Project of Energy Conservation Support to an Electric Furnace Factory in Vietnam

[Project summary]

Receiving a commission from the Ministry of Economy, Trade and Industry (METI) concerning the Project to Rationalize International Energy Use and the Project to Foster Human Resources to Promote Energy Conservation, the Energy Conservation Center, Japan (ECCJ) implemented a five-day project from January 25 through 29, 2016, for the promotion of energy conservation in the Vietnamese steel industry, which included the following activities.

- Described Japan's energy conservation policies and methods and the ISO50001 certification system for workers in charge of operation and facility maintenance at an electric furnace factory.
- (2) Conducted energy conservation audit at an energy-intensive electric furnace factory.
- (3) Held a seminar to introduce the latest technologies on energy conservation for workers in the Vietnamese steel industry (management and persons in charge) and government officials at Ministry of Industry and Trade (MOIT).



Workshop concerning the legal system of energy conservation (January 25)







On-site inspection-1

On-site inspection-2 (January 26-27)

Proposals based on the survey result (January 28)

Seminar (January 29)

In response to Vietnamese MOIT's request, we provided the following support for the promotion of energy conservation at an energy-intensive electric furnace factory.

(1) Introduction of Japan's energy conservation policies and methods:

For workers in charge of operation and facility maintenance at an electric furnace factory, we explained the following to enhance understanding of importance of energy management and various technologies: a) Recent trends and achievements in energy conservation in Japan; b) Energy Conservation Act and the qualified energy manager system; and c) new technologies of energy conservation.

(2) Energy audit: We explained the possibility of energy conservation and proposed various energy conservation measures with the presence of the workers in charge of operation and facility maintenance and young staff at MOIT at an electric furnace factory. (ex. 1) reducing the frequency of putting in scraps; 2) ensuring furnace capacity; 3) reducing the belch of flame outside the furnace; 4) slag analysis; etc.)

(3) Seminar to introduce the latest technologies for promoting energy conservation: We explained energy conservation technologies in Japan such as regenerative burners, scrap pre-heat continuous insertion-type electric furnaces and oxygen-enriched burners ladle preheat systems and estimated energy conservation effects when the technologies are applied.

This time, the electric furnace factory was located in the south of Vietnam, near Ho Chi Minh City. In the future, we will expand energy conservation activities to the northern Vietnam's steel industry centered around Ha Noi.