

# Supportive Policy Framework for Renewable Energy – Experiences for the design of Feed in-Tariff Systems

6 th March 2012, Tokyo

# Priority access to the grid

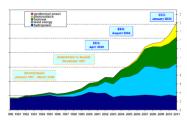
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#### What does priority access mean?

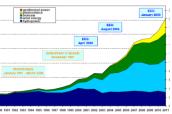


- The grid operator is obliged to connect the renewable energy plant to the grid
  - immediately
  - at the nearest grid junction point of the adequate voltage level
  - alternatively at another grid junction point which is economically and technically superior to the nearest one
- The obligation is effective even if the purchase requires an improvement, reinforcement or extension of the grid. The grid operator has to take the necessary action without any delay.
- The grid operator has to deliver instantaneously a schedule to the applicant for feed-in, giving proper information on the application flow. It also has to indicate which data the applicant has to provide to the grid operator.
- Having received these data, the grid operator has to deliver instantaneously but latest within 8 weeks all necessary information including a detailed estimation of grid connecting costs.





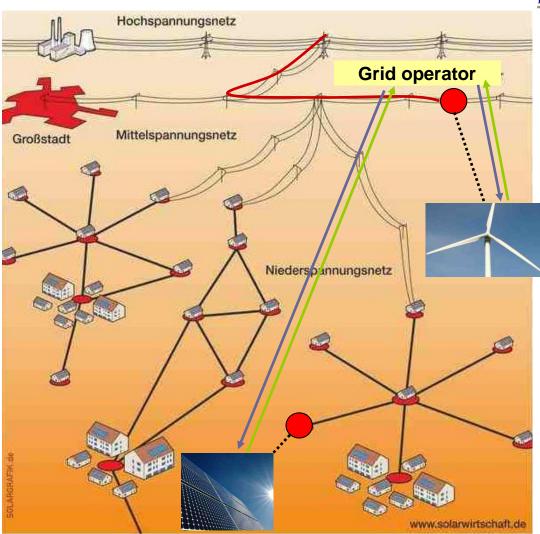
#### **Process of grid connection**



grid junction point

grid connection (including the power line from the plant to the grid junction point, converter) (payable by the applicant)

grid reinforcement (payable by the grid operator)



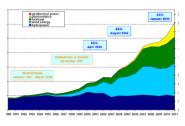
application for feed-in, additional data in a second step

Information on the grid junction point, additional information, cost estimation



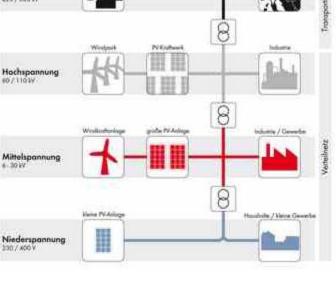


#### **Technical requirements**



The RES plants have to comply with the minimum requirements for grid connection.

- Different grid codes exist, depending on the voltage level.
- In case of an endangered stability of the grid, the grid operator is allowed to switch off the RES plants. Therefore they have to be equipped with a technical device which gives the grid operator the operational access to the plant.
- In case of an endangered stability of the grid, the RES plants have to help to stabilize it. Hence their converters have to feature the necessary quality. For wind energy and photovoltaics plants this is determined directly in the Renewable Energy Sources Act.
- As long as these requirements are not met, the RES plant operator cannot claim for obligational power purchase, feed-in payment etc.

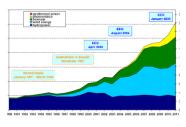


öchstspannung





### **Statutory power purchase**



- The grid operator is obliged by law to always purchase all the power produced by the RES plants connected to the grid and pay the corresponding feed-in tariff for each kilowatt hour produced.
- In case of the danger of a grid failure, the grid operator is allowed to switch off the RES plants. If he does that, he has to compensate the owner of RES plant for his lost remuneration.

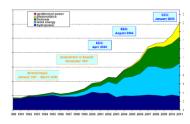


Between the grid operator and the plant operator a contractual relationship under civil law evolves, no matter if they sign a feed-in treaty. The latter is not explicity required by law.





## Three pillars of succes



Dynamic deployment of RES

Priority access to the grid

Statutory power purchase

long lasting Feedin tariff

Stable, reliable conditions for investors

