



## WORLD

## LAW GROUP

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# WLG PLENARY SESSION III



# E.U. & GREEK LEGISLATION FOR RENEWABLE ENERGY SOURCES ("RES")

May 9, 2008

9:00am to 10:00am

Ву

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- EU Directive 2001/77 on "the Promotion of Electricity Produced from RES in the Internal Electricity Market".
- <u>EU Level Targets</u>: Until 2010, RES produced electricity to represent 22,1% of total electricity consumption in the EU countries.
  - Until 2020, binding target set for 20% RES share in the total EU energy consumption (EU Council Resolution of 8/9 March 2007).
- <u>National Targets for</u>
  <u>Greece</u>:
  According to recent RES Law No 3468/2006, RES share should represent 20,1% until 2010, and 29% until 2020.

## <u>TABLE I</u>

#### **RES INSTALMENT REQUIREMENTS FOR 2010 TARGET ACHIEVEMENT**

RES SOURCE	INSTALLED CAPACITY (MW)	ELECTRICITY GENERATION (TWH)	CONTRIBUTION TO TARGET (%)	
WIND ENERGY	3,648	7,67	10,67	
SMALL HYDRO	364	1,09	1,52	
LARGE HYDRO	3,325	4,58	6,37	
BIOMASS	103	0,81	1,13	
GEOTHERMAL	12	0,10	0,14	
PHOTOVOLTAICS	200	0,20	0,28	
Total	7,652 MW	14,45 TWh	20,10%	

(Source: 4<sup>th</sup> National Report on Renewable Energy, Ministry for Development, Oct. 2007)



- Industry Associations:
  Center for Renewable Energy Sources (www.cres.gr)
  - Greek Association of RES Electricity Producers (<u>www.hellasres.gr</u>)
  - Hellenic Wind Energy Association (<u>www.eletaen.gr</u>
  - Hellenic Association of Photovoltaic Companies (<u>www.helapco.gr</u>)
- <u>Regional Market</u>:
- South East Europe Energy Market
- Institute of Energy for South-East Europe (<u>www.iene.gr</u>)
- 2<sup>nd</sup> South East Europe Energy Dialogue 21/22 May 2008, Thessaloniki.

## **GREEK LEGAL FRAMEWORK FOR RENEWABLES**

## **1. REGULATORY FRAMEWORK**<sup>1</sup>

The main body of legislation which regulates on the one hand the production of electricity from renewable energy sources ("**RES**") and particularly from photovoltaic stations ("**PV**"), and on the other the provision of investment incentives is the following:

 Law No. 3468/2006 on "Production of Electricity from Renewable Energy Sources and High Efficiency Co-generation of Heat & Electricity ("HECHE"), enacted in compliance with EU Directive 2001/77 ("RES Law").

<sup>&</sup>lt;sup>1</sup> Relevant definitions:

i. "**PPC**" means the Public Power Corporation of Greece (in Greek "**DEI**").

ii. "**RAE**" means the Regulatory Authority for Energy.

iii. "HTSO" means the Hellenic Transmission System Operator (in Greek "DESMIE").

iv. "Non-interconnected islands" means those Greek islands whose network of electricity distribution is not connected with the System or the Grid of mainland Greece.

v. "Grid" means the electricity-distribution network of PPC.

vi. "**System**" means all installations and facilities for the transmission of electricity, except for the Grid and the network of the non-interconnected islands.



- b. Regulation No.5707/2007 on "the issuance of electricity Production Permits for RES & HECHE Projects".
- c. Regulation No.13310/2007 on "the issuance of Installation Permit & Operation License for electricity production stations through the use of RES".
- d. Regulation No.104247/2006 on "the Environmental Permitting Process for RES Projects" according to Law No.1650/1986 (as amended by Law No.3010/2002), consisting of the Preliminary Environmental Assessment & Evaluation ("PEAE") and the final Environmental Conditions Approval ("ECA").
- e. Model Power Purchase Agreements ("PPA"), one model for the System and the Interconnected Network signed with HTSO and the other for the Network of the Non-interconnected islands signed with PPC, as promulgated by Decisions Nos.18359/2006 & 1725/2007 of the Minister of Development ("MoE") respectively.
- f. MoE Decision No.14610/2007 on the adjustment of the "Feed-in-Tariff" ("**FIT**") for the purchase of RES electricity and particularly for PV electricity.
- g. MoE Decision No.8684/2007 on the "1<sup>st</sup> Phase of the Development Program for PV Stations" in Greece, as amended and expanded by MoE Decision No.15450/2007.
- h. Law No.3299/2004 (as amended) on the provision of incentives for private investments in Greece ("**Investment Law**").

## 2. PERMITS & LICENSES

The main permits & licenses necessary for the establishment and operation of RES plants are the following:

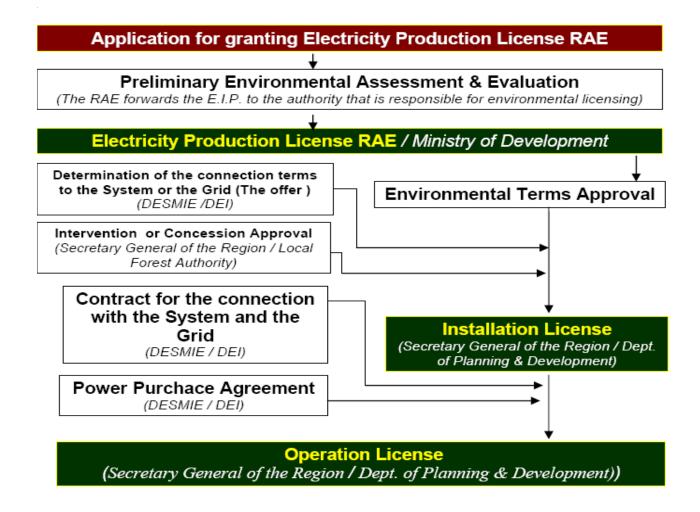
a. Production permit valid for 25 years and renewable for an equal period.



- b. Installation permit valid for 2 years and renewable for an equal period.
- c. Environmental permit ("ECA") valid for 10 years and renewable for one or more equal periods.
- d. Operation license valid for 20 years and renewable for an equal period.
- e. Contract for the connection of the RES station with the System or the Grid.

#### <u>TABLE II</u>

#### **RENEWABLE ENERGY LICENSING STEPS**



(Source: Hellenic Association of Photovoltaic Companies, www.helapco.gr)



#### 3. TARIFFS & GUARANTEED CONTRACTS

As of June 2006, Greece has a new RES law which offers a respectable tariff for RES investments and actually for the first time a separate feed-in-tariff (FIT) for Photovoltaic Stations (PV). Until now, all RES technologies were getting the same FIT. The FIT for PV is the highest of all technologies, and as from September 2007 the applicable tariffs are as in the Table below:

#### TABLE III

PRODUCTION SOURCE	MAINLAND GRID (€ / MWH)	NON-INTERCONNECTED ISLANDS (€ / MWH)	
WIND ENERGY SMALL HYDRO ≤ 15 MW	75,82 87,42		
OFFSHORE WIND ENERGY	92,82		
PV SYSTEM ≤ 100 kWp	452,82	502,82	
PV SYSTEM >100 kWp	402,82	452,82	
SOLAR ENERGY OTHER THAN PV ≤ 5 MW	252,82	272,82	
SOLAR ENERGY OTHER THAN PV > 5 MW	232,82	252,82	

#### ADJUSTED FEED-IN TARIFFS (2007)

(Source: 4<sup>th</sup> National Report on Renewable Energy, Ministry for Development, Oct. 2007)

The new tariffs are adjusted annually for increases in retail electricity prices and/or the inflation rate (80% of its nominal value, but this rule will be effective in the future when electricity market is fully liberalized).



The FIT is guaranteed for twenty (20) years, i.e. by virtue of article 12 of the RES Law, the PPA is valid for ten (10) years and it can be extended for ten (10) more years through a unilateral written declaration of the producer, filed at least three (3) months prior to the expiry of the initial contract.

Mention should be made that only PV stations are not subject to the 3% special tax on their electricity sales, net of VAT (these revenues are collected from the other RES producers in favor of the local municipalities).

## 4. PV DEVELOPMENT PROGRAM

A target of at least 700 MWp was initially set for PV. Due to the huge interest however, the Government decided to change this target by increasing it to 840 MWp. A detailed Program for PV Development was presented in April 2007 (and amended in July 2007) for PV deployment in the various regions of Greece according to system size, and it provides for licensing for this capacity to take place until 2010 while its incorporation into the System/Grid is scheduled until 2012-2014. It should also be noted that currently on the islands are permitted only Systems up to 150kWp.

Systems >150kWp require all permits & licenses (as per para.2 above), while Systems >20kWp and ≤150kWp require an exemption decision from the above permits issued by RAE. Lastly, Systems ≤20 kWp are exempt from environmental permits unless they are installed in environmentally sensitive areas (NATURA 2000, national forests, archaeological sites) and historic villages (in such a case the consent of a planning authority is required).

<u>PV Suspension</u>: In late March 2008, however, the Minister of Development issued a decision suspending the filing of more PV investment proposals due to the excessive response to the PV program. It is characteristic that until 28<sup>th</sup> March 2008, 7.947



investment plans were submitted for a total electricity production of 3.756 MW (several times over the target). Currently, the overall PV development program is under reconsideration and it will be restructured on a more pragmatic and business-oriented approach.

## 5. INVESTMENT INCENTIVES

Under the Investment Law, commercial RES applications are eligible to a State grant covering 20-40% of total installed cost. Percentage varies with size of investing company as well as the region of the country, and as from July 2007 the following grants are applicable. Especially, for PV and wind energy investments the grant is set at 40%.

SIZE OF INVESTING	AREA/ZONE OF GREECE		
COMPANY	Α	В	С
Large	20%	30%	40%
Medium	30%	40%	40%
Small	40%	40%	40%
Very small	40%	40%	40%

There are also various regional and EU funded grants available from time to time from which RES investments can benefit. Grants can be up to 50% of total installed costs.

## 6. LAND-USE PLANNING IN GREECE

There are currently the following Land - Use Plans promoted by the Government::

- 1. National Land-Use Plan for Sustainable Development.
- 2. Special Land-Use Plan for RES.
- 3. Special Land-Use Plan for Tourism.
- 4. Special Land-Use Plan for Industry.