

Strategy of Zero Emissions Technologies in Japan

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From the standpoint of considering global environment problems, the development of CCT is urged in order to use coal 'effectively,' 'cleanly,' and 'carefully.' In other words, projects should emphasize developments of environment-conscious coal utilization technologies and their worldwide promotion. This paper shows a strategy for the first 30 years of the 21st century of CCT and ZETs development in Japan. Assuming that we will enter a hydrogen energy era in 2020-2030, and taking into consideration the current development and diffusion of fuel cell power generation, fuel cell vehicles and hydrogen gas turbine combined cycle power generation, it is necessary to pursue such a possibility which allows "CO₂ free" energy power generation by means of coal gasification, coal based CO₂ recovery type hydrogen producing technology to become melted into a new business category which could be called the Coal-based Energy & Chemicals Integrated Center in combining power station, chemical industry, iron & steel industry and other business sectors.