

**Summary of Comments Made at a Press Conference
by Tsunehisa Katsumata, FEPC Chairman, on May 18, 2007**

Today I would like to report on two electricity demand-side measures being implemented to help solve global environmental problems.

The first is what can be described as the linchpin of our demand-side measures: increased use of heat pump units.

At last month's press conference I reported on electric power industry proposals for post-Kyoto Protocol global warming prevention measures. On the supply side, the linchpin of our efforts to solve global environmental problems is to increase the ratio of nuclear power in our energy mix, and on the demand side – although it is not included in our voluntary action plan – we believe that increased use of heat pumps, which are incorporated in air conditioners and Eco Cute water heaters, is of prime importance.

Unfortunately, however, it seems the marvelous nature and great potential of heat pump technology is not widely understood.

Even when the temperature is freezing, the atmosphere always contains a certain amount of heat. Heat pumps efficiently collect this heat, and without employing any combustion process, use it to produce heat energy in excess of the energy they consume.

In the case of a home air conditioner equipped with a heat pump running at maximum efficiency, 6 units of heat can be obtained for each unit of electricity consumed. Even if we assume that all of the electricity used was generated by thermal power, the heat energy output is more than double the energy input. And since nearly half of our electricity is actually generated by nuclear or hydro power that do not emit CO₂, the energy savings and reduction in CO₂ emissions are even greater.

The efficiency of heat pumps has increased dramatically in recent years. The coefficient of performance (COP) for home air conditioners, for example, has approximately doubled in the past 10 years.

Heating and hot-water supply account for 57% of home energy consumption, and make up about half of the approximately 3.5 tons of CO₂ emitted by the average home each year. So energy conservation in these areas is the key to reducing residential CO₂ emissions.

Over 90% of home heating and hot-water supply rely on combustion-type systems. If these could all be replaced by heat pump systems, CO₂ emissions from home heating and hot-water supply could be reduced by approximately 70%.

And if office building air conditioning and hot-water supply systems and factory boilers were converted to heat pump systems, it would be possible to reduce the entire country's CO₂ emissions by 10%.

In view of these facts, we are working on an industry-wide basis with various organizations, related industries, and the nation as a whole to promote the use of Eco Cute systems and other heat pump systems.

Both the Long-Term Energy Supply & Demand Forecast and the Kyoto Protocol Target Achievement Plan are currently being revised, and it is our hope that the government will incorporate the promotion of heat pump systems that simultaneously solve energy supply/demand and global warming problems as a key element of policy, and aim to increase their use.

I would now like to report on our efforts to promote "household eco-account book" practices.

Looking at the nation's CO₂ emissions for fiscal 2005, we can see that industrial sector emissions were reduced from 1990 levels by 3.2%, whereas transport sector emissions rose approximately 20%, and the commercial and residential sectors each recorded significant increases of approximately 40%.

Measures to address the commercial and residential sectors are therefore key points to consider in the government's current evaluation and review of the Kyoto Protocol Target Achievement Plan. But we believe that reductions in residential CO₂ emissions will require each and every citizen to be thoroughly aware of the current situation and firm in their preparedness and resolve.

Since the year before last, the government has implemented a Team Minus 6% citizen's campaign to raise public awareness of the need to combat global warming. The electric power industry is also participating in this campaign, and the FEPC will be implementing it again this year from June 1 through September 30. In addition to raising air conditioning thermostat settings and encouraging employees to wear lightweight attire, each year we are also switching off unnecessary lighting during lunch hour and after regular business hours, switching off office automation equipment whenever possible, and taking other steps at over 1,000 offices nationwide as each company's circumstances permit.

In addition to these measures, the "household eco-accounting book" practices that have until now been promoted independently by each power company will be actively promoted on an industry-wide basis.

To raise customer awareness of the need to conserve energy and reduce CO₂ emissions, we have set up eco-accounting pages on each electric power company's website where customers can calculate and compare the monthly amount of CO₂ emissions they produce by entering the amount of electricity, water, gasoline, and other items that they use each month.

With regard to household eco-accounting books, each electric power company has until now used meter-reading slips and other means to promote the practice among customers and employees. Beginning this year, however, we will carry out industry-wide activities such as the development of unified posters to be displayed in the offices of each company, and each of the companies will use its ingenuity to expand employee participation. In addition, customer participation will be actively promoted through sales offices, websites, and meter-reading slips at each company.

Although simple in nature, it is our hope that these activities will spread the word to more than 250,000 electric power industry employees and vast numbers of customers, thereby raising citizen awareness of the need to combat global warming.