



Overview of European PV support schemes

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Disclaimer

The information provided in this document:

- has been collected by EPIA and reflects the most important support schemes used for PV in main EU countries. Please refer to the national legislation for more detailed and last updated information;
- is not exhaustive. Other EU countries offer support schemes for PV but are not referenced yet as the information has not been checked yet by EPIA.

Belgium I

2008		Brussels (B)	Wallonia (W)	Flanders (F)
Green certificates¹⁻²	Duration	10 years	15 years	20 years
	Up to 20 m ² (B) Up to 5 kWp (W) No size limitation (F)	0,15-0,65 €/kWh	0,45-0,63 €/kWh	0,45 €/ kWh
	Next 40 m ² (B) Next 5 kWp (W) No size limitation (F)	0,15-0,50 €/kWh	0,32-0,45 €/ kWh	
	All further m ² (B) 10-250 kWp (W) No size limitation (F)	0,15-0,32 €/ kWh	0,15-0,36 €/ kWh	
	All further kWp (W)		0,15 €/kWh	

Net metering

Possible for installations ≤ 10 kW

¹ Brussels and Wallonia Regions give several green certificates for the production of 1 MWh from PV. The value of each green certificate for Wallonia and Brussels Regions is around 90 €. The value of green certificate is guaranteed in Wallonia at 65 € for PV systems ≤ 10 kWp. Flanders gives 1 green certificate for each MWh and has set a fixed price for PV green certificates of 450 €. There is general guarantee of 15 c€/kWh at national level.

² Above the revenues of green certificates, the electricity can be consumed by the producer or sold to an electricity supplier.



Belgium II

	2008	Brussels (B)	Wallonia (W)	Flanders (F)
Investment grants	Private households	50% of investment (max 3 €/Wp)	20% of investment (max 3500 €)	
	Companies	Max 50% (max €200.000)	Max 50% of investment for SMEs, 20% for larger companies	20% / 10% of additional costs for SME / larger companies, max €1,5 Mio until resources are used up, currently 25 Mio. €
	Public buildings and non commercial entities		30% of investment for public and non commercial entities	
Tax credits		<ul style="list-style-type: none"> •Private: tax reduction of 40% of investment, max 3440 €/ residence (2008) •Companies: 13,5 % of installation cost deductible from profit tax 		



Bulgaria

2008	≤5 kWp	> 5 kWp
Feed-in tariff	0,782 BGN/kWh (~ 0,40 €/kWh)	0,718 BGN/kWh (~0,37 €/kWh)
Other information	Duration	25 years
	Tariff annual review	The tariff is regulate every year (by 31 st March) based on the following: <i>The FIT rate is derived from a portion of 80% of the average electricity price in the previous year. A variable surcharge is added that cannot be less than 95% of the previous year's level. That means the PV FIT could also increase as electricity prices have risen sharply in Bulgaria in the past years.</i>
	System Limit	10 MW plant *(any size for plants installed before 31st March 2009)
	Cap	There is no cap
	FIT legal duration until end of 2010	
Beneficial credit terms	Up to 20% of the project investment from the Bulgarian Energy Efficiency and Renewable Energy Credit Line (BEERECL)	



Czech Republic

2008	Fixed FIT	Green Bonus
Feed-in tariff and/or Green premium	0,512€/kWh (13,460 CZK/MWh)	0,481 €/kWh (12,650 CZK/MWh)
Tax credits	Income is exempt from taxes (Act No. 586/1992, on Income Tax)	
Investment subsidy	<p>Operators may receive subsidies under the European Structural Funds or the national programme.</p> <ul style="list-style-type: none"> ▪ State Environmental Fund. The national programme consists of several sub-programmes, implemented by the Ministry of Environment which allows for the promotion of all technologies used in the generation of renewable electricity. In 2007, only PV systems whose capacity did not exceed 5 kWp were promoted. ▪ ECO-ENERGY programme of the Operational Programme Enterprise and Innovations. It gives entrepreneurs the opportunity to apply for investment grants or low-interest loans for projects in the field of renewable energy within. This programme is funded by the ERDF (European Regional Development Fund). ▪ Operational Programme Environment. It allocates investment grants from the Cohesion Fund to projects in the field of renewable energy. 	
Other information	<p>The amount of prices for electricity from renewable sources and green bonuses are yearly determined by the Energy Regulatory office. The purchase prices are adjusted related to inflation. The FIT is granted for 20 years.</p> <p>Values at 16 December: 1.00 CZK=0.0380595 EUR 1.00 EUR=26.2620 CZK</p>	

2008		Continental France	Overseas regions + Corse
Feed-in Tariff	Granting period	20 years	
	Roof top and ground-mounted	0,32 €/kWh	0,42 €/kWh
	BIPV	0,57 €/kWh	0,57 €/kWh
	Cap	Installed peak capacity x 1500 full load hours Thereafter 0,05 €/kWh	Installed peak capacity x 1800 full load hours Thereafter 0,05 €/kWh
	Other information	Tariff annually revised on inflation	
Beneficial credit terms		The government does subsidize “green loans” through financial institutions. The exact terms of the green loans vary per institution but interest rates fall between 3 and 5% over 5-10 years (20 in some cases).	
Tax incentives	Tax credit	Private tax reduction of 50% on material costs at main residence, max 8.000 € for singles and 16.000 € for couples, valid until end of 2012. System size < 3 kWp (if > 3 kWp, not cumulative with FIT).	
	Reduced VAT	Reduced VAT (5,5%) on material and installation cost. Accommodation is more than 2-year and system size < 3 kWp.	

Feed-in Tariff	Rooftop								Ground-mounted installations	
	≤ 30 kW		> 30 kW		> 100 kW		> 1.000 kW		All sizes	
	Degression rate	ct/kWh	Degression rate	ct/kWh	Degression rate	ct/kWh	Degression rate	ct/kWh	Degression rate	ct/kWh
2008		46,75		44,48		43,99		43,99		35,49
2009	8%	43,01	8%	40,91	10%	39,58	25%	33,00	10%	31,94
2010	8%	39,57	8%	37,64	10%	35,62	10%	29,70	10%	28,75
2011	9%	36,01	9%	34,25	9%	32,42	9%	27,03	9%	26,16

NB: without adjustments to the sliding scale

FIT are granted for 20 years.

If the growth of the PV market (new installations) in a year is stronger or weaker than the defined growth corridor, the degression in the following year will increase or decrease a percentage point respectively.

	Degression	2009	2010	2011
Upper limit in MWp	Above: +1%	1500	1700	1900
Lower limit in MWp	Below: -1%	100	1100	1200



Germany II

	Further support programs
Tax credits	<ul style="list-style-type: none"> • Investment costs for commercial systems (incl. Planning and installation) can be depreciated over a 20 year period and other costs can be considered as operations cost • Commercial systems are VAT exempted (VAT is at 19% in Germany) • In exceptional cases for some commercial systems which operate closely to producing or manufacturing facilities 12,5-27,5 % of investment can be claimed as tax credit
Beneficial credit terms	<ul style="list-style-type: none"> • KFW Program “Solarstrom Erzeugen” (No. 140) for private investors: Up to 100% invest, max €50.000, up to 10 years with 1-2 years free of redemption or up to 20 years with up to 3 years free of redemption at nominal interest rates of 4,15-4,45% depending on duration, except investors under direct supervision of local authorities • KFW “ERP-Umwelt- und Energiesparprogramm” for commercial investors: 50% for SMEs, other companies up to 35% of max. €500.000 invest (in old federal states) alternatively € 1 Mio. Invest (in new federal states), duration 10 years with 2 years free of redemption (in old federal states) alternatively 15 years with 5 years free of redemption , nominal interest rates between 4-7% (depending on location, duration and credit risk evaluation) • “KFW Umweltprogramm” for commercial investors: 75% of invest of max €10 mio. per Installation 96% net payment, up to 20 years duration, with up to 3 years free of redemption, nominal interest rates between 4-7,72%
Investment grant	Some regional programs exist



Greece

2008		Mainland	Islands
Feed-in Tariff	<100 kWp	€ct 45,28 /kWh	€ct 50,28 /kWh
	> 100 kWp	€ct 40,28 /kWh	€ct 45,28 /kWh
Tax credits		Income tax reduction by 20% of the installation costs, max €700,- on-grid as well as off-grid systems	
Beneficial credit terms		Interest rate support of 4% for credits of €10.000 – 350.000, duration until end of 2008	
Investment grant		20-40% of system costs depending on region and type of company	
Other information		<p>FIT payment duration fix for 10 years, extension of further 10 years possible</p> <p>Installations of max. 150 kWp on own ground do not require an operating license.</p> <p>The new proposal which was submitted to the parliament in November, foresees new Feed-in-Tariff which will be guaranteed for 20 years and the degression rate will be fixed and known for 5 years.</p>	

Italy I

2008		BIPV	BAPV	Non integrated
Feed-in tariff	1 - 3 kWp	0,49 €/kWh	0,44 €/kWh	0,40 €/kWh
	>3 – 20 kWp	0,46 €/kWh	0,42 €/kWh	0,38 €/kWh
	> 20 kWp	0,44 €/kWh	0,40 €/kWh	0,36 €/kWh
CAP		The maximum cumulative power supportable is 1200 MW. However, the plants that will enter into force no later than 14 months - for private owners - and 24 months - for public owners - after the reaching of the cap they will benefit from both the tariffs and the premium.		
Bonuses on the top of the FIT		bonuses, not cumulative, equal to a 5% premium are provided in these cases: <ul style="list-style-type: none"> - the electricity producer if he/she uses at least 70% of the electricity generated, - public schools and public health centers; - Installations integrated to building substituting asbestos roofs; - Municipalities with less than 5.000 inhabitants. - Increase in the energy efficiency: "If the consumption of energy of the building is reduced by at least 10%, an increase in the incentive tariff is awarded in a percentage equal to half of the percentage of electricity saved, but not exceeding 30% of the standard tariff. 		
Other information		<ul style="list-style-type: none"> •2% degression of 2008 tariffs starting from 2009, and so on for the forthcoming years. •The target set by the government is 3.000 MW by 2016. •FIT payment duration fix for 20 years 		



Italy II

	Further support programs
Net metering (alternative to the sell of electricity and cumulative with FIT)	<ul style="list-style-type: none"> • Net-metering does not provide for direct payments. Is based on a balance of the value of the electricity produced, consumed and not consumed but fed into the grid. This can lead to a surplus on behalf of the system operator that will be holder of a credit, that is refundable, in terms of electricity, within 1 year.
Tax credits	<ul style="list-style-type: none"> • Reduction of VAT from 20% to 10% • Reduction in property tax that amounts to less than 4 per mille
Sell of the electricity (alternative to net-metering and cumulative with FIT)	Owner of plants producing renewable electricity may decide to sell it; Three options are available: <ul style="list-style-type: none"> • Indirect Sell: Convention with the GSE (Italian Authority in charge of the Photovoltaic incentives system). • Direct Sell: <ul style="list-style-type: none"> - Sell it to the “electric stock exchange” - Sell it to an wholesaler
Other information	From January 2009 the net metering system will change significantly. The big change consists in the payment of the obtained credits by the GSE. The price that will be applied will be an average of the values of the national prices per area (prezzi zonali orari).



Portugal

2008	Law: DL 363/2007	
Feed-in Tariff	≤ 3,68 kWp	0,65 €/kWh
Cap	12MW	
Payment fix	valid for the year of connection + 5 complete years	After this period, for more 10 complete years, the tariff will be reduced by 5% for each 10MW connected until that date.
Other information	<ul style="list-style-type: none"> •All the installations must have, at least, 2m² of solar thermal installed to get theFIT. •The law 312/2001 that established the previous FIT was suspended in January 2005. Law 363/2007 only allow to get licences for systems up to 5,75KW. By the way systems with power higher than 3,68 kWp and up to 5,75kWp will be paid with the tariff equal to the domestic house owner's buying price (0,11 kWh) and won't benefit from the FIT. 	
VAT Reduction	Reduction of VAT from 21% to 12%	
Beneficial credit terms	100% reduction on interest rates. Started on 2007 and ends on 2013. Applicable only to SMEs to a maximum of 75 000€ per project loan for 5 years and 2 years for capital " carência".	
Investment subsidy	Support level equals to 35% of the total investment. Start year 2007- End year 2013 Applicable only to SMEs to a maximum of 250 000€ per project. (Portaria 1463/2007)	



Romania

2008	
Renewable Obligation Certificates (ROC's)	Romania has adopted the mandatory quota system combined with the trade system with minimum and maximum price limits legally set up for the green certificates. Each MW produce receive a GC and the price of the GC traded in November, 2008 was 38.87€/MWh.
Investment grants	The subsidy comes from European funds serving for a program called "The growth of economic competitiveness". The overall budget this year was about 70 million €, the minimum sum that one could get being about 100,000 € and the maximum one 50,000,000 €.
Other information	Currently a new proposal is under discussion. The main changes will drive to the adoption of a FIT or of a Net-Metering system.

2008		Power plan limit size	Tariff 2009	CAP 2009	CAP 2010	CAP 2011	
25 years duration. Fix rate							
Feed-in tariffs	Type I - Rooftop	<20 kW	2 MW	0,34 €/kWh	27 MW	30 MW	33 MW
		>20 kW		0,32 €/kWh	240 MW	265 MW	292 MW
	Type I - CAP				267 MW	295 MW	325 MW
	Type II – Ground-mounted		10 MW	0,32 €/kWh	233 MW (133+100)	207 MW (133+60)	162 MW
	Total CAP				500	502	488
Tariff and Cap Variation	<p>Tariffs and caps are adjusted quarterly according to demand in previous quarter:</p> <ul style="list-style-type: none"> •If at least 75% of the cap for the previous quarter is reached, rates decrease by a maximum of 2.5%, and the cap is increased by the same amount. •Conversely, if less than 50% of the cap is reached, rates increase and caps decrease by the same amount. •If between 50 and 75% of the caps are reached, incentive levels and caps remain the same. •The annual digression rate is capped at 10%. Annual caps adjust in inverse proportion to digression (e. g. If rates decrease by 8%, caps will increase by 8%). 						
Tax Incentives	Law 35/2006 establishes a tax rebate of 6% (2008), 4% (2009), 2% (2010) from the annual benefits of the PV system.						

Switzerland

2008		Power (KWp)	Tariff Swiss Franc (€ct/kWh) 2008
Feed-in-Tariff	Ground-based	<10	0,65 (40,2)
		<30	0,54 (33,4)
		<100	0,51 (31,6)
		>100	0,49 (30,3)
	Rooftop	<10	0,75 (46,4)
		<30	0,65 (40,2)
		<100	0,62 (38,4)
		>100	0,60 (37,1)
	Integrated (BIPV)	<10	0,90 (55,7)
		<30	0,75 (46,4)
		<100	0,67 (41,2)
		>100	0,62 (38,4)
	Cap	16 Mio CHF This cap will be raised to 32 Mio, as soon as the average price of fed-in solar electricity of new installations will be lower than about 0.62 CHF	
	Other information	Tariff for 25 years. Tariff Digression rate for new plants of 8% from 2010. Swiss Franc (01/09/2008): 1franc= 0.62 €	



United-Kingdom

2008	
Renewable Obligation Certificates (ROC's)	1 ROC is delivered for each MWh of green (e.g. PV) electricity produced. The generated electricity can be self-consumed or fed into the grid. The ROC's can be sold to energy suppliers according the quota obligation(increasing each year) they need to fulfil. Average price of ROC is between 35 £ and 50 £.
Tax credits	Reduced VAT: 5%
Investment grants	Low Carbon Buildings Programme (Phase I and II) <ul style="list-style-type: none">•Residential: £2,000/kW; £2,500 max. or 50% of project cost, whichever is lower.•Public sector buildings and non-profits: 50% of total project costs; £1.0 million max, 0,5-50 kWp