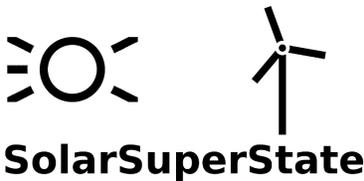


SolarSuperState Prize 2014



1. SolarSuperState Prize 2014 category WIND for Denmark



In the year 1891, the Danish government funded the first Danish wind mill for electricity production in Askov. The project was initiated by scientist Poul la Cour. This was the starting point of the Danish wind energy technology development. Another milestone in the support of the Danish government for wind energy was the funding of the 200 Kilowatt Gedser wind turbine. Johannes Juul engineered this wind turbine which started operation in 1957.

The Danish feed-in-tariff law for wind energy of the year 1992 was the foundation of the rapid domestic market enlargement for wind turbines in Denmark. The law guaranteed grid access and a “fair price” for wind power at 85 % of the retail electricity rate. Furthermore, the Danish government obliged the Danish municipalities to identify suitable sites for wind turbines and to organize public hearings before officially fixing wind turbine sites. The environment minister (later also energy minister) Svend Auken was the key person in the Danish government promoting wind energy between 1992 and 2000. In the year 2000, the annual additions of wind turbines reached a preliminary peak with some 120 Watt per capita. At the end of the year 2000, the cumulative installed wind power was some 440 Watt per capita. By 2001, wind turbine cooperatives, including more than 100 000 families, had installed 86 % of all turbines in Denmark. In the year 2013, the net annual additions of wind energy reached almost the level of the year 2000 with now some 117 Watt per capita.

In the year 2013, Denmark still ranks number one in the world with a cumulative installed wind power of some 840 Watt per capita.

3. SolarSuperState Prize 2014 category WIND for Sweden



In the year 2006, the Swedish parliament made a law with the obligation for almost all electricity users to buy a certain part of the new renewable energy electricity to be produced during the next 10 years.

Since 2009, Sweden shortened the permitting procedure for new wind turbines. The permitting process is since then based only on the Environmental Code instead of several other regulations.

The Swedish Energy Agency has pointed out suitable areas of national interest for wind energy production. The counties, local authorities and the Swedish Energy Agency control the planning of the municipalities in order to get enough sites for new wind turbines.

At the end of the year 2013, Sweden ranks third in the world with a cumulative installed wind power of some 460 Watt per capita.

1. SolarSuperState Prize 2014 category SOLAR for Germany



In 1989, the Aachen based non-profit non-governmental organization Solarenergie Foerderverein Deutschland e. V. suggested a “Cost Covering Feed-in Tariff” for solar electricity (“kostendeckende Einspeiseverguetung fuer Solarstrom”) at the level of the federal state. The basic outline included:

- 1) priority access to the grid
- 2) feed-in compensation level based on a technically optimized installation of the same year of manufacture and on economic operation of this installation including an appropriate profit
- 3) compensation period 20 years
- 4) coverage of the additional costs by the electricity customers

For the reason 4, such a Cost Covering Feed-in Tariff is no subsidy.

In 1990, a feed-in tariff law for renewable electricity (Stromeinspeisungsgesetz) was passed by the federal parliament. It came into force in 1991. This feed-in tariff law guaranteed for solar electricity grid access and a feed-in tariff of 90 % of the average electricity retail price (some 8 Euro cents per Kilowatthour at that time). This was not sufficient for photovoltaics but another support for feed-in tariffs at city level.

In 2000, the members of the German parliament Hans-Josef Fell, Michele Hustedt, Hermann Scheer and Dietmar Schuetz initiated a national cost-covering feed-in-tariff law – Renewable Energy Act (Erneuerbare-Energien-Gesetz, EEG). The tariff for solar electricity was limited to 99 Pfennig (some 50 Euro cents) per Kilowatthour. This law triggered the rapid global photovoltaic market enlargement in the first decade of this millenium. In 2013, Germany ranks number one in the world with a cumulative installed photovoltaic power of some 450 Watt per capita.

2. SolarSuperState Prize 2014 category SOLAR for Liechtenstein



In 2007, the Deputy Prime Minister at that time, Klaus Tschuetscher, initiated the first feed-in tariff law of the country. This feed-in tariff law for renewable electricity (Energieeffizienzgesetz, EEG) had a validity period of only five years. The validity period of the law regarding the feed-in tariff ended in the year 2013. This outdated law guaranteed for photovoltaic electricity producers

- 1) priority access to the grid
- 2) feed-in compensation for 10 years
- 3) subsidies for a photovoltaic installation

Often, the municipalities added more subsidies for photovoltaic installations. The additional costs for the feed-in compensation were paid by the electricity customers.

Currently, the parliament plans to add a second five year period for a feed-in tariff with a validity period from 2013 to 2018.

In July 2014, the national electricity utility company supports the government in paying voluntarily a preliminary feed-in tariff.

Several photovoltaic electricity producers consume some of the produced electricity directly in their buildings. This is an additional driving force for the continued photovoltaic deployment in Liechtenstein.

At the end of the year 2013, Liechtenstein ranks number two in the world with a cumulative installed photovoltaic power of some 410 Watt per capita.

3. SolarSuperState Prize 2014 category SOLAR for Italy



The Italian feed-in tariff regulation with the name "Conto Energia" was based on three laws / regulations

- 1) Decreto Legislativo 387 passed by the parliament in 2003
- 2) Decreto Ministeriale from 28 July 2005
- 3) Delibra 188 from 14 September 2005

The costs were and are payed by the consumers of electricity via the mandatory tariff levy A3, which exists since 1991 in order to finance special electricity production.

In 2005, the first photovoltaic installation was registered under the new feed-in tariff scheme "Primo Conto Energia". After reaching the cumulative power limits of one Conto Energia several times a new Conto Energia was launched by the government. In 2011, the first installation was registered under the up to date last "Quinto Conto Energia". In total, there exist five Conto Energia (Primo, Secondo, Terzo, Quarto, Quinto).

The original regulations guaranteed a feed-in tariff for 20 years.

At the end of the year 2013, Italy ranks number three in the world with a cumulative installed photovoltaic power of some 290 Watt per capita.