Collaborative Research Center for Energy Engineering

## Collaborative Research Center for Energy Engineering (CEE)

[Global Environmental and Energy Issues]

http://www.energy.iis.u-tokyo.ac.jp/

## **Aims of the Center**

The aims of the Collaborative Research Center for Energy Engineering are:

- 1. International coordination of energy and environmental engineering at The University of Tokyo
- 2. Development of advanced technologies for energy utilization
- 3. Construction of an academic fields encompassing energy and environmental engineering fields
- 4. Promotion of a sustainable society through industry-government-academia cooperation
- 5. Cultivation of human resources with wide vision

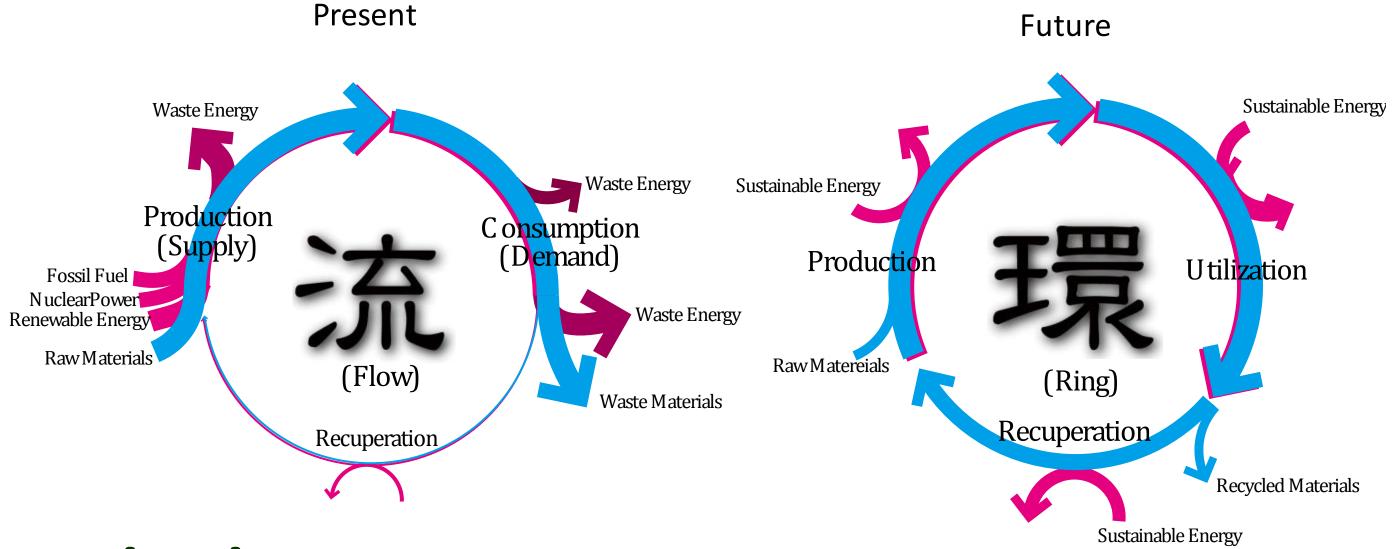
Long term vision and wide perspective are required to overcome energy and environmental issues. Our ultimate goal is to simultaneously resolve energy and environmental issues by developing comprehensive innovative technologies.

## **Research Activities**

In the conventional supply and demand structures of energy and materials, most of the available materials are discarded without being "recycled". This "FLOW" structure, in which most materials are discarded, has poor sustainability, because present design, production, distribution and usage processes are not suitable for recycling.

It is necessary to establish a cooperative production, usage and recycling system to avoid excessive depletion of resources such as carbon based resources or rare metals that are essential for high-technology products. In order to improve social and economic activities and to overcome global environmental issues, it is also important to maximize the efficiency of recycling the inherent energy which all materials contain.

The center aims to study the feasibility of the "RING (Kan)" concept, which is the coordination between the "Production", "Utilization" and "Recycling" processes of energy and materials.



## Mission and Organization

