

2nd Workshop of the International Feed-in Cooperation
Berlin, December 15 and 16, 2005
Draft Agenda

Venue: Conference-Building, Reinhardtstraße 14, 10117 Berlin

Dec. 15		Moderator:
9.00-9.15	Welcome by Hendrik Vygen (Director General for Climate Protection, Renewable Energy and International Affairs, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)	Dr. Harald Kohl, BMU
9.15-9.30	Welcome by Francisco Maciá Tomás, Subdirector General de Planificación Energética, Secretaría General de Energía Ministerio de Industria, Turismo y Comercio	
9.30-9.45	Key note by Beatriz Yordi (European Commission, DG TREN)	
9.45-10.05	Experience with the feed-in system in Spain: Isabel Blanco, Institute for Energy Diversification and Saving (IDAE)	
10.05-10.25	Experience with the feed-in system in Germany: Uwe Büsgen, BMU	
10.25-10.45	Discussion	
10.45-11.15	Coffee	
11.15-12.30	Round table on experiences of other feed-in countries	Martin Schöpe, BMU
12.30-14.00	Lunch	
Session 1	The procedure to determine the level of tariffs, used basis and data	Uwe Büsgen, BMU
14.00-15.00	Presentations (in particular Spain and Germany) For Spain: Mr. Luis Ciro PEREZ (senior officer at IDAE: Institute for the Diversification and Saving of Energy, <i>Instituto para la Diversificación y Ahorro de la Energía</i>) For Germany: G. Gerdes (Deutsche Windguard)	
15.00-15.45	Discussion	
15.45-16.00	Coffee	

Session 2	Ways to handle the integration of RE-power (in particular wind-power) into the grid	Sonja Hemke, BMU
16.00-17.00	Presentations (in particular Spain and Germany) For Spain: Mr. Juan Francisco ALONSO (head of the access to the grid department, REE: Spanish Electric Network, Red Eléctrica de España) For Germany: Prof. J. Schmid (ISET)	
17.00-17.45	Discussion	
19.00-	Dinner	
Dec. 16		
Session 3	Prediction of wind power and reducing uncertainty for grid operator	Cornelia Viertl, BMU
9.00-9.40	Presentations (in particular Spain and Germany) For Spain: Mr. Alberto CEÑA (technical director at AEE: Spanish Wind Association, Asociación Empresarial Eólica) For Germany: Mr. Lange / Mr. Focken (energy and meteo)	
9.40-10.00	Discussion	
Session 4	How to accommodate the costs for the electricity intensive industry	Dr. Volker Oschmann, BMU
10.00-10.40	Presentations (in particular Spain and Germany) For Spain: Mr. Luis Jesús SANCHEZ (sub-director of electricity at CNE: National Commission of Energy, Comisión Nacional de Energía). For Germany: Prof. U. Leprich (IZES)	
10.40-11.00	Discussion	
11.00-11.30	Coffee	
11.30-12.15	Next steps of the Feed-in Cooperation For Spain: Isabel Blanco, Institute for Energy Diversification and Saving (IDAE) For Germany: Uwe Büsgen, BMU Discussion	Dr. Volker Oschmann, BMU
12.15-12.30	Conclusions by Reinhard Kaiser, Deputy Director General, Directorate Z III "climate protection, renewable energy"	
13.00-14.30	Lunch	
<i>afternoon</i>	Possibility to visit the "Reichstagsgebäude" (Building of the Fed. Parliament)	

Description to the subjects of Session 1 - 4

Session 1: The procedure to determine the level of tariffs, used basis and data

The level of feed-in tariffs (FIT) set by the federal (or provincial) government of a country is generally based on the economic assessment of the existing potentials for renewable electricity. The tariff usually takes the form of either a total price for RES-E production, or an additional premium on top of the electricity market price paid to RES-E producers. Besides the level of the tariff its guaranteed duration represents an important parameter for an appraisal of the actual financial incentive. FITs allow technology-specific promotion as well as an acknowledgement of future cost-reductions by implementing decreasing tariffs. Furthermore different cost bands of a particular technology can be supported in a bandspecific manner by applying a stepped feed-in tariff design. Generally the level of tariffs should be set in accordance with the marginal generation costs of a technology. Therefore a thorough assessment of the technology specific generation costs is the key basis for the determination of the tariff level. Generation costs are typically composed of fix and variable costs as well as of the possible cost benefits in case of heat production by a CHP plant. Generally the feed-in tariffs for a technology should be based on the assessment of the various cost components for a technology. This should also consider the profit margins requested by potential investors. detailed overview of the analysis performed in Germany and Spain in order to determine the tariffs including the data basis used shall be presented and discussed.

Session 2: Ways to handle the integration of RE-power (in particular wind-power) into the grid

The decentralised and partially intermittent nature of the electricity produced by renewable energies causes additional requirements to the electricity system. Different aspects should be considered in this respect: grid connection and extension as well as system operation. Grid connection and grid extension: In case of RES-E generation technologies being mainly characterised by the local availability of resources such as wind and small-hydro-power grid connection often is a significant economic barrier. Therefore, a compromise between best sites and proper grid conditions appears. In the context of large-scale wind integration grid extension measures can be necessary. The share of cost caused by wind integration into the grid compared to other grid infrastructure investments as well as the socialisation by the grid tariffs has to be discussed. System operation: The influence of large scale wind generation on short-term balancing of the system and the long-term capacity contribution of wind to system security is discussed ambiguously in practice. In this context there are many open questions whether or not the corresponding markets (balancing markets, wholesale markets) send out the right price signals and no market interference is necessary. In this respect the question arises whether a better compatibility with power markets can be facilitated by a proper design of feed-in systems. Experiences and perspectives shall be presented and discussed.

Session 3: Prediction of wind power and reducing uncertainty for grid operator

In recent years important progress has been made with tools to forecast electricity output from wind farms. It has generally been found that over short time frames, and with good data about the historic wind regime at a site, it is possible to predict wind farm output using a correlation with forecasted meteorological data. Such forecasts are derived from sophisticated meteorological measurements and weather modelling.

Although these tools are still in a relatively early stage of development, it is now possible to provide vital forecasting information. This information can then be used by the system operator in balancing the generation with demand in their system, and significantly reduces the level of uncertainty to which wind generation has been historically attributed. An overview of the systems used and the results of R&D-projects should be presented and discussed.

Session 4: How to accommodate the costs for the electricity intensive industry

Since most RES-E technologies are currently not competitive with conventional power a reasonable burden sharing of the additional costs caused by RES-E generation is necessary. Different consumer groups are affected differently by the increased power price due to the RES-E generation. Especially for the electricity intensive industry the international competitiveness can be influenced by the corresponding cost premium. Therefore the design of feed in system needs to be carefully adjusted to the premium to power price that can be bared by the energy intensive industry in order maintain their competitiveness. Ways to handle the challenge to adjust the burden sharing between the different consumer groups and experiences should be presented and discussed.