

## **Background document on retroactive measures, moratoria, unplanned support reduction, cancellation of support or other harmful measures adopted in recent years in EU Member States affecting photovoltaic investments**

### **Country: Bulgaria**

#### **Measure n°1: Retroactive measure**

**Description of the measure:** By Decision C-33/14.09.2012 (Решение Ц-33/14.09.2012) the State Commission on Energy and Water Regulation (SCEWR) implemented grid access payments for all renewable installations, commissioned after 04.2010. The 'grid access payment' (GAP) is structured and functions as an additional fee. The GAP is based on applications from the operators of the Transmission and Distribution grids, who had informed SCEWR about 'increased costs for management and dispatching of the grids due to the large amount of renewable energy electricity generators'. The determined GAP are not based on calculations of the real costs for management of the energy system, but as a share of the price for purchasing the electricity from RES. In addition, the GAP are discriminatory, because:

- 1) They affect only RES, but no other types of energy sources;
- 2) They are different for the different types of RES;
- 3) They are different for installations with the same parameters, simply because they have been commissioned at different moment; for example, two PV installations with the same technical parameters and capacity (30 kWp) shall pay different GAP: 20% of revenue if commissioned by the end of 2011 versus 39% of revenue if commissioned in the first half of 2012.

The GAP for PV are between 1 and 39% of the relevant FiT:

- 1) PV installations commissioned until the end of 2011 - 20%;
- 2) PV installations commissioned in H1 of 2012 - 39%;
- 3) PV installations commissioned until September 1st 2012 - 5%;
- 4) PV installations commissioned after September 1st 2012 - 1%.

The GAP for Wind generators is 10% of revenue, for Hydro power plants 5%, for Biomass generators 1%. The decision duplicates the GAP, because it is already paid by all consumers of electricity (incl. the consumed electricity by the PV installations).

The decision contains no real data or calculations of the 'increased costs for management of the grids', and for this reason the GAP are determined as temporary and with no expiration date. There is also no deadline for the grid operators to submit the real calculations of the cost. The decision contradicts many national and European provisions. For this reason, the government and MPs from the ruling party submitted on November 27th 2012 a draft amendment to the Energy and Renewable Energy Acts, asking for a right to SCEWR (State Energy And Water Regulatory Commission) to determine such GAP for RES producers (the request is still under discussion in the National

Assembly). The amendment could legalize the cross subsidy between distribution and supply of electricity by providing the right to the distribution operator to transfer money to the end electricity supplier company.

*Impact on the Sector:* The decision is making it impossible for PV producers to pay their bank loans. Most affected by the GAP are small and medium PV producers with installations commissioned in H1 of 2012, who have to pay 39% of their income and directly face bankruptcy.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted on September 14th 2012, in force from September 18th 2012

### **Measure n°2: Moratorium**

*Description of the measure:* No grid connection procedure for renewable energy sources (RES).

1) The Renewable Energy Act (RESA), adopted on May 3rd 2011, implemented a moratorium on new grid connected RES. RESA provided no procedure for grid connection until July 2012, when SCEWR determined annual maximum admissible grid capacity for new RES initiatives. By Decision EM-01/29.06.2012 SCEWR determined 0 (zero) MWp capacity for RES for the regulatory period (07.2012-06.2013).

2) By an amendment of the RESA adopted on April 10th 2012, all RES projects on stage of signed preliminary grid connection contracts were postponed by schedules, coordinated by the National Electricity Company (NEC) and the distribution grid operators, according to the 10-year Plan for Development of the Electricity Grids.

By notification of NEC from July 10th 2012 - all RES projects with signed preliminary grid connection contracts were postponed to be interconnected after 2016. According to this notification, such producers had the possibility to confirm the postponement or to deny it and nullify all grid connection documentation for the projects.

*Impact on the Sector:* The only RES projects that can be developed are rooftop and façade PV installations on residential (up to 30kWp) and industrial buildings (up to 200kWp). Grid operators wrongly interpret the notification of NEC as relevant to such projects and therefore send letters to the producers with proposal for postponement of the grid connection after 2016. Large investments in PV projects, modules and equipment are stopped or nullified by these provisions.

*Legislation this measure is affecting:* N/A

*Date of adoption:* RESA adopted by the National Assembly on 03.05.2011 , Decision of SCEWR adopted on 29.06.2012 , Amendments to RESA adopted by the National Assembly on 10.04.2012, Notification of NEC from 10.07.2012

### **Measure n°3: Cancellation of support**

*Description of the measure:* Ban on the construction of PV installations on agricultural lands from 1st to 4th category. The ban affects only PV installations, not other RES technology, nor conventional energy generators, buildings, etc. The ban was implemented as amendment to the Act for Protection of Agricultural Lands (APAL).

*Impact on the Sector:* Agricultural lands with category 1-4 represent more than 40% of the agricultural lands in Bulgaria. According to calculations of BPVA, not more than 0.5% of the agricultural lands in Bulgaria could be used for building of 1500MWp of PV.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Amendments to APAL adopted by the National Assembly on 4.05.2011

**Measure n°4: Unplanned support reduction**

*Description of the measure:* SCEWR is allowed to determine FiTs more than once per year, but based on unclear conditions and without transparent methodology. By an amendment to RESA, adopted on July 17th 2012, SCEWR can determine the price for purchasing electricity from RES more than once per year. The only necessary condition, which enables this right of SCEWR, is more than a 10% decrease in the value of a price-forming element that should be observed since the moment of the last determination of FiTs. According to this provision, SCEWR determined new purchasing prices for RES in the end of July 2012 with a more than 54% cut (annual adaptation) and proposed another change of the prices only for PV - just three weeks after that - on July 21st 2012 (decreasing PV FiTs with other 39%). New FiTs for PV only were determined by SCEWR from September 1st 2012. The SCEWR motivated this second determination of FiTs on a single website of a German installer company with two completed projects, which gives a chart with the evolution of the PV module prices weekly. BPVA analysis of the website shows that there was no statistic proof of a change in the price-forming components with more than 10%.

*Impact on the Sector:* No bank would agree to finance PV or RES investment, because with this competence SCEWR can change the FiT unpredictably; there is no minimum period for which a price change could not occur and there is no clear interval for price decrease.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Amendments to Energy Act and RESA adopted by the National Assembly on 17.07.2012

## **Country: Belgium - Flanders**

### **Measure n°1: Retroactive measure**

*Description of the measure:* New grid fee in Flemish region for PV≤10 kW for the partial compensation of missed distribution fee caused by net metering allowed for this category of small PV systems.

Details:

- A fixed 53 euro per year per kW installed or
- An injection-based fee measured through of a smart meter able to measure injected and withdrawn electricity to/from the grid. The smart meter will have to be paid by the PV owner
- Proposal from distribution grid operators, to be approved by the national regulator CREG
- Decision applicable to all existing and new PV systems from 1 January 2013

*Impact on the Sector:* The grid fee will be over 55% of the new support by green certificates as from January 2013

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted by the Belgium Electricity and Gas regulator, CREG, on 6 December 2012

### **Measure n°2: Unplanned support reduction**

*Description of the measure:* Drastic cut in green certificate support mechanism. Details:

- decrease announced on May 25th, going into effect on August 1st (two months later), without consultation of the PV sector in advance
- reduction of guaranteed price for PV green certificates from 210 euro/MWh over 20 years to 90 euro/MWh over 10 years (= reduction of total support per kWp PV from 4200 euro to 900 euro = minus 79%).

*Impact on the Sector:* PV market has been moribund since August 1st, 2012: only 493 kW has been installed in comparison to 230 MW in the first 6 months. Uncertainty about the new green certificate price valid from January 2013 will last till beginning of december, leading to a serious market decrease and PV companies going broke or shrinking.

*Legislation this measure is affecting:* N/A

*Date of adoption:* 2012

## **Country: Czech Republic**

### **Type of Measure: Retroactive measure**

**Description of the measure:** Many retroactive legislative measures have been introduced since 2011: abolition of tax holidays, changes in depreciation, abolition of contribution on decentralized production, obligation to equip PV installations with facilities for remote power control, recycling fees. The largest impact has been a so called solar tax which decreased retroactively the FiT by 26% and green bonuses by 28%. The tax hasn't been implemented in the frame of the tax legislation but within the Amendment to the Act on RES 180/2005 Coll. The tax has been implemented for a three-year period (2011-2013). The tax on PV investments together with the gift tax on carbon credits and an increased fee for usage of an agricultural land for construction of the PV power plant have been adopted in order to decrease impact of the RES support on the price of electricity.

More specifically:

- PV systems installed between 2009 and 2010 supported by FiT have been assigned a tax of 26%
- PV systems installed between 2009 and 2010 supported by green bonuses have been assigned a tax of 28%

Since 2012 PV systems with an installed output up to 30 kWp inclusive have been excluded from the tax payment. Until then only rooftop systems under 30kWp had been excluded.

The Ministry of Industry recently announced a plan to prolongn of the solar tax to cover the whole lifetime of PV systems; the tax could be even higher than the current one. The official proposal hasn't been presented yet.

**Impact on the Sector:** The result of all these steps is that the payback period for PV installations has been pushed 15 years beyond what was guaranteed by the law (the lifetime is 20 years) in many cases. Photovoltaic power plants are operating at a loss. Many of them have negative cash flow, the operational costs are higher than revenues after the solar tax. The Czech PV Association keeps track of several forced sales when entrepreneurs were unable to repay bank loans.

**Legislation this measure is affecting:** N/A

**Date of adoption:** Amendement 402/2010 Coll. Approved by the Czech Parliament 14.12.2010

## **Country: France**

### **Measure n°1: Moratorium**

*Description of the measure:* On 9 December 2010, the Decree n° 2010-1510 the Government decided to suspend, for 3 months, the purchase obligation which applies to photovoltaic installations above 3 kWp.

Under specific criteria, PV projects which have accepted the quote for grid connection before the 2nd December 2010 have to be grid connected and commissioned within 18 months beginning from the quote acceptance, or 9 months if the quote has been accepted more than 9 months before the decree publication.

The moratorium ended on 4 March 2011 with the publication of a new Feed-in tariff decree, which applies to all PV systems up to 12 MWp.

*Impact on the Sector:* The measure has led to the cancellation of many PV projects above 3 kWp. For a period of 3 months, many solar companies were unable to launch new projects due to the suspension of the purchase obligation.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Decree n° 2010-1510 of 9 December 2010, published on the 10th.

### **Measure n°2: Retroactive measure**

*Description of the measure:* A decree project on the Feed-in tariff level has been under discussion since October 2012; it foresees a 20% decrease of the FiT applicable to all installations above 100 kWp, or without specific integration, or ground mounted. This decrease will be applied to all projects which have asked for grid connection starting from 1 October 2012.

*Impact on the Sector:* This project will lead to a low FiT for specific installations, with a retroactive effect.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Under discussion (Oct. 2012)

## **Country: Greece**

### **Measure n°1: Retroactive measure**

*Description of the measure:* New tax on revenue generated by renewable energy systems as part of new austerity measures. The tax on existing solar power plants will be between 25% and 30%, and is aimed at helping the country reduce its deficit.

More specifically:

- PV systems installed before 2012 have been assigned a tax of 25%
- PV systems built from Jan. 1, 2012 that receive a FiT calculated according to the law 3734/09, article 27A between February and August 2012 onward will be taxed at 27%.
- PV systems built from Jan. 1, 2012 that receive a FiT calculated according to the law 3734/09, article 27A before February 2012 will be taxed at 30%.
- Revenue generated by other types of renewable energy systems, including wind, biomass and hydroelectric, will be taxed at 10%.

YPEKA (Ministry of Environment, Energy and Climate Change) could decide to extend the retroactive tax by one year.

The tax excludes rooftop systems with a capacity <10 kWp, as well as PV systems built from Jan. 1, 2012, that receive a FiT calculate according t to the law 3734/09, article 27A after 9th of August 2012.

*Impact on the Sector:* The measures will drive many small- and mid-size solar companies out of business because they will not be able to repay bank loans.

Solar plants were already charged with tax of 40% on profits; the new measure brings the overall taxation unrealistically high and makes unsustainable many investments.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted on 7 November 2012 by the Greek Parliament

### **Measure n°2: Suspension of authorization procedures for new PV projects**

*Description of the measure:* In August 2012, the Greek Ministry of Environment, Energy and Climate Change put on hold authorization procedures for new PV projects. This decision has affected over 7.5 GWp of PV projects which had initiated such procedures. The only category not affected by the decision is the residential sector (PV systems <10 kWp). The reasoning for this suspension of authorization is the large number of applications overriding the indicative PV national target for 2020. However, this target (2.2 GWp) is only indicative and according to existing legislation can be revised every two years. The Greek PV industry is asking for such a revision and a considerable increase of the target for PV (up to 6 GWp) until 2020.

*Date of adoption:* Adopted on 10 August 2012 by YPEKA (Ministry of Environment, Energy and Climate Change)

## **Country: Italy**

### **Measure n°1: Unplanned support reduction**

*Description of the measure:* Sudden stop of III Conto Energia (DM 6/08/2010): application to pv plants entering into operation from 01.01.2011 to 31.12.2013. However, due to the so-called "Salva Alcoa" arrangement (which allowed plants built by 31/12/2010 to accede incentives of II energy bill up to 30/06/2011), lasted only five months. Then the IV Conto Energia entered into force.

*Impact on the Sector:* In less than two years Italy has had three different incentive systems. These sudden changes of legislation have generated many uncertainties on the part of operators and in some cases limited access to credit

*Legislation this measure is affecting:* N/A

*Date of adoption:* Legislative Decree no. 28 of 29 March 2011 (end of III Conto Energia)

### **Measure n°2: Unplanned support reduction**

*Description of the measure:* IV Conto Energia (DM 5/05/2011): introduction of limits on access to incentives, such as the "register" for so-called "big plants", rapid and sudden decrease of incentives, excessive bureaucracy

*Impact on the Sector:*

In less than two years Italy has had three different incentive systems. These sudden changes of legislation have generated many uncertainties on the part of operators and in some cases limited access to credit

*Legislation this measure is affecting:* N/A

*Date of adoption:* Ministerial Decree of 5 May 2011

### **Measure n°3: Unplanned support reduction**

*Description of the measure:* Revision of minimum guaranteed prices for the dedicated withdrawal

*Impact on the Sector:* Yet another change of a regulatory framework a few weeks after the publication of the IV Conto Energia. It created further uncertainty in the sector.

*Legislation this measure is affecting:* N/A

*Date of adoption:* AEEG resolution no. 103/11 of 28 July 2011

### **Measure n°4: Unplanned support reduction**

*Description of the measure:* V Conto Energia (DM 05/07/2012): Anticipation of the transition from Feed-in premium to Feed-in tariff (net metering and dedicated withdrawal alternative incentives) - new tariff and premium for self-consumption. Tariff decrease of 50-75% over those of IV Conto Energia, limited budget of 0,7 billion euros divided in the 5 semesters; lack of protection of investments in progress; in order to access to the incentive system, PV plants must be included in a register drawn up on the basis of suitable criteria (exclusion: all PV systems up to 12 kW and PV system up to 50 kW with asbestos removal that directly access to FiT)

*Impact on the Sector:*

In less than two years Italy has had three different incentive systems. These sudden changes of legislation have generated many uncertainties on the part of operators and in some cases limited access to credit

*Legislation this measure is affecting:* N/A

*Date of adoption:* Ministerial Decree of 5 July 2012



**Measure n°5: Cancellation of support**

*Description of the measure:* Restricts access to the incentive for photovoltaic systems installed in agricultural areas. Since its entry into force ground-mounted PV plants in agricultural areas no longer receive incentives

*Impact on the Sector:*

In less than two years Italy has had three different incentive systems. These sudden changes of legislation have generated many uncertainties on the part of operators and in some cases limited access to credit

*Legislation this measure is affecting:* N/A

*Date of adoption:* Art. 65 Legislative Decree 1/2012 converted in Law by L.27/2012

**Measure n°6: Cancellation of support**

*Description of the measure:* Prohibits the construction of photovoltaic systems on the ground in industrial areas - introduction of a register for PV plants (12 kW and above) installed on buildings and priority criteria for 'access to the registry completely different compared to the criteria valid for the IV Conto Energia

*Impact on the Sector:* Limits the installation of residential PV systems. Consequent suffering of the sector

*Legislation this measure is affecting:* N/A

*Date of adoption:* Ministerial Decree of 5 July 2012

**Measure n°7: Retroactive measure**

*Description of the measure:* Introduction of the contribution of 0.05 cents € for each kilowatt-hour of energy self-produced and incentivised in 2013 and retroactive for all PV systems incentivised according to the 4 previous Conto Energia. This is to cover the GSE costs of managing, monitoring and control.

*Impact on the Sector:* It is an addition operational cost for the management of the systems (OPEX) not budgeted

*Legislation this measure is affecting:* N/A

*Date of adoption:* Ministerial Decree of 5 July 2012

**Measure n°8: Other**

*Description of the measure:* Consultation paper of Italian TSO (Terna) published at the end of July 2012. It established, with effect from 1 August 2012, in case of emergency situations (probably in the peak of PV production during summer), a reduction of the production plants of Distributed Generation connected to the medium voltage. In particular this referred to non-programmable solar/wind systems up to 100 kW.

*Impact on the Sector:* Although, there hasn't been any detachment, the lack of a clearly defined procedure of this measure has created much confusion among operators. In addition, we highlight two problems: firstly the lack of any compensation for the failure to produce photovoltaic energy (as

is the case for wind power) and secondly the lack of a time limit of application of the measure (and so, in this way seems already applicable today)

*Legislation this measure is affecting:* N/A

*Date of adoption:* DCO Terna RIGEDI

#### **Measure n°9: Other**

*Description of the measure:* All PV systems with an installed capacity over 50 kW and connected to **Medium Voltage** grid by March 31, 2012 must carry out retrofits to be completed by March 31, 2013 whereby plants are brought into conformity with Chapters 5 (broadening of the thresholds of frequency and voltage) and 8 (protection of interface function to release voltmeter) of Appendix A70 of the network code of Terna.

*Impact on the Sector:* Great demand for systems interface protection of medium voltage in accordance with Annex A70 during summer 2012, since this included incentives until 31 October 2012. For several weeks the market for interface protection of medium voltage was saturated because of the great demand. Risk of suspension of incentives for plants not adapted by March 31, 2013

*Legislation this measure is affecting:* N/A

*Date of adoption:* AEEG Resolution 84/12 of 8 March 2012

#### **Measure n°10: Other**

*Description of the measure:* The AEEG Resolution 84/12 has set the date of entry into force of the CEI 0-21 July 1, 2012 (ahead of the demands made by the manufacturers of inverter and interface protection LV).

*Impact on the Sector:* This date did not allow, especially for manufacturers of LV protection interface, to have the physical time for the design, proper engineering and marketing of their products. Especially in the months of July and August, this has made it very difficult for market participants to implement protection systems on the market that comply with LV interface CEI 0-21, since there were very few manufacturers able to provide products complying with the timing dictated by the AEEG.

*Legislation this measure is affecting:* N/A

*Date of adoption:* AEEG Resolution 84/12 of 8 March 2012

#### **Measure n°11: Other**

*Description of the measure:* Consortia for the disposal of the PV modules at the end of life: all the requirements that must be met from 1 January 2013 are not yet defined, thus affecting eligibility for incentives by the GSE. Furthermore, the definition of "PV module producer" is not in line with the one defined in the WEEE Directive that has to be transposed in Italy until 1 February, 2014

*Impact on the Sector:* Uncertainty and confusion. Lack of clear instruments

*Legislation this measure is affecting:* N/A

*Date of adoption:* Ministerial Decree of 5 May 2011

#### **Measure n°12: Other**

*Description of the measure:* From January 1, 2013 the cost of imbalance will be borne by producers of energy from renewable sources.

*Impact on the Sector:* Scenario of economic uncertainty

*Legislation this measure is affecting:* N/A

*Date of adoption:* AEEG Resolution 493/2012 of 22 November 2012

## **Country: Slovakia**

### **Measure n°1: Unplanned support reduction**

*Description of the measure:* The change of FiT (decrease of 38,77%) in the middle of regulatory period 2012 contrary to law, the change was announced 1 month before. Cumulative decrease of FiT from 2011 is of 54%.

*Impact on the Sector:* Economically unpredictable environment. The regulator announced new FiT 1 month before the new FiT was launched, no option to finalize running installation processes within old FIT conditions etc.

*Legislation this measure is affecting:* N/A

*Date of adoption:* Notice of the regulatory office by the July 1st 2012

### **Measure n°2: Other**

*Description of the measure:* Non-transparent calculations and set-up of FiT, impossible to control the regulatory office or to claim.

*Impact on the Sector:* PV development is no longer attractive because of the low return on investment or the length of time of economic return

*Legislation this measure is affecting:* N/A

### **Measure n°3: Cancellation of support**

*Description of the measure:* The maximum limit of the capacity per installation is 100kWp only at the rooftop or facade since 2011, no matter the consumption of the owner. Ground mounted plants restricted also at the brownfields.

*Impact on the Sector:* The SMEs with higher consumption are not motivated to act green

*Legislation this measure is affecting:* N/A

*Date of adoption:* Mid 2011

## **Country: Spain**

### **Measure n°1: Unplanned support reduction**

*Description of the measure:* Sudden change of support framework: caps introduction, 30% FiT reduction

*Impact on the Sector:* One year market paralysis  
Employment destruction

Lack of confidence / Unreliable framework

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted on 26 September of 2008 by Council of Ministers

### **Measure n°2: Unplanned support reduction**

*Description of the measure:* Sudden FiT reduction of 25% for rooftop PV systems and 45% for ground mounted PV systems

*Impact on the Sector:* Losses of expected revenues  
Lack of confidence / Unreliable framework

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted on 19 November of 2010 by Council of Ministers

### **Measure n°3: Retroactive measure**

*Description of the measure:* Hourly production limits to FiT, which means:

- 30% FiT reduction for 80% of current PV power plants in 2011, 2012 and 2013, and 10% FiT reduction for next 25 years (For PV systems under Royal Decree 661/2007)
- 10% FiT reduction for 10% of current PV power plants for next 25 years (For PV systems under Royal Decree 1578/2008)

*Impact on the Sector:* Losses of expected revenues  
Lack of confidence / Unreliable framework  
Companies bankruptcy

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted on 23 December of 2010 by Council of Ministers

### **Measure n°4: Moratorium**

*Description of the measure:* Sudden stop to FiT programs without deadline

*Impact on the Sector:* Employment destruction (from 60.000 jobs in 2008 to 7.000 - 5.000 now)  
Losses of investments done

Lack of confidence / Unreliable framework  
Companies bankruptcy

*Legislation this measure is affecting:* N/A

*Date of adoption:* Adopted on 27 January of 2012 by Council of Ministers

**Measure n°5: Other**

*Description of the measure:* New tax on all energy systems production of 7%

*Impact on the Sector:* Losses of expected revenues

Lack of confidence / Unreliable framework

Companies bankruptcy

*Legislation this measure is affecting:* N/A

*Date of adoption:* To be adopted by Spanish Parliament. Expected to come into effect on 1 January 2013