

<b>Technology definition</b>	Infrastructure technology suitable for conversion to the industrial structure that links low-carbon type raw material substitution considering the whole process from raw material collection to post production waste disposal and recycling and integrated high efficiency new processing in order to fundamentally reduce the energy that is injected and distributed in various forms in the industrial sector, which is the processing body of petroleum and resources
<b>Keywords</b>	Process optimization, Carbon-neutral feedstock, Renewable raw material and product, Manufacturing life cycle, Resource and energy circulation, New innovative process, High energy efficiency, Recycling and resource, Waste minimization and valorization, New and renewal energy utility, Inter-industrial resource and energy exchange, Sustainable industry, Energy Efficiency, Eco-friendly process, Clean technology, Process technology, Energy saving, Low GWP, Eco-friendly material, Energy efficient device (or unit), Eco-friendly fuel, Waste minimization, Waste reuse, Life cycle analysis, Emission minimization, Waste heat recovery, Process optimization, Process Efficiency, Green process
<b>Related sub-technology</b>	<ol style="list-style-type: none"> <li>1. Improvement of process energy efficiency ((1) High-efficiency technology for manufacturing equipment, (2) Optimization technology for manufacturing process efficiency, (3) FEMS (Factory Energy Management System))</li> <li>2. New process technology (① Process exhaust gas reduction technology (including hydrogen reduction steel technology) ② New catalyst technology ③ Fourth industrial process technology)</li> <li>3. Raw material substitution technology (① Biomass-derived chemical production technology, ② CO<sub>2</sub>-derived chemical production technology, ③ Natural gas-derived refining technology)</li> <li>4. Byproduct waste and resource circulation technology (① Process, product byproducts and waste value-added technology (resource recovery and material recycling) ② Process energy recovery and reuse technology (combined heat and power, etc. ③ Process-plant-region energy integration networking technology)</li> </ol>