

WORKSHOP
“Photovoltaics systems in family houses“
26th September 2008
“19th International Building Trade Fair”
Prague Exhibition Centre Letňany,
Prague, Czech Republic

Report on the organization and performance of the workshop

The workshop was organized as an attendant program as a part of Prague Exhibition Centre Letňany - Forarch 2008.

The target group included:

- ◆ Owners of family houses;
- ◆ Local actors – mayors and representatives of municipalities;
- ◆ Users of systems on RES;
- ◆ Representatives of utilities;
- ◆ Representatives of installers;
- ◆ Representative from Energy Regulatory office;
- ◆ Private companies.

The approximate number of participants is 120 people.

The main targets of the workshop were to inform owners of family houses about the Technical possibilities, legislative conditions and economic conditions of the implementation of small RES (mostly PV systems) and CHP systems for electricity and heat production. Therefore, speakers from relevant institution (Energy Regulatory office, ČEZ – Czech distribution company and PV companies) were invited to give the relevant information to the attendees. The focus was to afford integrated information for interested homeowners in the Czech Republic.

The agenda for September 26

10:30	Welcome, Introduction project „PERCH“ Mr. David Pech, CityPlan
10:45	History and development PV systems in the world, kind of using, principle of PV systems, solar conditions in Czech Republic Mr. Petr Klimek, Czech RE Agency
11:15	Purchase prizes, green bonuses, licence for production electricity from „RES“ Mr. Rostislav Krejcar, Energy Regulatory Office
11:45	Technical and administrative conditions for connections to grid Mr. Martin Němeček, ČEZ Distribuce, a.s.
12:15	Lunch
13:00	Technical and administrative preparation for realization PV systems in family houses Mr. Tomáš Bergman, Solar systems, s r.o.
13:45	Investments and economic factors of PV systems in the Czech Republic Mr. Vladimír Matajka, Solarenavi, s r.o.
14:30	Photovoltaics shingles, folio – introduction this technology Mr. Ušák, Tegosolar s r.o.
15:00	Examples PV systems, experiences from realization and using PV system in family house – „homeowners“ Mr. Palla, homeowner and owner of roof PV system
15:30 – 16:00	Discussion
16:00	Summary, end

Photos from workshop



Results and Discussion

Carried national workshop afford to representatives from homeowners, utilities and installers summarize information regarding all aspects, which is important to know before own decision to realized small RES system to house. The workshop was more specialized for small PV systems for family houses (installations on roofs). We can expect, that rightly small PV system will be the most exploited kind of “small” RES in the Czech Republic in the near future. The one of the reason is that “small” PV system can be used in the majority cases by contract to other kind of RES.

From the participated presentations and the discussions resulting the following main headlines:

1. The production of electricity from “small” RES is relatively new for homeowners and the electricity network in the Czech Republic.
2. With the new laws, decrees and legislative documents that have been adopted a harmonization with the European legislation is achieved. The major documents are:
 - ◆ The Energy law 458/2000 Sb. (Energy act no. 458 of 28th November 2000)
 - ◆ Support for the electricity production from renewable energy source (Act no. 180 of 31 March 2005)
 - ◆ Energy Management Act (Act no 406/2000)
 - ◆ Public Notice No. 51/2006 Coll., conditions for connection to grids.
 - ◆ Price decisions for each year – Energy regulatory office.
 - ◆ Local distribution system grid code – business measurement.
 - ◆ Operation rules distributions systems - business measurement
3. The high purchase prices of electricity produced from first off PV systems lead to the rapid development of small and large PV systems in Czech Republic.
4. Czech Energy Regulator Edict (secondary legislation to primary Act on the Promotion of act 180/2005) includes important statements:

In 2008:

- ◆ There are feed-in tariffs and guaranted periods for different kind of RES.

Feed-in tariff for PV 0,54 €/kWh (13,46 Kč/kW)

Green bonuses for PV . 0,51 €/kWh (12,65 Kč/kW)

Feed-in tariff and green bonuses will be for already installed systems yearly increased by PPI index (2-4%). In 2008 is extension of the feed-in tariffs guarantee, e.g. PV from 15 to **20 years**.

In 2009 will be expected prices probably lower than in 2008:

Date of setting in operation	purchase price	Green bonus
	Kč/MWh (€/MWh)	Kč/MWh (€/MWh)
PV system realised after 1.1. 2009 to 10 kW	12 790 (512)	11 850 (474)
PV system realised after 1.1. 2009 above 10 kW	12 790 (512)	11 850 (474)

In 2009 will be two category differentiate according to installed capacity of PV system (limit will be 10 kW). In 2009 the purchase price and green bonuses will have the same size for both categories, but price will be different in next future years (higher size purchase price will be for installed capacity to 10 kW). The reason for decreasing purchase price and green bonuses is lower investment of PV system. (source: Energy regulatory office)

5. During first half year 2008 rapidly increased installed capacity in PV systems. At the beginning 2008 was installed capacity in PV systems in the Czech Republic about 5,5 MW, but expected installed capacity at the end 2008 is 20 MW.
6. People – homeowners, entrepreneurs have started to interest for PV systems. One of the main reason, why people started to realize PV systems on roofs is favourable purchase price and guarantee long time for purchase price (20 years). The size of purchase price depends on date of setting to operations. People started to see in RES and specially PV system capital opportunity. Average repayment time for PV system is in the Czech Republic around 10 years. Repayment time depends on locality and method of investment. For homeowners is preferable system – green bonuses.
7. Each future owner needs licence for production electricity from RES. For small installed capacity to 20 kW isn't necessarily to have professional qualifications. The obtaining licence is easier for small installed capacity. During workshop was discussed details with regard to licence.
8. Last topics, which were discussed, were conditions and applications for connection to grid. DSO (distribution system operator) is obliged to give formulation to 30 days after receipt of applications form.

Interested parties obtained a lot of information about PV system and next small RES in the Czech Republic.

Dissemination: website www.cityplan.cz, where were located every presentations (pdf. foulders) from all participants.