Belgische federatie van PV-bedrijven
Federation belge des entreprises PV
Belgischer Verband der PV Unternehmen
Belgian PV companies federation

BelPV

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DOCUMENT	Flemish PV market	**Date**	12/05/2009

The PV Market in the Flemish Region

Status May 2009

This report gives an overview of the support mechanisms and market evolution in the Flemish Region. In the federal state of Belgium, renewable energy is a regional competence. Each of the three regions (Flemish region, Walloon region and Brussels Capital region) has drawn up its own support policy. On the federal level, tax stimuli are provided for renewable energy and energy savings.

1. Subsidy mechanisms

1.1 The green certificate system

Since 2006, the PV subsidy framework in the Flemish region has been modified from an investment subsidy to a production based subsidy mechanism, with guaranteed prices.

In the Flemish Region, a green certificate system has been in effect since 2002. It is a quota based support mechanism to promote power generation based on renewable energy sources. This is a two-pronged system. On the one hand producers of electricity based on renewable energy sources can receive green certificates. On the other hand there is a certificate obligation in place for power suppliers. They must submit a specific number of green certificates. This volume corresponds to a specific minimum share of total electricity they supply to their customers. In 2008 this share is fixed at 4,5% and it will increase to 6% by 2010.

For each amount of 1000 kWh produced by a renewable electricity installation, a green certificate is granted by the regional regulator VREG. This certificate can be sold on the green certificate market at a current market price of 110 euro/MWh (= 1000 kWh).

1.2 PV in the green certificate system

The Flemish electricity law sets a list of guaranteed minimum prices, differentiated by technology. For PV-systems, the minimum price is 450 euro per MWh or 45 eurocent/kWh, or 4 times the market price for green certificates. The minimum price for PV is guaranteed for a period of 20 years after the start up date of the PV system (e.g. if you install PV panels in August 2008, you will receive certificates at 450 euro/MWh until August 2028). Grid operators are obliged to buy these PV certificates from every investor (individual, public, company). This obligation can be fixed in a bilateral contract between the investor and the grid operator.

1.3 The future of the green certificates for PV

In March 2009, the Flemish governement has approved a modifation of the minimum prices starting from January 2010. The adapted legislation establishes a structural decrease of guaranteed minimum prices. The new certificat price for new PV-

systems installed from 1/1/2010 will be 350 euro/MWh. Existing PV-systems are entitled to the current tariff. The following years, the certificate price decreases with 20 euro per year (see fig.1), but only for newly installed systems. In combination with decreasing investment costs on the world market and the Flemish market, the PV sector expects the financial payback time to remain almost at the same level of 8 years.

2010	350€/MWh
2011	330€/MWh
2012	310€/MWh
2013	290€/MWh
2014	250€/MWh
2015	210€/MWh
2016	170€/MWh
2017	130€/MWh
2018	90€/MWh
2019	50€/MWh
2020	10€/MWh

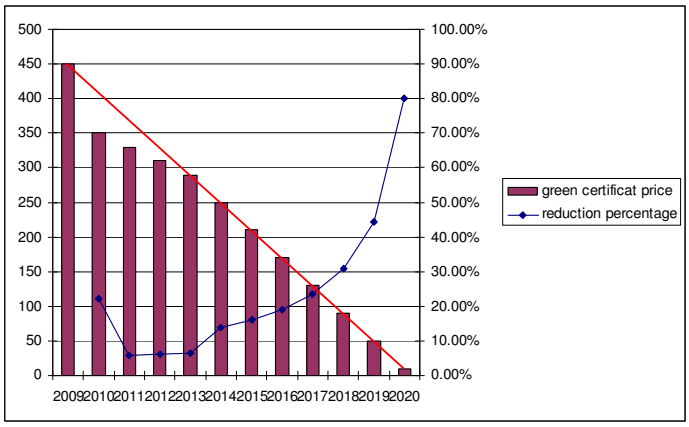


Fig. 1: Evolution of the guaranteed certificate price for PV in the Flemish region (2010 – 2020)

1.4 Netmetering

On top of the certificate system, which can be compared to a feed-in tarif, netmetering is allowed till 10 kW_{AC} (nominal power of the inverter). This means that the power production of the PV system avoids the purchase of conventional kWh from the supplier. Every kWh is accounted for by the kWh-meter which is allowed to turn back.

For larger PV systems above 10 kW_{AC}, it is obliged to install two separate kWh meters: one for the registration of the PV production (injection at low selling price, e.g. 5 cent/kWh) and one kWh meter for the registration of power consumption.

The total tariff for PV electricity (≤ 10 kW_{AC}) combining netmetering with green certificates (45 cent/kWh) is about 62 cent/kWh. This depends on the contract with the electricity supplier (the average residential tariff for households is 17 to 20 cent/kWh).

1.5 Fiscal support measures

For private persons, a tax deduction of 40% of the investment cost is granted by the federal government, with a cap of 3600 euro per year.

Private houses older than 5 year are also eligible for the decreased VAT tarif of 6% (instead of 21%) on PV investment costs.

Companies can deduct an additional 15,5% of the investment cost for PV from their profit before tax.

1.6 Investment subsidies

In several communities, a premium of 250 to 1000 euro per PV system is granted for private persons.

For companies, a system of “ecology premiums” is established (investment subsidy for ecological investments). For PV, the subsidy is 12% for SME’s and 6% of the total

investment cost. The AC production of the PV systems and thus the corresponding installed PV-capacity should be limited to the electricity consumption of the building on the roof of which the PV panels are installed. This is a new condition sinds Jan. 2009.

The agricultural sector is subject to a very favorable investment subsidy of 30% of total investment costs for PV.

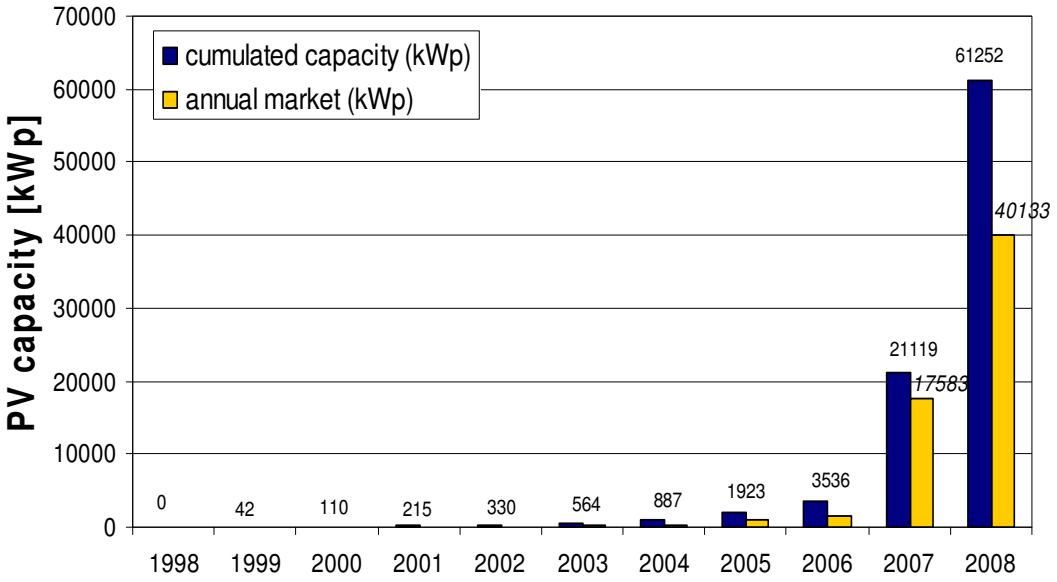
All these above mentioned subsidies can be cumulated: green certificates, netmetering, fiscal measures and investment subsidies, depending on the investor category.

2. Market evolution in the Flemish region

2.1 Market growth 1998 - 2008

The combination of the favorable subsidy mechanisms, with in particular the establishment of high guaranteed green certificate prices explains the huge market growth rate of installed PV power in the Flemish region since 2006, as shown in Figure 2.

Fig. 2: PV Market growth in the Flemish region 1998 - 2008.



By the end of 2007, 3000 PV systems with a cumulated capacity of 21 MWp were installed in the Flemish Region. By Dec. 2008, the total cumulative PV capacity already increased to 61 MWp, or 10 Wp per inhabitant.

By the end of May 2009, the total installed PV-capacity increased to 97 860 kWp, with a growth rate of more than 9000 kWp per month. The expected result by the end of 2009 is an increase by 90 MWp and a cumulated capacity of 150 MWp.

2.2 Market segments

The average PV system size is 5 kWp, but there are several market segments:

- private house owners mostly install standard PV systems on sloping roofs, with sizes from 2 to 4 kWp. There are around 18000 residential PV-systems in Flanders.

- on farm buildings, the size is 30 – 200 kWp on sloping roofs of sheds and stables.
- companies prefer larger installations on flat roofs (see list below in fig. 3). The share of these larger systems in the total installed PV capacity is around 30%.

Fig. 3: Top 10 of grid connected PV-systems in Flanders.

Owner	kWp	Location
Electrawinds Solar	1.308	Middelkerke
Reynaers Aluminium	584	Duffel
WDP	572	Grimbergen
MD Logistics	548	Lokeren
Freeze&Store NV	447	Zedelgem
Meli (Cenes)	400	Veurne
Polypane Glasindustrie	389	Temse
Somnis Bedding	375	Lokeren
Maasland Beheer en Logistiek NV	354	Opglabbeek
Glas Ceyssens	350	Heusden-Zolder

mediafin Bron: Vreg

The largest system (Electrawinds Solar, 1308 kWp) is ground based. At the moment, several similar ground mounted systems are under construction. The largest so far has a total planned capacity of 4,7 MWp ("Zonnecentrale" in Heusden Zolder).

3. The PV sector in Flanders

3.1 PV companies

There is only 1 solar cell manufacturer in the Flemish region: Photovoltech in Tienen, with an annual production capacity of 80 MWp, to be extended in the next years.

A growing number of small installation companies is active in the Flemish market. Around 15 larger companies combine activities of supply of PV modules and installation of PV systems; most of them have established their own dealer and installer network.

3.2 Sector federation BelPV

Established in March 2008, the new PV sector federation BelPV currently groups more than 120 PV companies and PV related organisations. BelPV is member of the Flemish umbrella organisation ODE-Vlaanderen vzw.

For more information:

- Sector federation BelPV: www.belpv.be
- ODE-Vlaanderen: www.ode.be