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## **MAURITIUS A SUSTAINABLE ISLAND - DEVELOPMENT OF FEED-IN-TARIFFS AND INCENTIVE SCHEMES FOR SMALL SCALE DISTRIBUTED GENERATORS IN MAURITIUS**

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### **OVERVIEW**

The Government of Mauritius (GoM) has a long term policy of transforming Mauritius to a sustainable Island. This policy includes reducing the country's dependence on oil and democratisation of energy supply.

A step in this direction is to devolve upon citizens the ability to produce electricity via small-scale distributed generation (SSDG), i.e. wind, photovoltaic and hydro installations below 50 kW.

Since SSDG are more expensive per installed capacity than existing much larger power plants, subsidies are needed to provide incentives to small independent power producers (SIPP), households and to firms to invest in SSDG's.

The suggested paper presents the context, the theoretical considerations and the proposed incentive schemes to provide for electricity production via SSDG.

Furthermore, the paper gives an update on the implementation of the proposed legislative incentives in Mauritius and the expected results measured in installed capacity of SSDG.

### **METHOD**

The method of the paper (the project) is organised logically in the following steps, ref table 1 below.

Table 1. Overview over the questions to be answered and method

<b>Question to be answered</b>	<b>Method</b>
Which incentive schemes are used in EU-countries and developing countries?	Case studies / review of incentive schemes, investment subsidies and feed-in-tariffs (FIT), empirical and theoretical evidence.
What is the cost of the present power production?	Analysis of the cost of the present production cost of the incumbent producer, the Central Electricity Board (CEB).
What is the power production cost of SSDG (wind, photovoltaic and hydro below 50 kW)?	Literature review and interviews about investment cost and expected power production with the three different SSDG-technologies at various sites in Mauritius.
Which incentive scheme could be suggested based on this study?	With an assessment of the necessary subsidy level (i.e. the requested internal rate of return), distributional considerations concerning the localisation of the SSDG across the island, the necessary subsidies (FIT) can be assessed.  A model to facilitate the calculations is developed

## **RESULTS**

The results comprise:

An overview of the incentive schemes for SSDG used in EU- and developing countries;

The present production cost of the incumbent power producers in Mauritius including consideration of the externalities of the power production.

The assessed investment cost per kW, the foreseen kWh production and the kWh production cost of the SSDG in question; and

The subsidies suggested to the GoM and the implementation of the scheme.

Finally the concrete results and the final outcome in Mauritius will be addressed.

## **CONCLUSION**

The conclusion will address whether the proposed incentive schemes are giving the expected results and more broadly if a policy like “Mauritius a Sustainable Island” as concretely implemented in relation to the deployment of SSDG seems viable in a small scale developing country like Mauritius