policy Characteristics

Criteria	Prescriptive policies			Economic policies		Supportive policies
	Regulations on equipment; process	Regulations on EM	Negotiated agreements	Energy taxes	Tax reductions; subsidies, loans, & R&D funds	Opportunity Identification; capacity building, public disclosure; cooperative measures
Potential to reduce energy use cost-efficiently						
Industry coverage	Medium	Medium	High	High	Medium	High
Motivational power	High	High	Medium	High	Medium	Low
Compliance flexibility	Low	High	High	High	Medium	High
Ease of policy development, execution and assessment						
Technical design convenience	Low	High	Low	High	Medium	High
Quantifiability of results	High	Medium	Medium	Low	High	Low
Ancillary societal effects						
Acceleration effects of long-term R&D	High	Medium	Medium	Medium	High	High



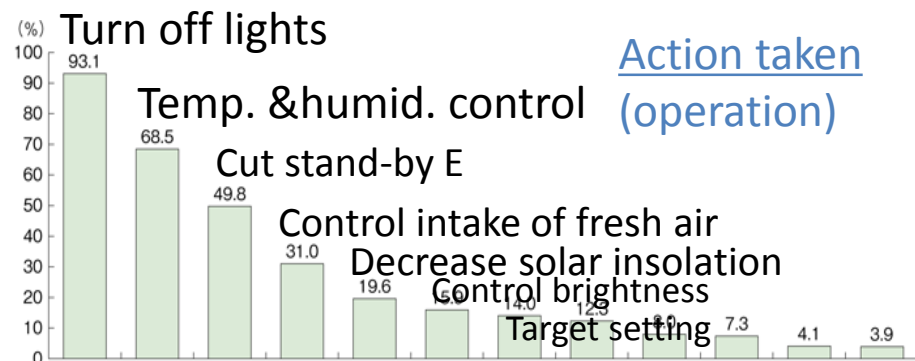
E.G EE at Small and Medium Enterprises



Energy saving through investment has not progressed esp. at the smaller employee size. ◆

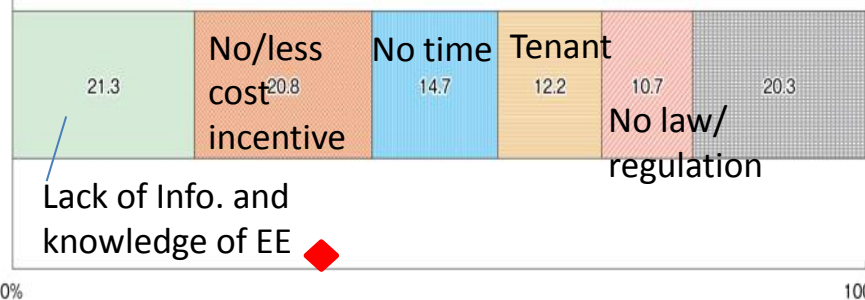
Action taken by government, e.g.:

- Subsidy for cost of EM invest. outsourcing ◆
- Subsidy for EE equipment/facility
- Promotion of ISO14001/14005

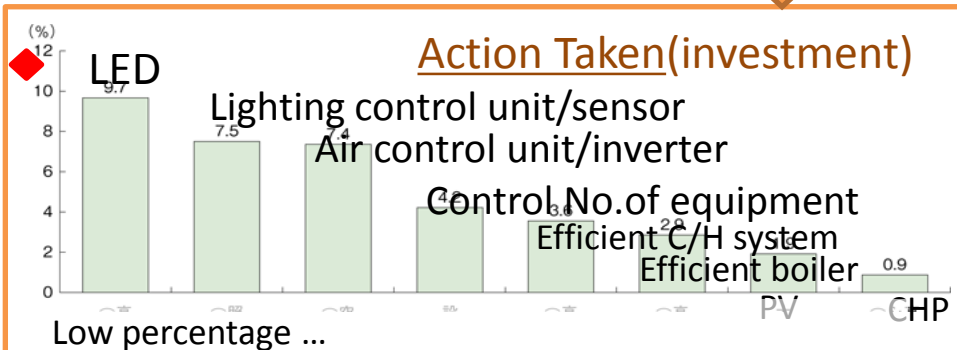


High percentage of efforts in case with awareness

Reason of no-action taken (operation base)

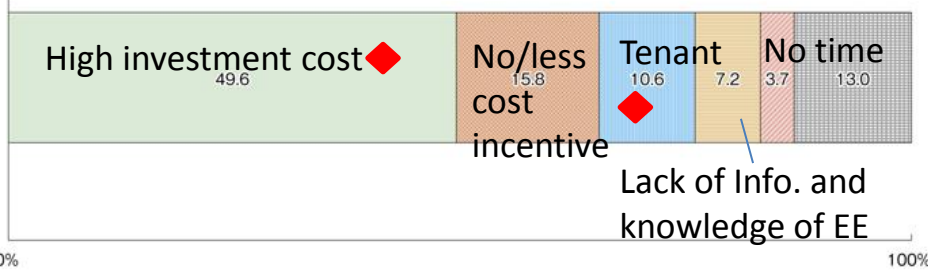


Gap!



Low percentage ...

Reason of no-action taken (investment)



Lack of Info. and knowledge of EE

- ◆ How to inform on EE tech. properly
- ◆ How to connect knowledge to action
- ◆ How to address "incentive-change"
- ◆ Principal/agent problem