**SWITCHING FROM FOSSIL FUEL SUBSIDY TO RENEWABLE ELECTRICITY DEVELOPMENT: CASE OF TUNISIA**

Rafik Missaoui, Manager Director of ALCOR, Tunisia

### **Overview**

The energy and particularly electricity is still highly subsidized in most developing countries, even energy importer ones, which is likely to reduce the sustainability of their electricity sector.

These subsidies imply major constraints for these countries, in several terms:

* Pressure on public finances, especially with the increasing trends of international fuel prices
* Increasing gap in the trade balance due to the high energy bill of the countries
* Inefficiency of the use of energy and the non-development of clean technology market such as renewable energy and energy efficiency.

On the social side, these subsidies is no longer justifiable because many studies has shown a targeting problem, since the largest share of energy subsidies goes to richest population instead of poor classes.

In these countries, there is a need for urgent tariff reform that aims to direct the subsidies to the poorest social classes and phased out for the wealthier classes. On the short term, this can be done by relevant tariff structuring that targets the real poor households with specific electricity prices. The tariff reform should be also accompanied by a progressive partly transfer of the fossil fuel subsidies for electricity generation to renewable energies incentives. Most of them are already competitive to the conventional power generation. Feed-in tariff and net metering systems can be good mechanism to make this subsidy transfer in an efficient and transparent way.

### **Method**

In this paper it is proposed to assess the impact of the conventional electricity generation subsidy on the deployment of renewables in the case of Tunisia, through the analysis of the competitiveness of these technologies compared with the conventional electricity generation.

This will be done taking in account scenarios of international fuel price evolution and learning curve for renewable technologies.

The competiveness will be assessed by comparing the following two costs:

* The fuel marginal cost of conventional kWh taking into account the real cost of fuel supply.
* The cost of the kWh produced by renewable energy integrating the margin of private producers (required feed in tariff), based on the levelized cost method.

### **Results**

Then the paper will analyse in what extended it is possible to switch from fossil fuel subsidy to renewable electricity development while conserving a win win situation between the main stakeholders, namely the consumer, the State, the electricity company and the Nation.

The study made by IRENA and IISD in 2014 on energy pricing and renewable energy deployment in Tunisia, has shown that the fossil fuel subsidy for electricity generation can be partly transferred to wind and solar PV technology incentive, creating a win – win situation between stakeholders that can enable RE market sustainable development.

### **References**

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