

# Proposal of Energy Saving Fund – Feedback of the Public Consultancy on the Future Development of the Electricity Market in 2015

From the document, we can find six questions and this feedback focuses on question 5 only, which is quoted below

“What specific requirements would you suggest to be set out in the future contractual arrangement (if any) between the Government and the power companies to encourage the promotion of demand side management and renewable energy by the power companies?”

## Background

According to the consultation document, there will not be a deregulation of electricity market in the near future and the existing Scheme of Control Agreements (SCA) will be used for ten more years. Based on this background, we would like to propose to establish Energy Saving Funds (ESFs) in the new SCAs.

Energy Saving Funds (ESMFs) in the new SCAs

ESFs are proposed for targeting X% (like 1%) reduction in total energy consumption. ESFs will be developed for each utility company. That is, there will be two ESFs in Hong Kong for two utility companies. This is a kind of **MATCHING** fund and the corresponding proportion is open for discussions.

Who contributes the ESFs: Government AND large-scale electricity consumers

For example, Government can contribute Y% of the Funding amount annually, or a lump sum for the whole period of SCA. On top of paying the tariff based on the SCA calculation, large-scale electricity consumers need to make (1-Y%) contribution to the ESF account, like 0.02 HK\$/kWh. [*Similar to the arrangement of Platform Screen Door extra fee*]

Rationale: Large-scale electricity consumers have social responsibilities to reduce energy consumption and therefore provide “greener society”. Government has a role to promote energy savings.

Who can apply these ESFs: only the large-scale electricity consumers or all end users.

Rationale: Besides Government, large-scale consumers are the only contributors to the fund, it is expected that they will apply this fund to help them to get back their contribution from the ESF and save money from using lesser electricity. This arrangement will introduce and enhance the competition among the large-scale electricity consumers in the context of energy savings. That is, only contributors can apply (or make use of) these ESFs.

Fairness: if all end users can apply the ESFs, which incurs fairness problem to the large-scale consumers, only large-scale consumers can apply the ESFs.

Who manage the ESFs: an approval committee consists of officers from Government, corresponding utility companies.

Rationale: It is reasonable that Government should be in the approval committee due to its contribution to ESFs. Concerning utility companies, it is because of the reward/penalty scheme to the utility companies described below.

Reward/penalty scheme to utility companies:

(1) REWARD: if the reduction target X% (like 1%) can meet, utility company can share the 50% of the fuel cost savings of these X% generation, assuming natural gas would be the key fuel.

(2) PENALTY: however, if the target cannot meet, power companies need to pay the expected fuel cost savings as penalty.

(3) This arrangement motivates utility companies to select good quality energy saving projects.

How to calculate and keep this reward/penalty money:

- (1) It must be separated from ESFs, otherwise, it would destroy the competition environment among the large-scale electricity consumers. Since utility companies are not the contributors, they have no right to make use of these funds.
- (2) According to existing SCA arrangement, there is a fuel clause account using for adjusting the fuel cost annually.
- (3) Reward/penalty money can be managed in this account. Every year, we can calculate the pre-saving money (Z) of using less fuel and collect this money from the utility as usual. If REWARD scenario, utility companies can get 50% of Z from the fuel clause account. If PENALTY scenario, utility companies pay 50% of Z to the fuel clause account and 50% of Z to the ESFs.
- (4) Rationale: in REWARD scenario, utility companies actually help HK saving fuel costs, and they deserve to get part of the savings. In PENALTY scenario, the approval projects by utility companies cannot help HK to achieve the target, which can imply the performance of utility companies in energy savings. This 50% of penalty money can increase the ESFs for the next year to enhance the further energy saving initiatives.

Remarks:

**To large-scale electricity consumers**, they are motivated to apply ESF under a competition environment and it is possible that they can get more than what they contributed.

**To Government**, it uses 25% resource to achieve 100 % outcome with the contribution of large-scale electricity consumers and utility companies.

**To utility companies**: they also join the game under reward/penalty scheme in order to help Hong Kong save energy.

**To Hong Kong society**: fuel cost savings with X% electricity consumption.

**To energy saving industries**: this fund would become a key driving force for the growth of these industries and create the corresponding job opportunities. ← **Green GDP**.

**The attached figure is an example of 1% electricity reduction with using the figures in 2013-14.**

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**Management**

**480  
millions**

**92.5 millions**  
Reward if meeting  
the target

**185 millions**  
Penalty if not  
meeting the target

**ESF**  
**960 millions**

**92.5**

**92.5 millions**  
To Fuel Clause

**Large-scale  
elec.**



**\$0.024/kWh**

**Energy saving  
service providers**

**Approved projects with  
50% matching fund**



**Large-scale elec.**

