

Excerpt from “Evaluation of different feed-in tariff design options - Best practice paper for the International Feed-In Cooperation”, a research project funded by the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), 3rd edition, update December 2010, pp.53-54, http://www.feed-in-cooperation.org/wDefault_7/content/research/index.php

Evaluation of the premium tariff versus fixed tariff

The premium option shows a higher compatibility with the liberalised electricity markets than fixed feed-in tariffs. This involves a better and more efficient assignment of the balancing costs and the incentive for better forecasts in case of fluctuating renewables. It allows a higher demand orientation of renewable electricity generation and therefore shows better properties, when integrating large RES shares into an electricity system. **Depending on the detailed design of the premium option the risk for the RES-E producers can be larger.** This is particularly the case for a fixed premium, where the premium does not depend on the average electricity price at the power market. In case of the sliding premium (as implemented in the Netherlands), where the premium is a function of the average electricity price, the investment risk does not necessarily increase. **In case of a fixed premium one often observes a higher support level, which then implies higher costs for the electricity consumers.** As said above the most promising option to avoid extra costs for electricity consumers could be a premium varying with the electricity market price, as applied in the Netherlands or a top limit for the overall remuneration paid in the case of the premium option. A bottom limit could be introduced as well, in order to compensate falling electricity prices. Such a cap and floor system has been introduced in Spain. Generally it has to be said that premium feed-in design options are an innovative instrument to combine all major advantages of feed-in systems with a higher demand orientation of RES generation and the need for a higher market compatibility of renewable generation.

Since the low-risk investment conditions of a fixed tariff are very important for many independent power producers and lead to a reduction of the cost of capital **it is advisable to implement premium tariffs as an optional variant besides the fixed tariff options** (as done in Spain). This reduces the capital costs for all investors (also for the ones operating under the premium option) as the optional design combines the advantaged of fixed and premium feed-in tariffs.

Evaluation of a premium tariff design compared to a fixed tariff design

Advantages	Disadvantages
<ul style="list-style-type: none">- Higher compatibility with electricity markets- More demand orientated- Provides an incentive to feed electricity into the grid, in times of peak demand	<ul style="list-style-type: none">- In case of a fixed premium investment security may be reduced (this problem is avoided with a premium depending on the electricity price)- Operators of wind and solar power plants can hardly influence the time of electricity generation and therefore have less chances of feeding electricity into the grid at peak demand