

# Constructing a circular economy: A Win-win solution

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# Win-win for whom and for what?

Human beings cannot ignore both environmental and resource constraints any more.

To break the constraints, we have to create a new economy; a circular economy, which can afford to give a win-win solution

- for environment and economy
- for all actors
- for all nations
- for all generations

This looks a little bit too wishful thinking, doesn't it?

# A short review of development of “Resource Efficiency” and “Circular Economy”

- Concept of “Resource Efficiency”: **A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy (2011), Roadmap to a Resource Efficient Europe (2011)** and so on.
- Multi-dimensional concepts: raw materials, eco-system, marine-resources, soil, energy and so on.
- The idea is too complicated to be implemented in an actual economy at present.
- Elmau G7 Summit (2015) confirmed the vital role of resource efficiency as a policy measure for creating a new economy.

# A short review of development of “Resource Efficiency” and “Circular Economy”

- The concept of “Circular Economy” and its policy package were launched: **Closing the loop - An EU action plan for the Circular Economy (2015), On the implementation of the Circular Economy Action Plan (2017)** and so on.
- Communiqué G7 Toyama Environment Ministers’ Meeting (May 15-16, 2016) reconfirmed the importance of resource efficiency and the enhancement of decoupling between economic growth and natural resource utilization.

# Leaders' Declaration of Elmau G7 Summit (2015)

- The protection and efficient use of natural resources is vital for sustainable development. *We strive to improve resource efficiency, which we consider crucial for the competitiveness of industries, for economic growth and employment, and for the protection of the environment, climate and planet.* Building on the “Kobe 3R Action Plan”, and on other existing initiatives, we will continue to take ambitious action to improve resource efficiency as part of broader strategies to promote sustainable materials management and material-cycle societies. *We are establishing the G7-Alliance on Resource Efficiency as a forum to share knowledge and create information networks on a voluntary basis.*

# “Resource Efficiency” and “Circular Economy”

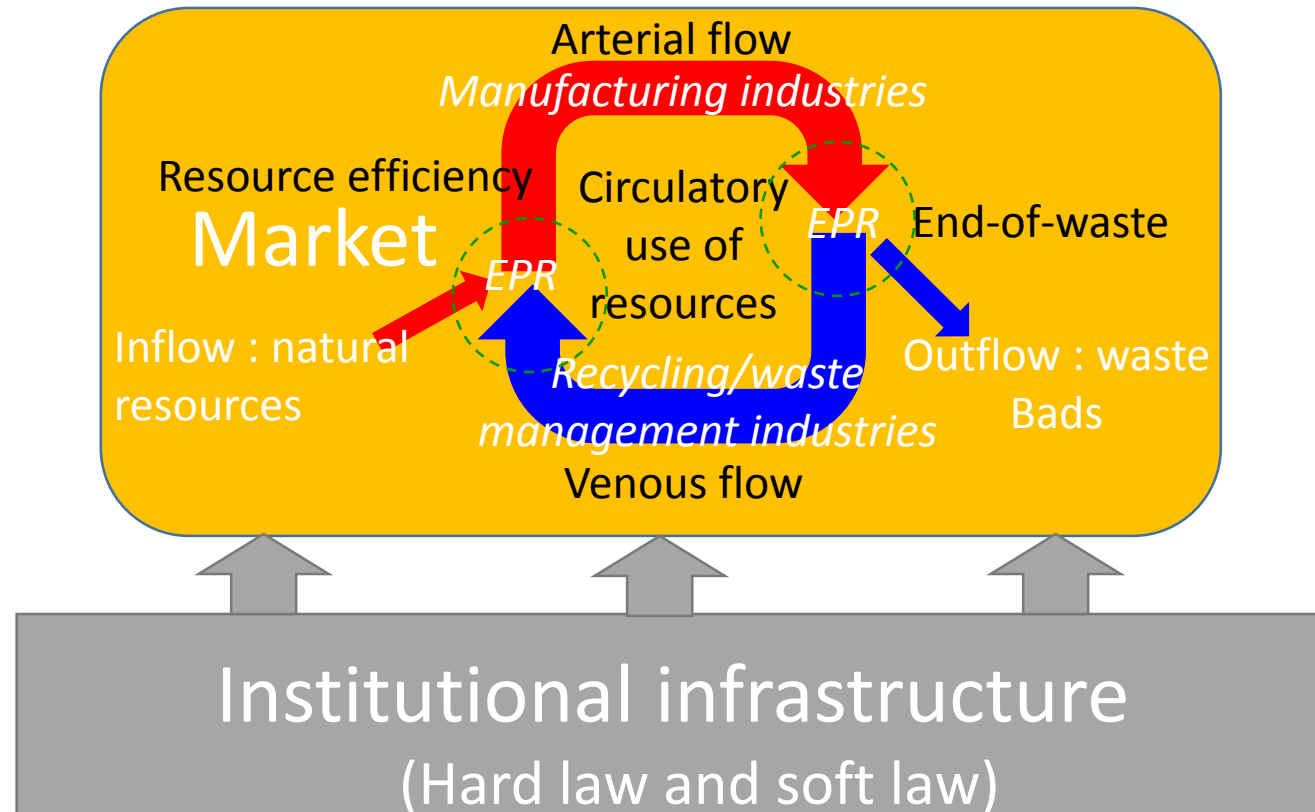
- Although the policy package of a circular economy was launched in 2015, instead of that of resource efficiency, the concept “resource efficiency” is still a vital concept for making a circular economy.
- In the near future, multi-dimensional concept of resources will possibly be developed, and a policy based upon the concept will be implemented.
- So far, a circular economy based upon, say, resource productivity, will be pursued.

# How can we construct a circular economy?

- A circular economy cannot be created without institutional supports.
- So called *institutional infrastructure*, which consists of **hard law** and **soft law**, if well designed, contributes to creating a circular economy.
- Hard law which realizes the policy concept “extended producer responsibility” is surely helpful for pursuit of a circular economy.
- Nowadays, policies based upon soft law has been proved to be powerful for creating a circular economy.
- These provide business sectors with an appropriate guide toward circulative use or resources.

# Resource efficiency and End-of-Waste

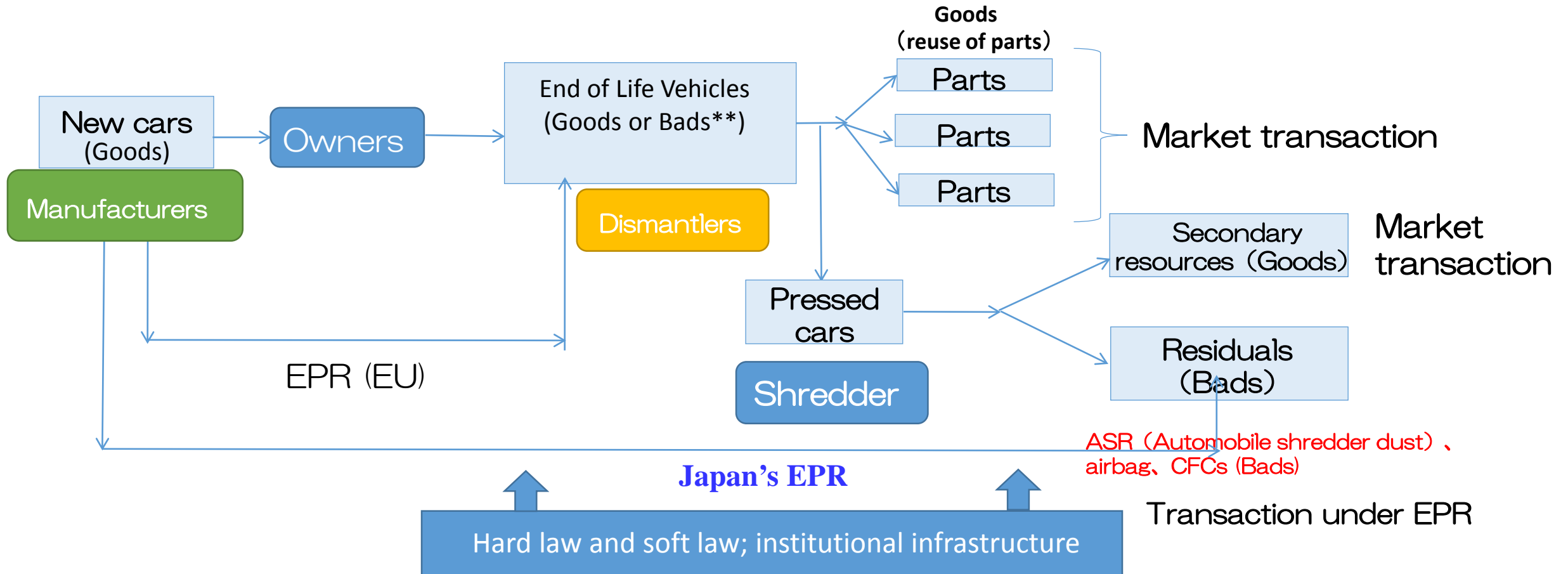
EU has introduced two basic policy concepts; resource efficiency and end-of-waste





# Example of EPR

## Recycling of automobiles under EPR in Japan



# A narrow path to a circular economy

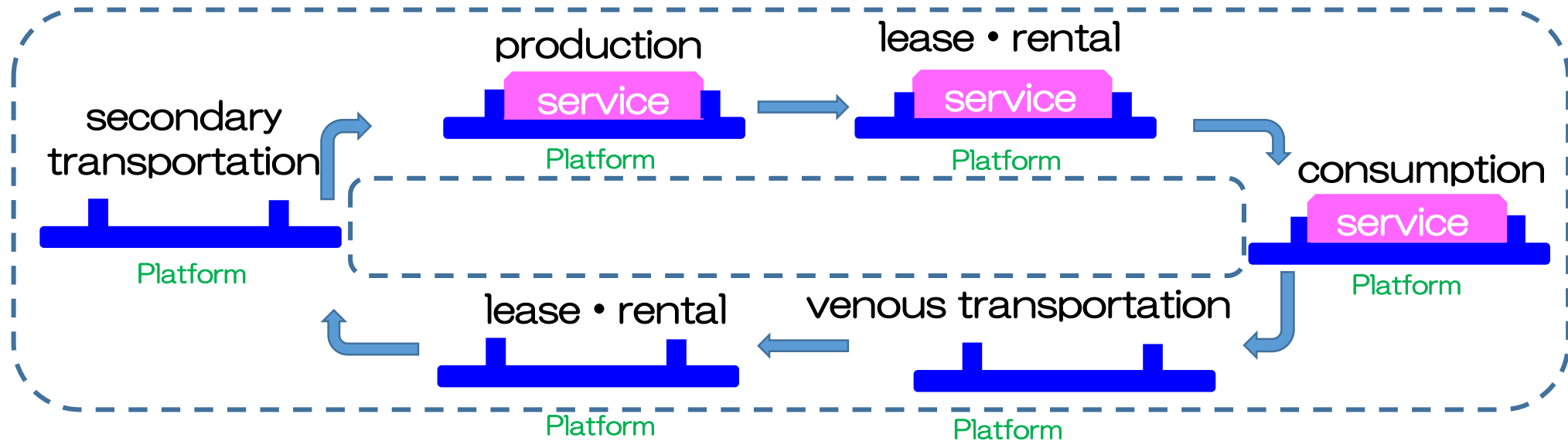
- To create a circular economy, we have to have a well-designed institutional infrastructure.
- This is not an easy task at all.
- We have to dispose of a wishful thinking on this.
- There are two tough problems to be solved on a path toward to a circular economy.
- One is how to expand effective demand in Keynesian sense, and the other is how to enhance TFP (total factor productivity, namely technical progress rate) in a circular economy

# Business opportunity not seized yet

- There has been a change of consumers' preferences.
- They tend to give more weight to buying services than to buying products themselves.
- Eg. More and more young people do not want to own a car. They rent a car or buy Uber services.
- Eg. Subscription business, platform business and so on are flowering.
- Eg. Solution business (eco-solution business and so on) is getting more and more popular.
- Business opportunity like these is not fully seized yet.

# From products to services

A production sector can be turned into a refill sector of services.



There is no distinction between arterial business and venous business. Moreover, EPR is naturally implemented in this system.

# Knowledge intensive business

- These types of business are knowledge intensive.
- In traditional knowledge intensive sectors, there has been epoch-making innovation.
- It will be so in new knowledge intensive business.
- Thus, a high rate of TFP (technical progress) can be expected.

# Knowledge intensive business as blue ocean

- Traditional business which sells ordinary commodities is mostly “red ocean”.
- On the other hand, new knowledge intensive business is basically “blue ocean”.
- High-quality knowledge is not exposed to excessive competition.
- Thus, there will be more business opportunities in a circular economy, insofar as it is well-designed.

# Conclusion (1)

- We are facing severe environmental and resource constraints.
- To break the constraints, we have to create a new economy, in which resources are used in a highly circulative manner; a circular economy.
- A circular economy can be created by the help of institutional infrastructure which consists of hard law and soft law.
- The institutional infrastructure must be well designed.
- Yet, a path to a circular economy is very narrow.
- Effective demand must be expanded, while TFP must be enhanced on the other.

# Conclusion (2)

- Change of consumers' preference is accelerating the business style from products to services.
- This new business is knowledge-intensive business and the business field is blue ocean.
- High technical progress is expected in this field, while there will be demand expansion as seen in subscription business, platform business, solution business and so on.
- So far, such a business opportunity has not been seized, and new markets remain unexploited.
- Who will be a winner in the new business?