Re-packaging Policy Package for SCP

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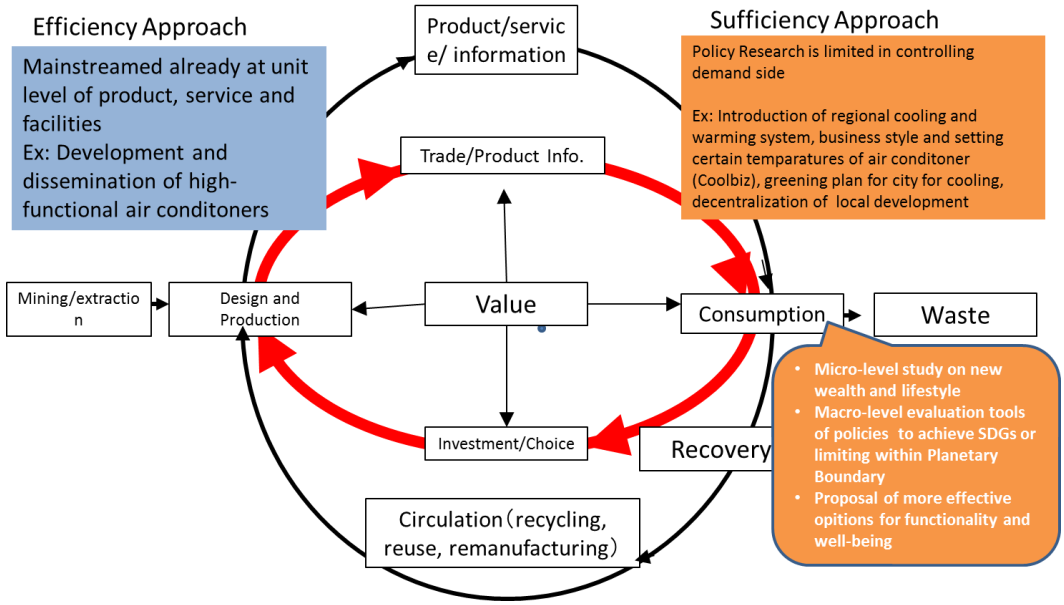
Sufficiency Approach

- This study defines "Sufficiency Approach" as **an approach contributing to techno-social systems development controlling overall energy and resource consumption** through decarbonisation and resource saving keeping **within resource and environmental constraints such as planetary boundaries**.

- The spirit of a sufficiency approach is enshrined in the SDGs framework and the Paris Agreement.

- The recent G7 Environmental Ministers Meeting calls for "**reducing the consumption of natural resources and promoting recycled materials and renewable resources so as to remain within the boundaries of the plant**". It also states that **"awareness of sufficiency** – the idea that we should not be greedy but satisfied with appropriate amounts" is necessary for global sustainability.

Sufficiency Approach and Efficiency Approach



Efficiency Approach and Approach Emphasizing Planetary Boudary

	Efficiency Approach	Approach emphasizing planetary boundary
Objectives	Problem solution through resource and energy efficiency improvement	System changes including infrastructure change in service provision
Relationship between Consumption and Production	Signaling to sustainable product and service by highly aware consumers. Innovation at product and service level	Innovation in social technical regime of service provision. Socio-technical innovation
Monitoring the progress	Conventional economic development. Reduction of direct environmental impact and harmonization with economic development.	Well-being, inclusive wealth, reduction of indirect impacts such as footprint, attainment of sufficiency
Driver of consumption	Acquirement of functionality Social and psychological signals	Acquirement of functionality Social and psychological signals Socio-technical system of service provision

Research Questions

- What are the effective policies to contribute to social system design which can control overall energy and resource consumption within a planetary boundaries?

- What kind of policy packages based on sufficiency approach can be considered?

Conventional typologies of SCP policies

- Policy tool box from SWITCH project or past SCP policy research such as EUPOPP under EU FP7 are based on **conventional typologies of environmental policies.**

- **Difficult to overcome stereotype typologies of environmental policy tools such as regulatory, economic, voluntary, information**. These are usually assuming conventional pollutions and product-life cycle.

- Conventional typologies may not be useful **for considering policies which targets shift in consumption patterns and needs, lifestyle and infrastructure**.

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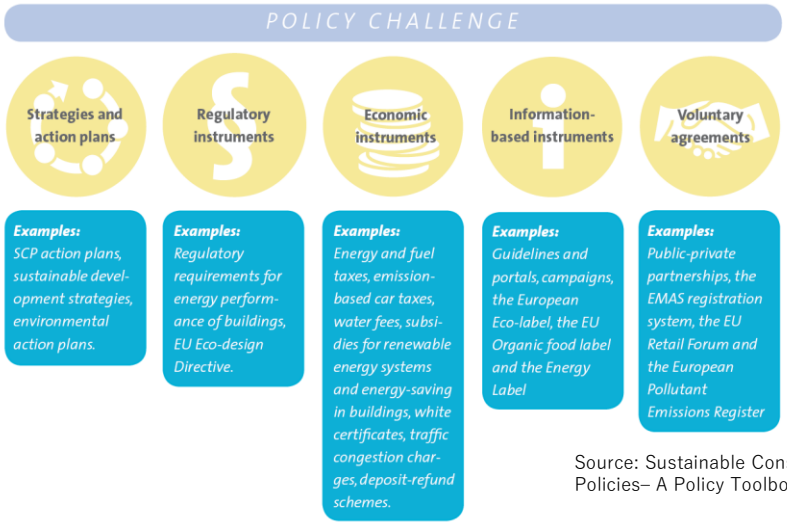
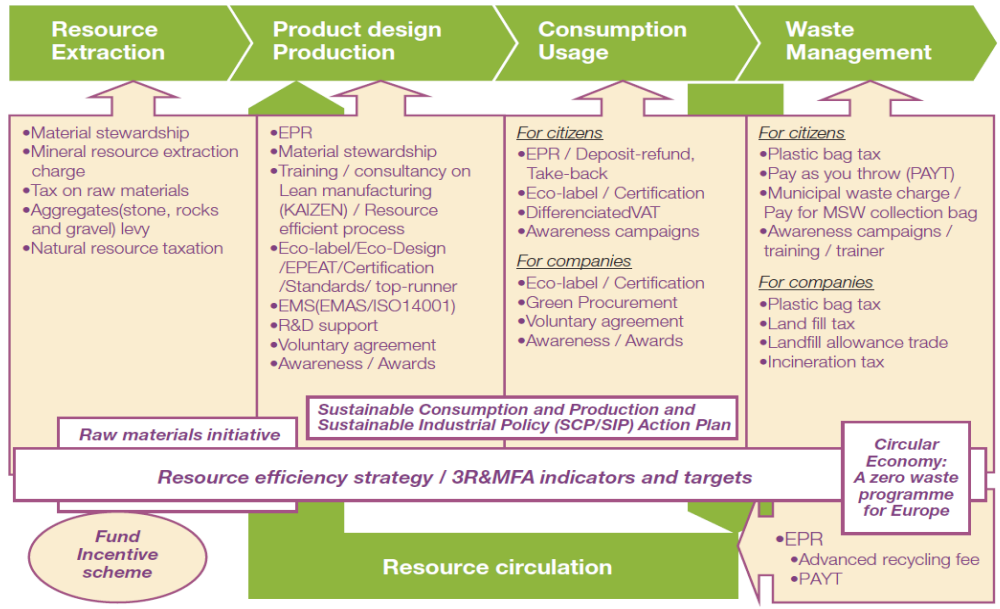
Conventional typologies



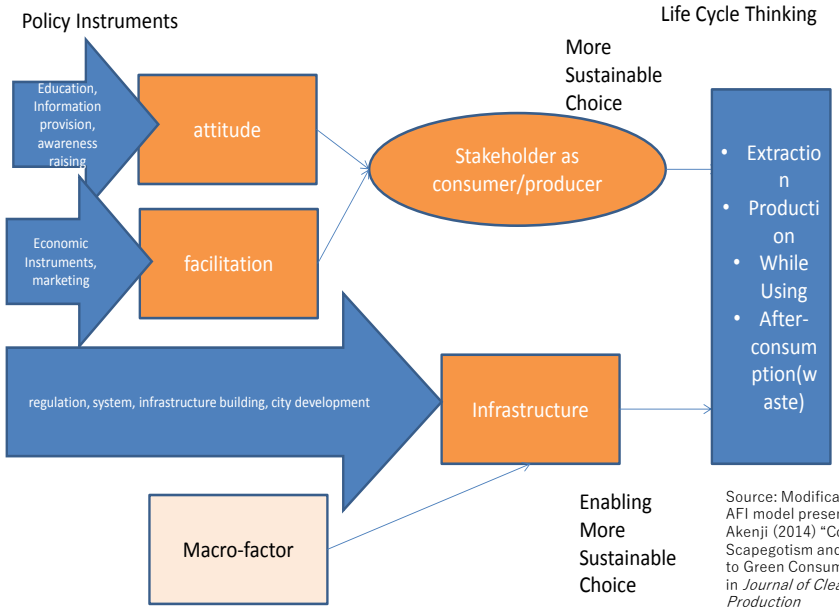
Source: Sustainable Consumption and Production Policies– A Policy Toolbox for practical use

Conventional typologies

Figure 2: Overview of policies and tools for waste prevention and resource reduction



AFI model of SCP



Source: Modification of AFI model presented by Akenji (2014) "Consumer Scapegotism and Limits to Green Consumerism" in *Journal of Cleaner Production*

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Importance of visions/long-term goals to direct policies

- De-carbonization
- Circular economy
- Planetary boundaries
- One planet living

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Examples of policy tools

Sector	Direction	Ideal situation in 2050	Policy Direction	Tools to change attitude	Tools for facilitation	Tools to change infrastructure
Housing (usage of electric appliances)	Energy saving/de-carbonization	Zero-net energy housing with 100% renewable energy	Cool-share, warm-share, lessen heat island effect, increase of urban green	Cool biz, product environmental info., expanded use of public space, more business in local cities	Top-runner, carbon tax, eco-point, subsidizing retro-fitting	Urban planning, regional cooling and heating, greening of urban center, change in energy mix, building codes
Housing (usage of electric appliances)	Resource saving/circular economy	Using SMART ICT, Share and service oriented design, Using stocks	High-value reuse, sharing infrastructure, expanded use of recycled resources	Material footprint information, Product env. Info., rewarding to products using recycled materials	Top-runner, EPR, DfE, Standard for high-value reuse	Urban planning, building codes, product take-back, R&D for high-value reuse

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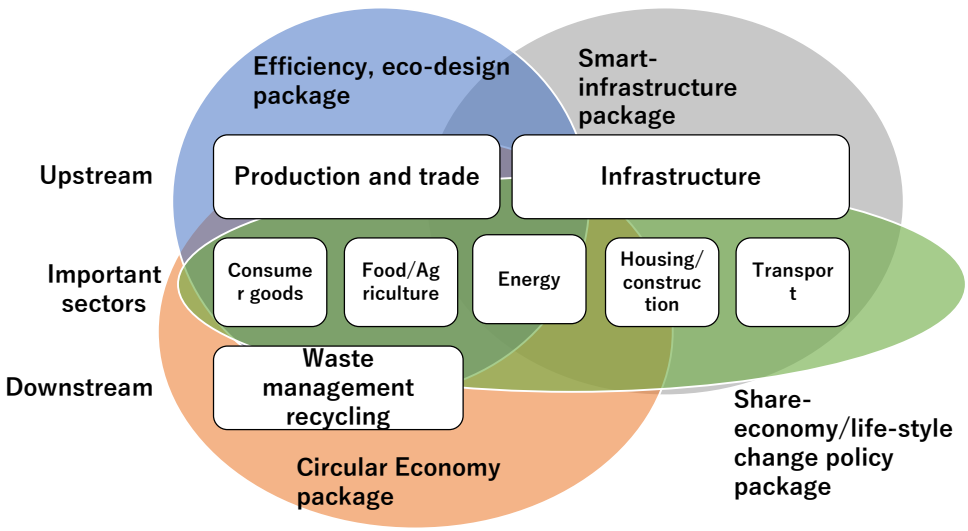
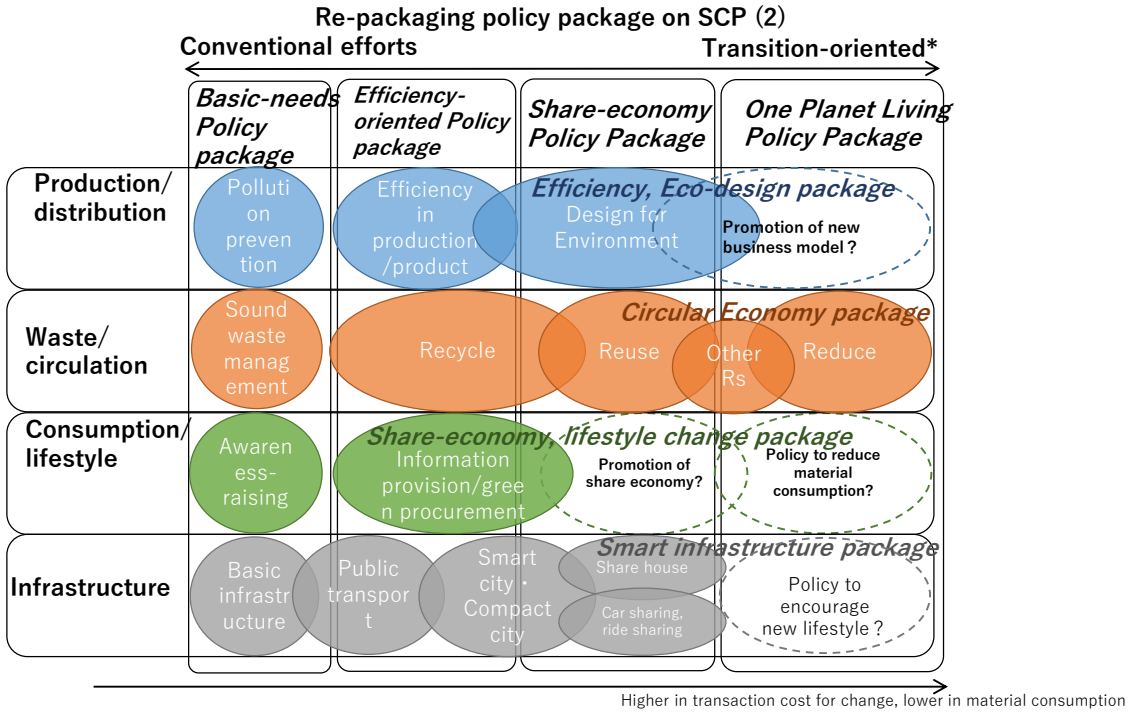
Re-packaging policy package on SCP (1)



＊Transition means large changes in these sectors or overall system



Conclusion/Hypothesis from preliminary analysis

- Long-term goals and visions is essential and should be embedded in the discussion on SCP policy
- **Need to change mind-set of policy analysis and making** from environmental policy-oriented view (command and control and financial tools) **to innovation and infrastructure-transition view (also incentive for facilitating private investment).**
- **Repackaging** shows that **lack of concrete examples in more advanced policy tools** and packages requires for one planet living.
- Transition-oriented more advanced policy for one planet living requires **re-alignment of different policy and business sectors** (such as environment, industry, construction/infrastructure, financing, lifestyle etc.)
- Transition-oriented policy **requires wider stakeholder engagement along supply-chain and different sectors**. Thus, development and implementation of such policy package may need **higher transaction cost (process of consensus building)**.
- Development of **ICT are becoming a key for lowering such transaction cost** (i.e. wider support to shared economy and circular economy)