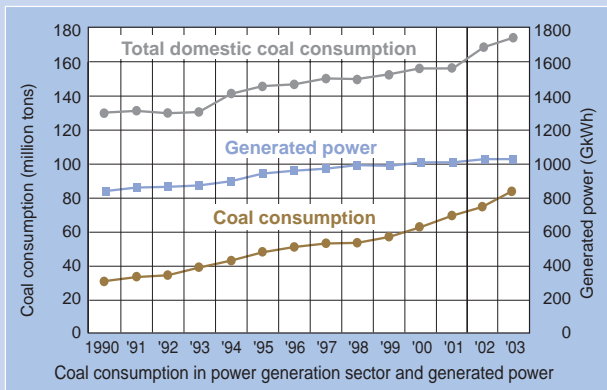
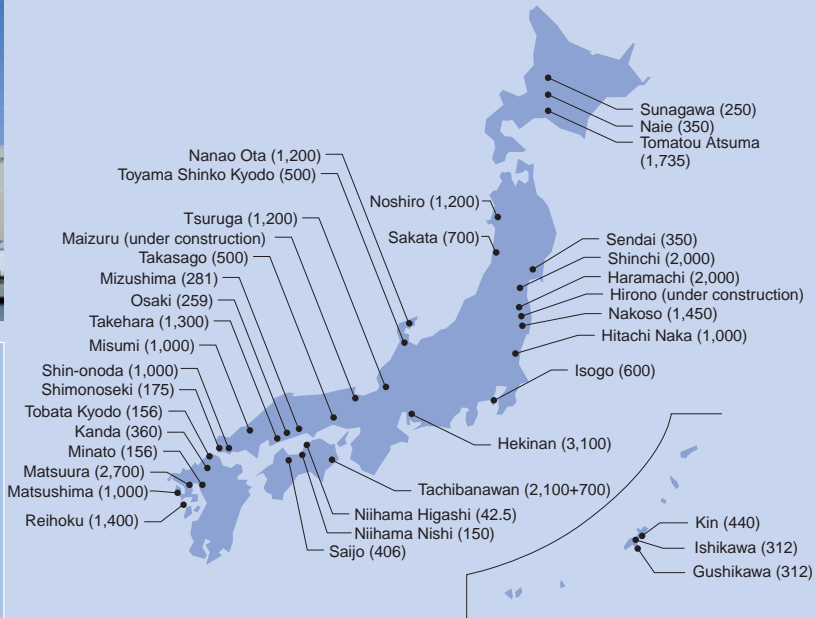


Power generation field

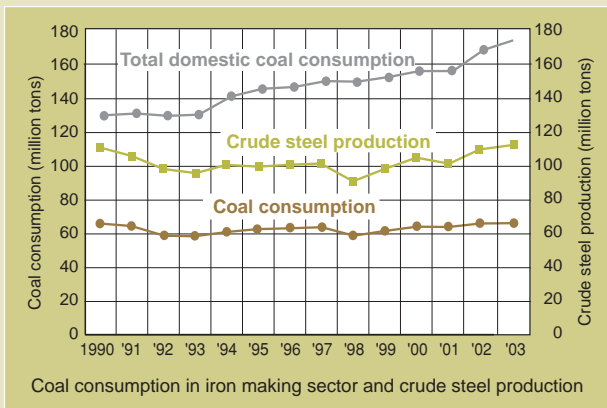


Location of coal-fired power plants

Figures in parentheses indicate power generation capacity (MW) at the end of FY2005.

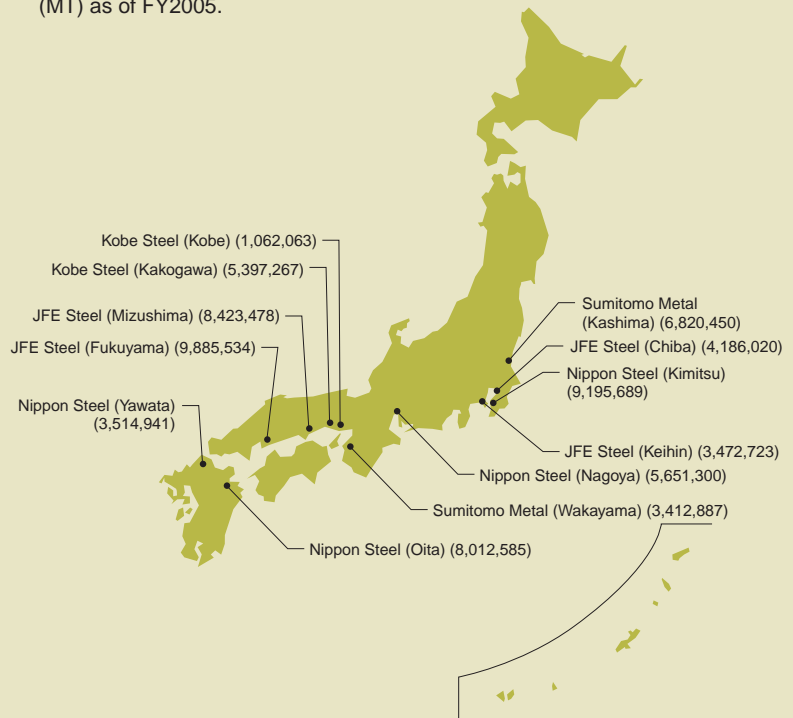


Iron making field

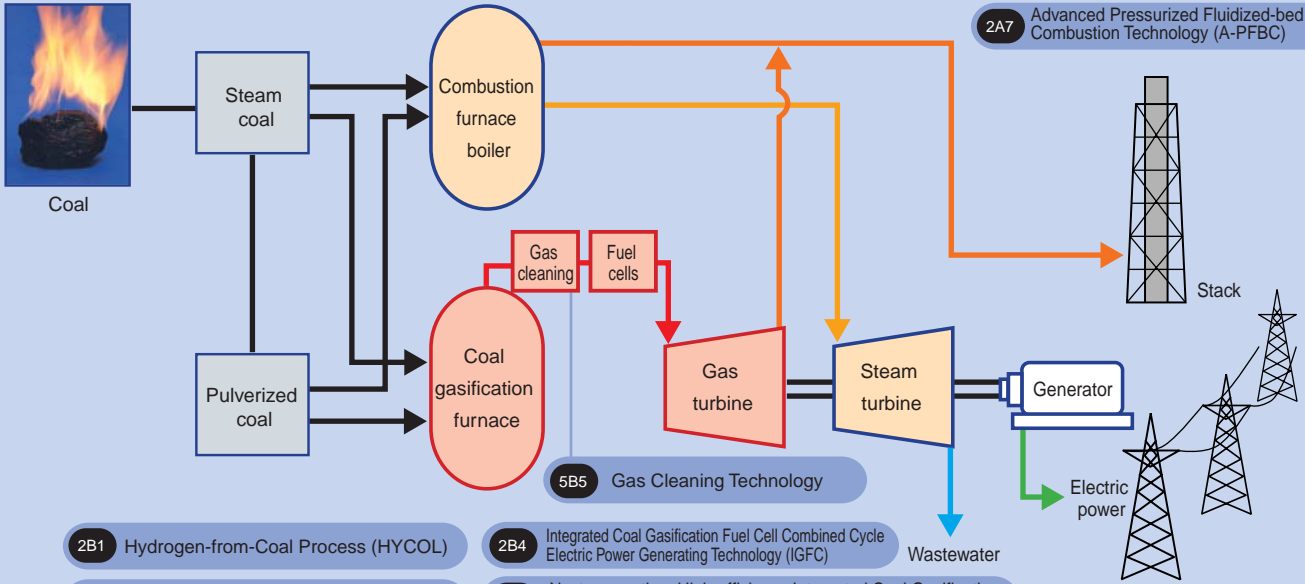


Location of iron works

Figures in parentheses indicate crude steel production (MT) as of FY2005.



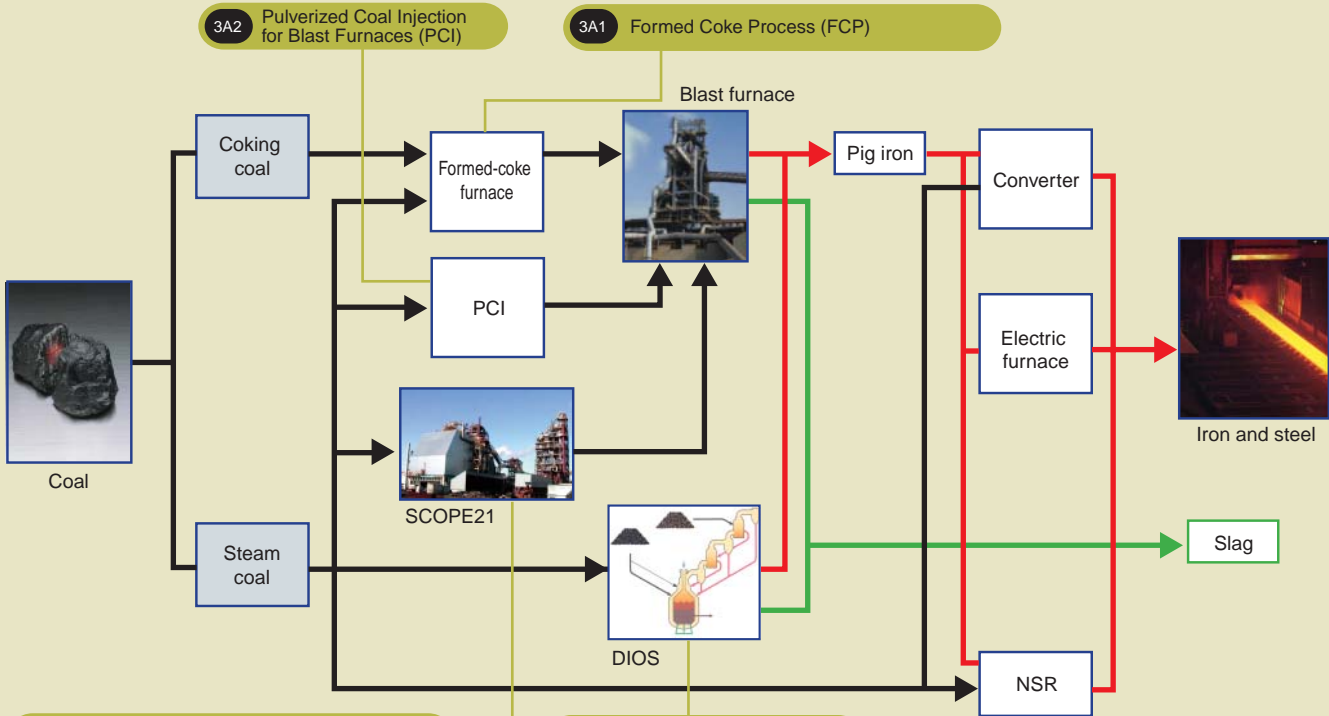
**Coal-fired power generation technologies**



- 2A1 High Efficiency Pulverized Coal-fired Power Generation Technology (Ultra Super Critical Steam)
- 2A2 Circulating Fluidized-bed Combustion Technology (CFBC)
- 2A3 Internal Circulating Fluidized-bed Combustion Technology (ICFBC)
- 2A4 Pressurized Internal Circulating Fluidized-bed Combustion Technology (PICFBC)
- 2A5 Coal Partial Combustor Technology (CPC)
- 2A6 Pressurized Fluidized-bed Combustion Technology (PFBC)
- 2A7 Advanced Pressurized Fluidized-bed Combustion Technology (A-PFBC)

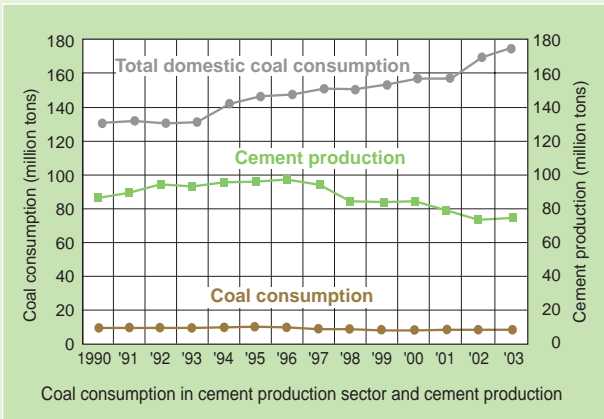
- 2B1 Hydrogen-from-Coal Process (HYCOL)
- 2B2 Integrated Coal Gasification Combined Cycle (IGCC)
- 2B3 Multi-purpose Coal Gasification Technology Development (EAGLE)
- 2B4 Integrated Coal Gasification Fuel Cell Combined Cycle Electric Power Generating Technology (IGFC)
- 2B5 Next-generation, High-efficiency Integrated Coal Gasification Electric Power Generating Process (A-IGCC/A-IGFC)
- 4D1 Hyper-coal-based High-efficiency Combustion Technology (Hyper-coal)

**Iron making technology**



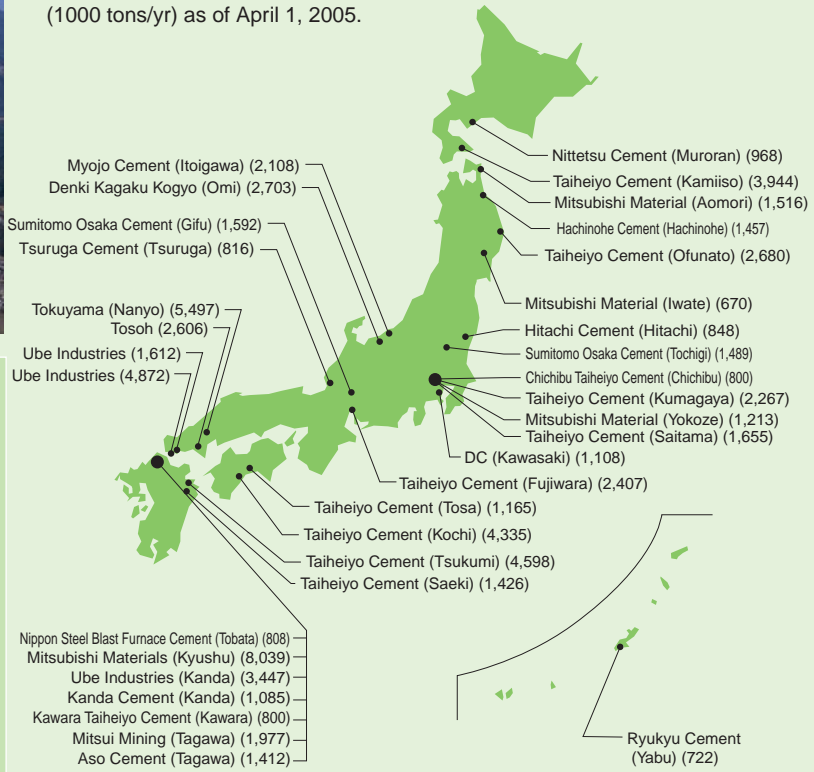
- 3A2 Pulverized Coal Injection for Blast Furnaces (PCI)
- 3A1 Formed Coke Process (FCP)
- 3A4 Super Coke Oven for Productivity and Environment Enhancement toward the 21st Century (SCOPE21)
- 3A3 Direct Iron Ore Smelting Reduction Process (DIOS)
- 3A5 Coke Dry Quenching Technology (CDQ)
- 3B2 New Scrap Recycling Process (NSR)

Cement production field

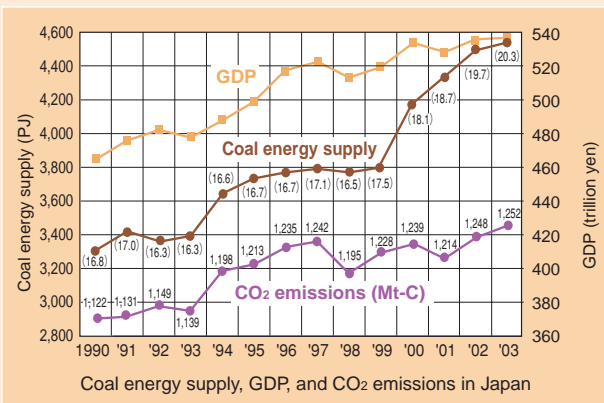


Location of cement plants

Figures in parentheses indicate clinker production capacity (1000 tons/yr) as of April 1, 2005.

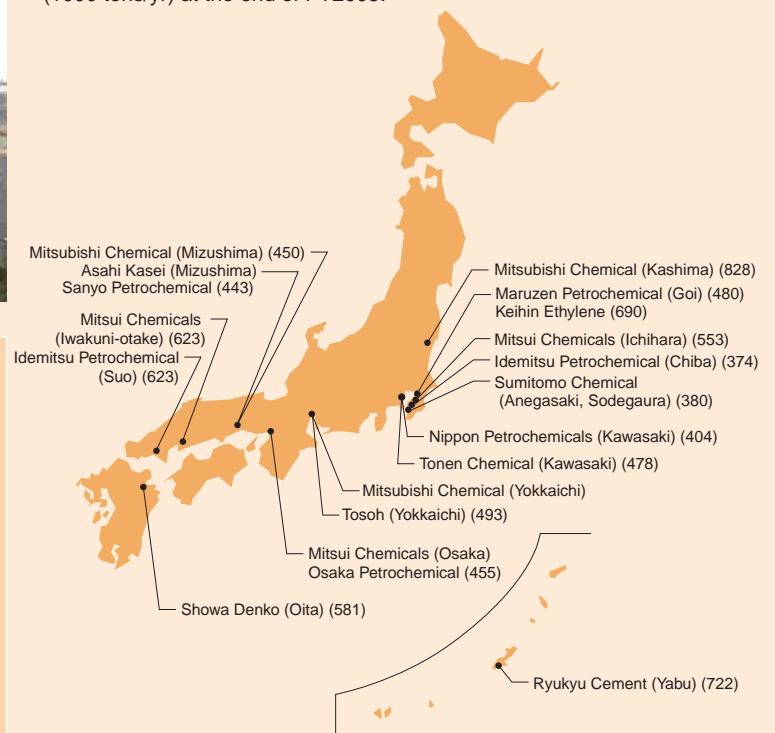


Coal chemicals and other fields



Location of chemical complexes

Figures in parentheses indicate ethylene production capacity (1000 tons/yr) at the end of FY2005.

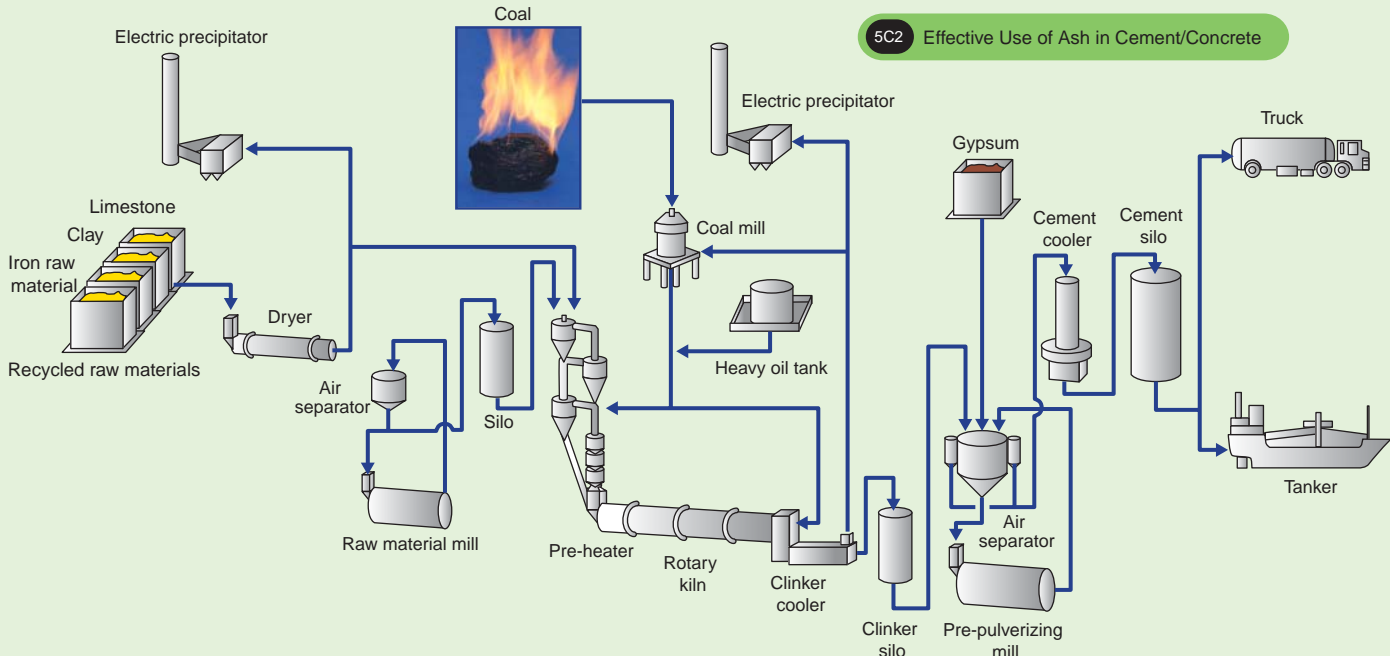


Figures in parentheses indicate coal's percentage of primary energy.

**Cement production technology**

**3B1 Fluidized-bed Advanced Cement Kiln System (FAKS)**

**5C2 Effective Use of Ash in Cement/Concrete**



**Coal chemical process**

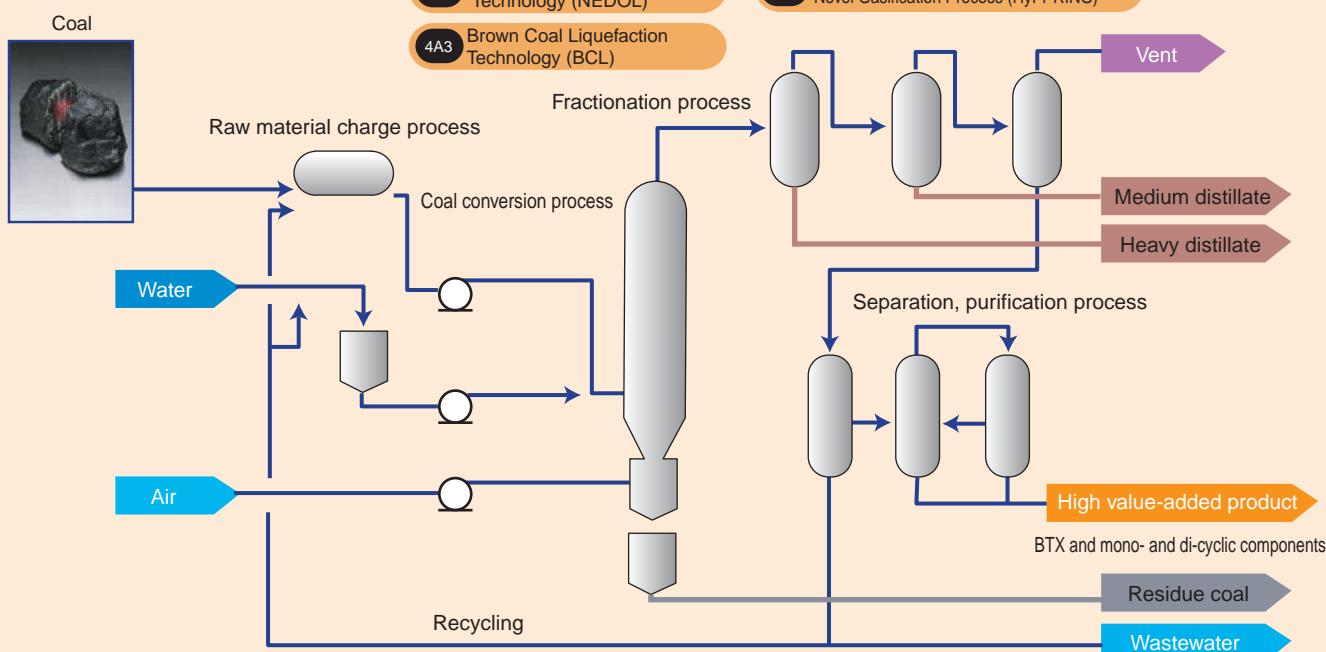
4A1 Coal Liquefaction Technology Development in Japan

4A4 Dimethyl Ether Production Technology (DME)

4A2 Bituminous Coal Liquefaction Technology (NEDOL)

5A1 Hydrogen Production by Reaction Integrated Novel Gasification Process (HyPr-RING)

4A3 Brown Coal Liquefaction Technology (BCL)



4B1 Multi-purpose Coal Conversion Technology (CPX)

4D1 Hyper-coal-based High-efficiency Combustion Technology (Hyper-coal)

4B2 Efficient Co-production with Coal Flash Partial Hydrolysis Technology (ECOPRO)

4D2 Low-rank Coal Upgrading Technology (UBC Process)