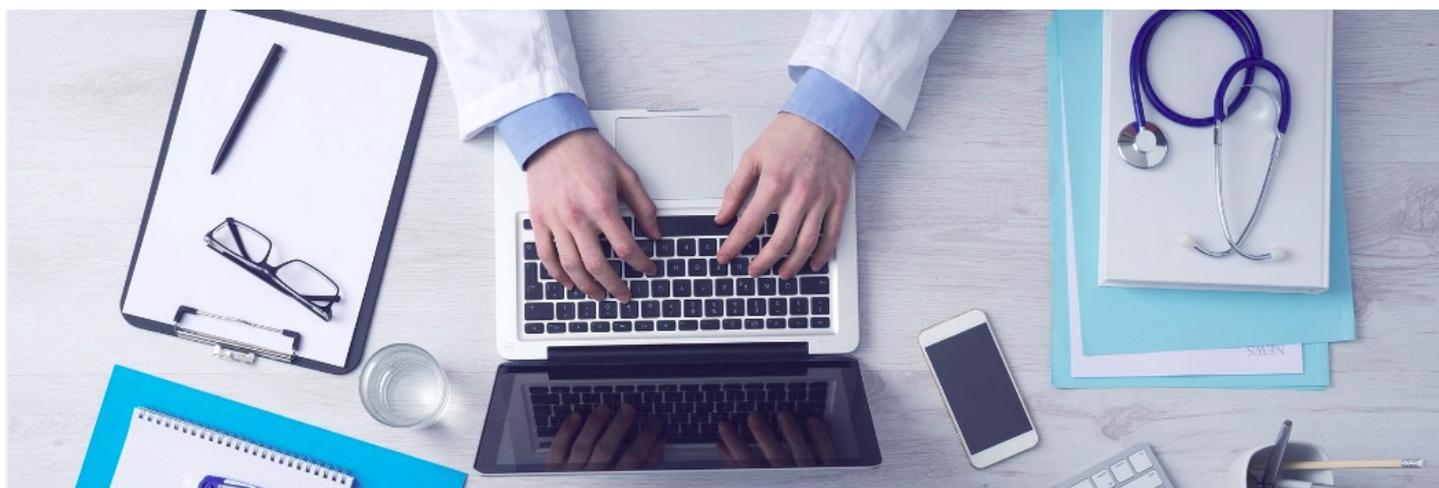


Suggestions for MOEA Trial Program of Voluntary Base Green Electricity Framework



On March 6, 2014, The Energy Bureau of Ministry of Economic Affairs has published a pre-announcement on a Trial Program of Voluntary Base Green Electricity Framework (hereafter the *Trial Program*) and consulted on public opinion. In light of the content of the *Trial Program*, STLI provide the following suggestions for future planning of related policy structure.

The institution of green electricity as established by the *Trial Program* is one of the policies for promoting renewable energy. Despite its nature of a trial, it is suggested that a policy design with a more options will be beneficial to the promotion of renewable energy, in light of various measures that have been undertaken by different countries.

According to the *Trial Program*, the planned price rate of the green electricity is set on the basis of the total sum that the electricity subsidy to be paid by the Renewable Energy Development Fund divided by the total sum of electricity generated reported by Tai Power Company. The Ministry of Economic Affairs will adjust the price rate of the green electricity on the base of both how many users subscribe to the green electricity and the price rate of international green electricity market rate and, then announce the price rate in October of each year if not otherwise designated.

In addition, according to the planned *Trial Program*, the unit for the subscription of green electricity is 100 kW·h. It is further reported that the current planned price rate for green electricity is 1.06 NTD/ kW·h. And it shall be 3.95 NTD/ kW·h if adding up with the original price rate, with an 37% increase in price per kW·h. In terms of the existing content of the *Trial Program*, only single price rate will be offered during the trial period.

In this regard, we take the view that it would be beneficial to take into account similar approaches that have been taken by other countries. In Germany, for instance, the furtherance of renewable energy is achieved by the obligatory charge (EEG Umlage) together with the voluntary green electricity program provided by the private electricity retail sectors.

According to German Ministry of Economics and Energy (BMWi) , the electricity price that the German public pays includes three parts:

(1) the cost of the purchase and distribution of the electricity, including the margin of the electricity provider (2) regulated network fees, including those for the operation as well as for the measurement works of the meters (3) charges imposed by the government, including tax and the abovementioned obligatory charge for renewable energy (EEG Umlage) , as prescribed by the *Act on Renewable Energy* (Gesetz für den Vorrang Erneuerbarer Energien, also known as Erneuerbare-Energien-Gesetz - EEG) .

In terms of how it is implemented on the ground, an example of the green electricity price menu program from the German electricity retail company, Vattenfall, is given in the following. In all price menu programs provided by Vattenfall in Berlin, for instance, 29.4% of the electricity comes from renewable energy as a result of the implementation of the *Act on Renewable Energy*.

Asides from the abovementioned percentage as facilitated by the existing obligatory measures, the electricity retail companies in Germany further provide the price menus that are “greener”. For example, among the options provided by Vattenfall (Chart I) , in terms of the 12-month program, one can choose the menu which consist of 39.4% of renewable energy, with the price of 0.2642 Euro/ kW·h (about 10.96 NTD/ kW·h) . One can also opt for a menu of which the energy supply comes from 100% of renewable energy, with the price of 0.281 Euro/ kW·h (about 11.66 NTD/ kW·h)

Chart I : Green Electricity Price Menus provided by Vattenfall in Berlin, Germany

	Percentage of Renewable Energy Supply	Percentage of Renewable Energy Supply Electricity Price
12-month program	39.4%	0.2642 Euro/ kW·h (about 10.96 NTD/ kW·h)
All renewable energy program	100%	0.281 Euro/ kW·h (about 11.66 NTD/ kW·h)

Source : Vattenfall website, translated and reorganized by STLI, April 214.

In addition, Australia also has similar programs on green electricity that is voluntary-base and with the goal of promoting renewable energy, reducing carbon emission, and transforming energy economy. Since 1997, the GreenPower in Australia is in charge of audition and certification of the retail companies and power plants on green electricity. The Australian model uses the certification mechanism conducted by independent third party, to ensure the green electricity purchased by end users in compliance with specific standards.

As for the options for the price menu, take the programs of green electricity offered by the Australian retail company Origin Energy for example, user can choose 6 kinds of different programs, which are composed by renewable energy supply of respectively 10%, 20%, 25%, 50%, 75%, and 100%, at various price rates (shown in Chart II) .

Chart II Australian Green Electricity Programs provided by Origin Energy

Percentage of renewable Energy	Electricity Price per kW·h
0	0.268 AUD (About 7.52 NTD)
10%	0.274868 AUD (About 7.69 NTD)
20%	0.28006 AUD (About 7.84 NTD)
25%	0.28292 AUD (About 7.92 NTD)
50%	0.2838 AUD (About 7.95 NTD)
100%	0.2992 AUD (About 8.37 NTD)

Source : Origin Energy website, translated and reorganized by STLI, April 214.

Given the information above, it can thus be inferred that the international mechanism for the promotion of green electricity often include a variety of price menus, providing the user more options. Such as two difference programs offered by Vattenfall in Germany and six various rates for green electricity offered by Origin Energy in Australia.

It is the suggestion of present brief that the *Trial Program* can reference these international examples and try to offer the users a greater flexibility in choosing the most suitable programs for themselves.

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