



# **The framework on the promotion of Renewable Energy Sources at NUTS-3 level**

## **- Italy Romania Greece -**

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## List of abbreviations

AIA	Integrate Environmental Authorization (IEA)	Autorizzazione Integrata Ambientale
ANRE	Romanian Energy Authority	Autoritatea Nationala de Reglementare in domeniul Energiei
ARPA	Regional Agency for Environmental Protection	Agenzia Regionale per la Protezione dell'Ambiente
AUSL	Local Health-Care Agency	Azienda Unità Sanitaria Locale
D.Lgs.	Legislative Decree	Decreto Legislativo
D.M.	Ministerial Decree	Decreto Ministeriale
D.P.R.	Presidential Decree	Decreto Presidenziale
DIA	Declaration of Activity Initiation	Denuncia d'Inizio Attività
EE	Electric Energy	Energia Elettrica
ENAC	Italian Civil Aviation Authority	Ente Nazionale per l'Aviazione Civile
ENAV	Authority for management and control of civilian air traffic	Società Nazionale per l'Assistenza al Volo
Enel	National Authority for Electric Energy	Ente Nazionale Energia eLettrica
GSE	Energy Service Manager	Gestore dei Servizi Energetici
L.	Law	Legge
L.R.	Regional Law	Legge Regionale
PAI	Plan for Hydro-geological arrangement	Piano di Assetto Idrogeologico
PRG	General Town Planning Scheme	Piano Regolatore Generale
R.D.L.	Royal Decree	Reggio Decreto Legge
RFI	Agency for National Railway Network	Rete Ferroviaria Italiana
SIC	Sites of Community Importance	Siti di Importanza Comunitaria
TAR	Regional Administrative Court	Tribunale Amministrativo Regionale
Terna	Agency for National Electric Energy Network	Rete Elettrica Nazionale SpA
T.U.	Single Act	Testo Unico
USTIF	Authority for the transportation of fixed plants	Uffico speciale trasporti a impianti fissi
VIA	Environmental Impact Assessment (EIA)	Valutazione Impatto Ambientale

ZPS	Special Protection Areas	Zone di Protezione Speciale
ZSC	Special Conservation Areas	Zone Speciali di Conservazione
RES or FER	<i>Renewal Energy Sources (Fonti da Energia Rinnovabile)</i> means renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases)	
RES-E	<i>Electricity produced from renewable energy sources</i> means electricity produced by plants using only renewable energy sources, as well as the proportion of electricity produced from renewable energy sources in hybrid plants also using conventional energy sources and including renewable electricity used for filling storage systems, and excluding electricity produced as a result of storage systems	
NUTS	<i>Nomenclature of Units for Territorial Statistics</i> is a geocode standard for referencing the subdivisions of countries in European Union. For each member State, a hierarchy of three NUTS levels is established by Eurostat, the third level of the hierarchy (NUTS-3) is defined as Provinces in Italy, Prefectures in Greece and Counties (județe) in Romania. In those three States the subdivisions corresponds to administrative divisions within the country.	
GC	<i>Green Certificate</i> are a tradable commodity proving that certain electricity is generated using renewable energy sources.	

Service Conference	Conferenza Servizi
Single Authorization	Autorizzazione Unica
Certificate of no impediment	Nulla osta
Area Plan for Parks	Piano d'Area per i Parchi
Park Agency	Ente Parco
Superintendancy for Environmental and Architectural Heritage	Soprintendenza per i beni Ambientali e Architettonici
River Basin Authority	Autorità di Bacino del Fiume
Technical Basin Service	Servizion Tecnico Bacino
Region	Regione
Province	Provincia
Municipality	Comune
Natura 2000 Network	Rete Natura 2000
Incidence Assessment	Valutazione d'Incidenza

State Forestry	Corpo Forestale dello Stato
Air Force	Aeronautica Militare
Navy	Marina Militare
Italian Telecommunication Company	Telecom
Preliminary inquiry	Istruttoria
County Council	Consiliul Județean

# 1 Introduction

This study has been carried out within the context of a project titled “INnovative Tools for Energy Regulations of Province Associations on Renewable Energy Sources” (INTER PARES). Coherently to the acronym that titled the project, INTER PARES is based on the comparison of policies and practices in the field of electricity production from renewable energy sources (RES) implemented by Institutions at the same level of administration, namely those ones that can be classified at the NUTS-3 level. That is the reason why the project is promoted by the Associations that at national level represents local authorities at NUTS-3 level in Italy, Greece and Romania with the overall objective of streamlining the authorisation procedures.

Scope of this study is to provide a comprehensive framework of competences and procedures – in the field of electricity production from RES – allocated to the NUTS-3 level in the countries concerned. In particular the specific objective of this study is to analyse the administrative procedures in force which are necessary to obtain the permits for the installation of RES plants, and highlighting the main non-technological barriers and gaps. The identification of those barriers and gaps in the authorisation procedure for the installation of RES plants is the precondition for the achievement of two subsequent objectives foreseen by the project: i) the empowerment of local authorities in the field of RES, and ii) the implementation of new procedures and policies in order to streamline the authorisation procedure for RES plant deployment in a set of targeted provinces.

The second chapter of the study provides an overview of the literature concerning the administrative procedures in force at European and national level with regard to the administrative processes for permitting the installation for different type of RES technology. This section focuses on the results of studies and projects that at European level have addressed the administrative barriers limiting the promotion of RES production. Moreover, chapters from 3 to 6 analyse the results of the survey that have been carried out in Italy, Greece and Romania involving the local authorities at NUTS-3 level. Finally, the seventh chapter discusses the conclusions drawn by the survey analysis. These observations are particularly focused on the administrative procedures to achieve necessary permits in the different technologies taking into account factors like numbers of permissions required, numbers of bodies/institutions involved, transparency of the process, technical requirement, barriers and gaps.

## 2 Scenario definition

The European Directive 28/2009/CE<sup>1</sup> on the promotion of Electricity from Renewable Energy Sources (RES) established a target of 20% of all energy use to be obtained from renewable resources by 2020. The directive legally obliges each EU Member State to ensure that its 2020 target is met and to outline the “appropriate measures” to maintain the commitments.

One of the key principles of the Directive, which is needed to ensure the compliance with established objectives, is to provide to Member States the option of using flexibility mechanisms to help reaching national targets and the streamlining of administrative procedures.

Besides the fact that the subject regarding the reduction of non-technological administrative barriers (e.g. the burden of regulations and extensive lead time for administrative procedures) to streamline authorization process for RES plant installation is relatively recent, the literature produced so far by scholars is quiet extensive. Indeed, some recent studies and EU-funded projects have stressed the need for each Member State to implement – in order to enhance the development of RES technology and market – measures for the realization of an effective and sound administrative/legal framework for granting construction and operation of RES plants. The very purpose of chapter 2 of this paper is to display some of the most important researches/projects dealing with non-technological barriers that obstruct the RES dissemination in the EU.

A relevant research was organized by the European Parliament in the year 2007 within the Workshop on the Renewal Energy Directive proposal<sup>2</sup>, which analysed some core features subsequently adopted by the aforementioned Directive. The Workshop focused on some measures suggested in the draft Directive, which, in turn, were based on the findings of the stakeholders’ consultations and the impact assessment to the proposal. The workshop conclusion papers distinguish between four types of administrative or regulatory burdens:

- Costs of regulations, including:
  - Direct financial costs (fees, taxes);
  - Compliance costs of regulations (investments etc.);

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<sup>1</sup> Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:EN:PDF>

<sup>2</sup> European Commission, Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008) 19 final, Brussels 23.1.2008, [http://ec.europa.eu/energy/climate\\_actions/doc/2008\\_res\\_directive\\_en.pdf](http://ec.europa.eu/energy/climate_actions/doc/2008_res_directive_en.pdf)

- Costs for complying with information obligations (time needed to fulfil requirements).
- Time of approval procedures;
- Opportunity costs for dealing with administrative procedures;
- Uncertainty of the outcome of approval procedures with implications for planning of investment decisions etc.

The workshop has recognised the importance of two elements for improving public agency performance (involved in authorization procedures) and mitigate overtly bureaucratic behaviour, namely the enhancement of qualification and professionalism of staff to develop more “client responsive” agencies, and streamlining administrative procedures or integrating them into “one-stop-shops” to improve inter-agency coordination.

Besides the workshop of the European Parliament, the Intelligent Energy Europe Programme<sup>3</sup> opened a substantial opportunity window for those organizations that are willing to research the causes and find possible solutions to administrative non-technological barriers in the field of renewable energy technology deployment. For instance the OPT RES project<sup>4</sup>, which concluded in 2007, dealt with market barriers and, as final result, has issued recommendations for future improvement of existing RES electricity promotion measures, along with an extensive stakeholder consultation. The project identified four clusters of non-technological barriers, namely (i)administrative and regulatory barriers, (ii)grid-related barriers, and (iii)social barriers, and (iv)financial barriers. The conclusions related to the first cluster of barriers point out five sub-categories of administrative barriers:

- High number of authorities involved;
- Lack of coordination between different authorities;
- Long lead times to obtain the necessary permits;
- RES insufficiency taken into account in spatial planning;
- Low awareness of benefits of RES at local and regional authorities.

Researches and projects were also undertaken in the field of administrative red tape reduction focused on single RES technology. Indeed, the European Commission performed two distinguished researches both focussing on bioenergy authorization procedures only. As far as the first research is concerned, it

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<sup>3</sup> European Parliament, Policy Department Economic and Scientific Policy, Workshop on the Renewable Energy Directive Proposal Briefing papers, June 2008,

<http://www.europarl.europa.eu/activities/committees/studies/download.do?language=en&file=21735>

<sup>4</sup> OPTRES report (D8 report), Sustainable Energy Europe, Analysis of barriers for the development of electricity generation from renewable energy sources in the EU-25, Utrecht, May 2006.

describes the results of the consortium outlined within the study Benchmarking and guidelines for streamlined authorisation processes for bioenergy installations<sup>5</sup>. The major goal of this report is to reveal detailed quantitative information about the various bioenergy plants permitting procedures in the European Union, in particular the lead time and the costs. The bioenergy categories considered are Biofuels, Biogas, Combustion, Cofiring and Boilers including all possible kinds of feedstock as well as the organic fraction of waste. The research outlines some major aspects concerning the RES authorization issue. The research reveal that the average Lead time is around 23 months in the EU (the lead time is determined by the number of process steps rather than by technological and/or geographical differences), while 30% of the applicants fail to obtain authorization. Major delays are due to Spatial planning procedure, Environmental Impact Assessment, Integrated Environmental Permit, grid access, and legal causes. The EIA increases the median value of total costs from € 49.000 to € 400.000. Moreover, legal causes are mainly due to expected emissions (noise, smell, NOx, fine dust), traffic movement, land use, and sustainability aspects.

Furthermore, considerable differences between Member States were revealed concerning formal permitting procedures: the number of permits, the order of the permits, and the duration of a permit all strongly differ. In addition, the formal public resistance is highly dependent on the geographical area going from low in the south and the east to (very) high in the northwest of Europe.

The research suggests two main findings:

- The reduction of the number of permits, institutional authorities and relevant legislative acts, especially for States such Bulgaria, Romania, Hungary, Greece, Spain, and Portugal.
- The reduction of the duration of the procedure, introducing a mandatory timeframe to a level in accordance with the benchmark levels.

Last but not least, the research advocates that the Italian and German one-stop-shop procedure may be taken as reference for other member states.

The second research of the European Commission<sup>6</sup> has reached similar conclusions on the same matter. Indeed, the two major non-technological barriers outlined by the research are the excessive number of permits and procedural steps involved in the authorization process, and the public resistance phenomenon. The research reveals that the average lead time for the EU-27 average is 16-21 months. In

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<sup>5</sup> European Commission, Ecofys/Golder, Benchmark of Bioenergy permitting procedure in the European Union, January 2009.

<sup>6</sup> European Commission, Ecofys/Golder, Permitting of Bioenergy installations in the EU-27: Practical recommendations based on a study of 130 real cases, 2009.

this concern, the excessive number of procedural steps is much relevant rather than the number of permits, besides they are mutually dependant variables. Moreover, the public resistance issue is also at stake. Indeed, the most common reason for appeal (60% by NGO, but not in Italy where private stakeholders' appeals are absent) is the expected emissions of the bioenergy installation, followed by traffic movements, land use, and sustainability aspects. In case of a higher appeal, emissions are again the main reason for objections, followed by sustainability issues. In case of emissions, the most common aspects named by the appellants are noise, smell, NOx and fine dust.

### 3 Methodology adopted

This study is based on the analysis of legislation, functioning and organisation of 113 local authorities at NUTS-3 level in Italy, Greece and Romania. Indeed, in order to carry out an analysis on the decision making process at NUTS-3 level in this specific sector, a questionnaire was developed to gather the necessary information. This tool was designed in two stages. In the first stage, the associations representing the provincial authorities at national level provided a set of primary information on the legislative framework concerning the authorisation process for the installation of RES plants.

To this end, a pre-questionnaire was elaborated, encompassing 4 fundamental open questions:

1. Which functions are legally assigned to the provinces/prefectures/counties in the area of electricity production from renewable energy sources (RES-E)?
2. What kind of authorisations are issued by the provinces/prefectures/counties acting as “responsible authorities”?
3. What kind of relations the provinces/prefectures/counties have with other responsible authorities in the area of Environmental Impact Assessment?
4. Are there any other authorities, besides prefectures/counties, responsible for the issuing of authorizations?

These 4 questions were addressed directly to the expert that within the association was competent in the renewable energy sector. Due to the competence devolution in Italy, the pre-questionnaire was sent to a small sample of provinces<sup>7</sup>, in order to obtain a first coherent framework of the different actors involved in the authorisation process.

The aim of this pre-questionnaire was to identify specific competences in the RES sector assigned to the local authorities at NUTS-3 level. This set of primary information were needed to design a second detailed questionnaire (see Annex II), which would be flexible enough to be adapted to the different national contexts.

Indeed, the questionnaire was structured in 5 different areas.

- The general overview section concerned some basic information about the province (also the contact details of the person who filled in the questionnaire) and a set of quantitative data

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<sup>7</sup> The provinces were selected on regional basis, in order to have a fair representation of the different regional contexts. Finally 23 provinces answered to the pre-questionnaire: Benevento, Bergamo, Brindisi, Campobasso, Chieti, Crotone, Cuneo, Enna, Foggia, Forlì-Cesena, Ogliastro, Pisa, Siena, Teramo, Torino, Treviso, Udine, Vercelli, Vicenza, Viterbo.

regarding the electricity production from RES in the territory concerned. This data had to be collected on the basis of the technology (solar, wind, bioenergy, hydropower, thermal, geothermal) and focused on the installed capacity and number of installations.

- The section named “functions and operative capacity” and on RES-e policies and strategies, encompassed a set of dichotomous questions concerning the structure (office, agency, department etc.) in charge of the RES policies within the provincial authority.
- The section “legal framework” was focused on the legislation in force at provincial and regional level with regard to the installation of new RES plants. Also in this case the items presented were “technology oriented” in order to check if the normative dispositions were implemented differently on the basis of RES technology. This part of the questionnaire were essentially composed by qualitative questions.
- The fourth part of the questionnaire addressed the administrative barriers limiting the development of new RES installations within the province territory. Information provided by this set of question are quantitative with regard to the number of authorities concerned by the authorisation process, duration of the procedure, administrative costs and progress capacity (i.e. number of blocked project). Moreover in this section a number of multiple choice question were elaborated to assess the transparency of the procedure, major obstacles and the factor(s) that mostly blocks the projects.
- Finally, the last section of the questionnaire presented various items related to the promotion, awareness and support to the development of “RES”. This qualitative information included also question regarding measures already implemented to provide financial support to the projects.

## 4 The Italian framework on the promotion of RES

### 4.1 The legislative framework in force (Legislative Decree 387/03)

The *Legislative Decree 387/03*<sup>8</sup> represents the juridical reference that governs the modalities and procedures for the obtainment of authorizations needed for the construction and management of Electric Energy (EE) production plants powered by Renewable Energy Sources (RES). Moreover, the Decree simplifies the authorisation procedures, since it envisages the possibility to apply for the Single Procedure, in which all the public authorities concerned convey and participate within an enquiry/decision making body, namely Service Conference. The functioning of the Service Conference is governed by the same Decree, which establishes the modalities and terms for the conclusion of the Single Authorization procedure<sup>9</sup>.

The principles concerning rationalization and simplification of Single Authorization procedures are the following:

- the construction and operation of EE production plants powered by renewable sources, modification works, upgrading works, partial or total refurbishment, and reactivation works, as defined by law, and all other associated works and infrastructures needed are subject to the Single Authorization, which is issued by the Region or Province, if the latter is authorized by the Region. The Single Authorization must be in accordance with the Laws on environmental protection, protection of landscape, historical, and artistic heritage;
- the Single Authorization is issued only after the conclusion of a Single Authorization procedure, in which all the interested public administrations participate. The procedure must be carried out in accordance with the simplification principle and with modalities laid down by Law num. 241/1990<sup>10</sup>. Realization works of EE production plants powered by renewable sources, and all aforementioned associated works and authorised infrastructures must be of public utility, unpostponable, and urgent;
- the issued single authorization constitutes a title for plant's construction and operation;
- the aforementioned works could also be realized in areas classified as "agricultural" by urban plans.

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<sup>8</sup> The Legislative Decree n. 387 of the 29<sup>th</sup> December 2003 has implemented the Directive 2001/77EC.

<sup>9</sup> Single Authorization, paragraph 4, art. 12, Legislative Decree 387/03.

<sup>10</sup> Law n. 241 of the 7<sup>th</sup> August 1990 (Official Journal n. 192 issued the 18<sup>th</sup> of August 1990), concerning administrative transparency.

The Single Authorization encompasses, whenever necessary, a variant of the urban planning instrument.

The discipline of the Single Authorization procedure is not applicable in case of installation of RES plants for which no authorisation is needed. Small plants, with power generating capacity less than predetermined thresholds (see table below), shall be subject to rules concerning the *Declaration of Activity Initiation* (DIA). Moreover, the installation of wind generators with reduced diameter and height, as well as solar thermal panels or photovoltaic panels adherent or integrated on building's roofs with a surface area not exceeding the roof's one, is subject to the discipline chosen by each Municipality.

Therefore, the Single Authorization procedure is compulsory for:

- the construction and operation of EE production plants powered by renewable sources;
- modification works;
- upgrading works;
- partial or total refurbishment;
- reactivation works, and all other associated works and infrastructures needed for the construction and operation of plants.

In addition, the procedure must be in accordance with the Laws on environmental protection, protection of landscape, historical, and artistic heritage.

Besides, the Single Authorization procedure is not activated in the following cases:

- for the construction and operation of renewable energy plants against which are not subject to any authorization (environmental, historical, archaeological, landscape, hydro-geological, fire prevention, etc.), as these cases shall be subject to the discipline of building permit.
- when the generation capacity is lower than the determined thresholds (see below with reference to the specific source), as in these cases the discipline concerning the Declaration of Activity Initiation for building shall be applied at the articles 22 and 23 of the Presidential Decree num. 380/2001<sup>11</sup> and according to Regional Laws.

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<sup>11</sup> Presidential Decree n. 380 of the 6<sup>th</sup> June 2001 (Official Journal n. 245 of the 20<sup>th</sup> October 2001), concerning the Construction Industry Single Act.

### Power thresholds

Wind-power	< 60 kW
Solar-power	< 20 kW
Hydro-power	< 100 kW
Biomass	< 200 kW
Biomass (landfill gases, residual gases deriving from treatment processes, and biogases)	< 250 kW

- for the installation of individual wind-power plants with total height not exceeding 1.5 meters and a diameter not exceeding 1 meter, as well as solar thermal or photovoltaic plants adherent or integrated on the roof of buildings with (i) the same inclination and orientation of the outer layer and (ii) whose components do not modify the shape of the buildings themselves in case the plant surface area does not exceed the roof's one. In all these cases the applicable discipline is the one chosen by each Municipality.

The Single Authorisation for the construction and operation of renewal energy production plants is issued:

- by the Region, in agreement with local authorities concerned, for plants exceeding 50 MW of thermal power;
- by the Province for those plants envisaged by current law, and whose jurisdiction does not reside in the Region and in the State;
- by the Ministry of Transport for offshore plants, previous consulting the Ministry of Economic Development and the Ministry of Environment and Protection of Land and Sea, and after obtaining the use of the maritime domain by the competent maritime authority.

With the approval of Legislative Decree 56/2010<sup>12</sup>, which entered into force the 5th May 2010, the competence system has been further modified. Indeed, the high efficiency electricity production plants up to 3 MW are now subject to municipal discipline of the Declaration of Activity Initiation.

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<sup>12</sup> Legislative Decree n. 56 of the 29<sup>th</sup> March 2010 (Official Journal n.91 of the 21<sup>st</sup> April 2010).

## **4.2 Authorization procedures**

In order to identify critical situations and non-technical barriers it is necessary to analyse the authorization procedure system, both in terms of modalities regarding authorization procedure and in terms of jurisdiction.

### **4.2.1 Modalities and conclusion of the Single Authorization procedure within the Service Conference.**

The application for obtaining the single authorization shall be submitted to the competent authority, along with a valid stamp duty, the comprehensive final project, and the necessary technical documentation. The whole documentation shall be submitted in as many copies as the number of authorities involved in the proceedings.

The proceeding is conducted in the Service Conference, announced by the Head of the Single Authorization procedure within 30 days from the confirmation (i) of the Single Authorization application, or (ii) of the supplementary documentation eventually required.

Each convened authority participates through a single representative who has been made in charge, by institutionally competent bodies, of making final and binding decisions on behalf of its authority on all legal acts under its jurisdiction.

The disagreement expressed at the Service Conference shall be motivated and must indicate the specific changes and requirements deemed necessary for fulfilment.

In case of disagreement expressed by a State Authority responsible for environmental protection, landscape-territorial, or historical and artistic heritage, or an authority responsible for health protection and public safety, the applicable discipline shall be the art. 14-quarter, paragraph 3 of the Law num. 241/1990<sup>13</sup> currently in force.

In the case the Service Conference grants the Single Authorization, the construction and operation of the plant shall be carried out in conformity with the approved project. The Single Authorization includes all requirements eventually needed, which depend on the realization and operation of the plant. Furthermore, following the dismissal of the plant, as it is envisaged in the apposite Plan, the Single Authorization obliges the beneficiary to restore the premises to their original condition. Moreover, in case of hydro-power plants the beneficiary is obliged to implement environmental restoration and rehabilitation measures.

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<sup>13</sup> Ibid.

#### **4.2.2 Actors involved in the Single Authorization procedures**

The Service Conference must gather all agencies/associations/organizations deemed holders of permits, opinions, “nulla osta”, agreement acts necessary for the obtainment of the Single Authorization. On the contrary, the granted Single Authorization shall be null and void.

Underneath, the table provides an exhaustive list of constraints that may be taken into account on sites earmarked for the installation of RES plants.

Constraint	Responsible Authority
<p>Landscape constraints deriving from Legislative Decree 42/2004 and subsequent modifications.</p> <p>Vincoli paesaggistici derivanti dal D.Lgs. 42/2004 e s.m.i.</p>	<p>Region or Municipality, eventually Superintendency for Environmental and Architectural Heritage.</p>
<p>Compatibility with the Area Plan for Parks</p> <p>Compatibilità con il Piano d'Area per i Parchi</p>	<p>Park Agency (if interested)</p>
<p>Copatibility with the Plan for Hydro-gological arrangement (PAI)</p> <p>Compatibilità con il Piano di Assetto Idrogeologico (PAI)</p>	<p>River Basin Authority in case of river belts and instability.</p>
<p>PRG compatibility (soil usage, geomorphological danger, buffer stripes from roads, watercourses, water treatment plants, cemeteries);</p> <p>Compatibilità con il PRG (Uso del suolo, pericolosità geomorfologia, fasce di rispetto da strade, corsi d'acqua, depuratori, cimiteri);</p>	<p>Municipality</p>
<p>Soil usage and protection in case of interference of public watercourses</p> <p>Uso e tutela del suolo In caso di interferenza con corsi d'acqua considerati acque pubbliche</p>	<p>Region or interregional Authorities</p>
<p>In case of eventual effects on the Natura 2000 Network sites, such as Sites of Community Importance (SIC), Special Protection Areas (ZPS), Special Conservation Areas (ZSC), the Incidence Assessment is required;</p> <p>In caso di possibili incidenze su siti della Rete Natura 2000, quali: Siti di Importanza Comunitaria (SIC), Zone di Protezione Speciale (ZPS), Zone Speciali di Conservazione (ZSC), si richiede la valutazione d'incidenza;</p>	<p>Region and/or delegated Province</p>
<p>In case of areas subject to hydrogeological constraints (Royal Decree 30/12/1923 n. 3267) the authorization is required.</p> <p>In caso di aree sottoposte a vincolo idrogeologico (R.D.L. 30/12/1923 n. 3267), è necessaria l'autorizzazione.</p>	<p>The Authority in charge depends on areas and volumes, and on the presence of wooded areas (Municipality, Province, Region, and binding opinion of the State Forestry).</p>
<p>Interferences with technological networks</p> <p>Interferenze con reti tecnologiche</p>	<p>Ministry of Telecommunications</p>
<p>Connections of networks for EE distribution</p> <p>Connessioni rete di dispacciamento energia elettrica.</p>	<p>Authorization required from the supplier (eg. Enel).</p>

For easier comprehension, a non-exhaustive list of principal actors that participate to the Service Conference is shown below:

Actors	Authorization procedures	Notes
<b>Region or delegated Province</b>	Single Authorization, former Legislative Decree 387/03;	
	Screening procedure and EIA procedure, former Legislative Decree 152/2006;	
	Authorization for construction and operation of power lines;	The Region/Province authorizes the construction and operation of works concerning transmission, sorting, processing, and distribution of electric energy. In addition, every ancillary work which has a nominal tension not exceeding 150kV needs the authorization from the same authorities. In case of inter-provincial or inter-regional power lines the authorization is issued in accordance with interested Provinces/Regions.
	Wastewater discharge authorization for wastewaters discharged not into sewers.	The authorization to discharge is required for (i) wastewater treatment plants operated by private companies, located in the vicinity of manufacturing plants for the treatment of liquid waste therein produced with direct discharge into surface waters or soil (sub-irrigation), and for (ii) all discharges of industrial origin not subject to purification and discharged into surface water or soil (eg. cooling water) and rainwater classified as “second rainwater” (Il pioggia) by regional legislation.
	Authorization to use the remaining electricity production.	The use of remaining electric energy production shall be authorized in two cases: (i) in case the electric energy is considered as waste (operation R5 or R10 Legislative Decree 152/06); and (ii) in case it is considered as biomass (Agricultural use, Ministerial Decree 96/06).
<b>Municipality</b>	Opinion regarding EIA procedure, former Legislative Decree 152/2006	

	Opinions regarding the authorization for construction and operation of power lines.	
	Authorization for discharging wastewaters in public sewers, former Legislative Decree 152/2006.	
	Landscape authorization (if delegated)	In order to grant the authorization, the Municipality shall assess the landscape compatibility of the requested work, in relation to (i) the characteristics of the context, and (ii) the recognised value of the existing landscape constraint. Legislative Decree 42/2004.
<b>Competent Arpa</b>	Technical opinion regarding the authorization, former Legislative Decree 387/03	The ARPAs are regional Agencies for environmental protection.
	Opinions regarding authorization for construction and operation of power lines.;	
	Opinion regarding building permit.	Legislative Decree 387/03 and Regional Laws
<b>Competent AUSL</b>	Opinion regarding the building permit;	The AUSLs are public no-profit companies with legal personality, which are thoroughly incorporated in the Regional Health Service with the aim of protecting, promoting, and improving health.
	Opinions regarding the authorization for construction and operation of power lines.	
<b>GSE and/or Enel , Terna, or distributing company</b>	"Nulla osta" regarding the network connection and interference resolution.	<b>GSE</b> (Energy Services Manager) is a company entirely owned by the Ministry of Economy and Finance. The activity of the GSE concerns the field of renewable and assimilated sources by encouraging the production and managing the consequent economic and financial flows. <b>Terna</b> is the company responsible in Italy for electricity transmission network on high and extra-high tension throughout the country, owning over 98% of electricity infrastructure.
<b>Park Agency</b> (if competent)	"Nulla osta", former Law 394/1991 (Discipline regarding protected areas).	The parks are managed by Park Agencies through planning and programming tools. They are entities endorsed with administrative and functional autonomy. The granting of licenses or authorizations regarding operations, plants, and works inside the parks, is subject to prior "nulla osta" of the Park Agency. The "nulla osta"

		verifies the conformity between the provisions of the plan, the regulation, and the intervention.
<b>Region or delegated Province</b>	Incidence Assessment under Presidential Decree 357/97	The Incidence Assessment is a process of preventive nature, to which is necessary to submit any plan, project, or action that could have a significant effect on the site, or proposed site concerning Natura 2000. The submission could be individual or in combination with other plans and project. In any case it is necessary to take into account the conservation objectives of the site itself.
<b>Technical basin service</b> (if competent)	License for use of state-owned areas, former Single Act 523/1904	Technical Basin Service is in charge of prevention and emergence managing for the protection of the territory from hydraulic and hydrogeological risks, and of management and protection of water resources and land areas in the river basin of the river of competence.
<b>Mountain community</b> (if competent)	Authorization for the realization of works in areas under Hydrogeological Constraint, ex Royal Decree 3267/1923.	The Mountain Communities are associations of municipalities and local authorities of montain or partially montain municipalities, also belonging to different provinces, for the valorization of mountain areas. They may exercise their own functions, conferred functions, and associated municipal functions.
<b>Ministry of Cultural Heritage and Activities</b> (if competent)	Measure according to Legislative Decree 42/2004 art. 136	Verification needed for enshuring whether works are realized within areas of significant public interest deleared as such by the Ministry of Cultural Heritage and Activities.
<b>Superintendency for Architectural Goods and Landscape, and Superintendency for Archeological Goods</b> (if competent)	Opinion regarding the landscape athorization, ex art. 146 Legislative Decree 42/2004.	The Superintendencies are bodies of the Ministry of Cultural Heritage and Activities endorsed with territorial responsibilities in the field of cultural heritage, landscape, museums, archives, and similar. The execution of any works concerning cultural goods is subject to prior authorization by the competent Superintendency. The authorization is granted on behalf of the project or, whether sufficient, on behalf of the technical description of the intervention, both presented by the applicant. It may contains limitations.

<b>Basin Authority</b> (if competent)	Conformity opinion regarding the Basin Plans.	The Basin Authorities are mixed State-Regions bodies, operating on river basins, for actions regarding soil and subsoil, rehabilitation of water, useage and management of water resources, and protection of environmental aspects related to river basins.
<b>Ministry of Internal Affairs</b>	Conformity opinion regarding fire prevention, former Presidential Decree 37/98, art. 2.	All activities regarding fire prevention controls or visits are subject to conformity opinion by the Firefighter's Provincial Committee, which examines the projects and it pronounces on their conformity to the fire prevention legislation.
<b>Military Authority</b> (Ministry of Defence, Air Force, Navy, State Forestry, etc).	"Nulla osta" regarding authorization for power line construction and operation.	
<b>Ministry of Telecommunications-Territorial Inspectorate</b>	"Nulla osta" regarding authorization for power line construction and operation, and for any underground matalic pipe line, former art. 95, pharagraph 5, Legislative Decree 259/2003.	
ENAC, ENAV, USTIF, National Mining Office for hydrocarbons and geothermic, Directorate General for RFI works and soil.	Opinions and "nulla osta" regarding the authorization for power line costruction and operation.	ENAC - Italian Civil Aviation Authority  ENAV – Authority for management and control of civilian air traffic in Italy  USTIF – Authority for the transportation of fixed plants (Ministry of Transports)  RFI – Agency for National Railway Network
<b>Telecom</b>	"Nulla osta" competent for network interference resolution.	<b>Telecom</b> – Italian telecommunication company that owns the telephone network.

## 4.3 Relations between the Single Authorization procedure and other procedures

### 4.3.1 EIA procedure (Environmental Impact Assessment), IEA procedure (Integrated Environmental Authorization), and Incidence Assessment

In the case of plants for which it is necessary to enable the Screening procedure for the verification of the liability to the *Environmental Impact Assessment* procedure (EIA), the applicant shall submit the preliminary project and the Screening report to the EIA office of the Authority responsible for EIA

procedure (Region or delegated Province). Afterwards, if the Screening outcome excludes the project from EIA procedure, the applicant shall submit the application for the Single Authorization to the Authority responsible for Electric Energy production. Once the application has been approved the Single Procedure should conclude within 180 days.

However, if following the Screening procedure it should be necessary to enable the EIA procedure, the Single Authorization is issued under the EIA procedure. The positive Environmental Impact Assessment has the same juridical value as Single Authorization.

In case of plants subject to EIA procedure under the competence of the State/Region, the Service Conference called within the Single Procedure, expresses its opinions only after it receives the positive EIA. In case of plants subject to *Integrated Environmental Authorization* (IEA), the latter is released under the Single Procedure. Finally, if the project meant to be realised on sites regarding the Natura 2000 Network, such as Sites of Community Importance (SIC), Special Protection Areas (ZPS), Special Areas of Conservation (ZSC), the *Incidence Assessment* is required. The Single Authorization includes also the outcomes of the Incidence Assessment.

In case a plant is subject to EIA procedure, but not to IEA procedure, the EIA procedure encompasses the Incidence Assessment.

Please note that supplementary Law 99/09 regarding Annex IV, Part II of the Legislative Decree 152/06 has further amended the Single Authorization procedures: non thermal plants with total power less than or equal to 1MW are not subject to verification procedure for EIA liability (namely, Screening).

- Plants subject to verification procedure for EIA liability (Screening)<sup>14</sup>:
  - a) Wind power > 1 MWp
  - b) Solar power > 1 MWp not integrated
  - c) Hydro power > 100 kWp
  - d) Thermal plants for production of electric energy, steam, and hot water with total thermal power exceeding 50 MW. These thresholds are reduced by 50% whether such plants are located within protected natural areas.
  
- Plants subject to Environmental Impact Assessment (EIA) (Legislative Decree 152/06 and successive modifications):

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<sup>14</sup> Legislative Decree 152/06 and successive modifications – Decree 19/02/07, Law 99/09.

- a) Plants, mentioned under letter “d” at the previous point, that are located, even partially, within Protected Natural Areas as defined by the Law 396 of the 6<sup>th</sup> December 1991;
- b) Thermal plants for production of electric energy, steam, hot water with total thermal power exceeding 150 MW;
- c) Wind-power plants for production of electric energy with procedure in which it is envisaged the mandatory participation of a representative of the Ministry of Cultural Heritage and Activities; those thresholds are reduced by 50% whether such plants are located within Protected Natural Areas.

#### **4.3.2 Plants that require the activation of expropriation procedures**

Authorized works for the realization of plants powered by renewable sources, associated works, and infrastructure essential to the construction and operation of these plants, are of public utility, unpostopnable, and urgent.

For the realization of private works of public utility (plants and/or works and related infrastructure) the expropriation authority is the agency that issues the declaration of public utility, namely the agency that issues the Single Authorization.

Thus, the expropriation authority regarding the field of EE makes individual notice to landowners involved in the procedure. The notice informs the commencement of the proceeding for the Single Authorization, which substitutes essential acts for the realization of the project. Whenever necessary the procedure encompasses the urban variant, the expropriation notice, and the declaration of public utility.

Against such acts it is possible to appeal before the ordinary territorial jurisdiction, namely the TAR (Regional Administrative Court), and/or to make an extraordinary appeal before the President of the Republic.

#### **4.3.3 Authorization procedure for RES typologies**

Hereinafter, the paragraph focuses on some examples of authorization processes concerning individual types of renewable sources. The concurrence between Regional and State legislation makes the processes differ from Region to Region, even with the presence of equal EE production plants.

##### *4.3.3.1 Biomass plants between 50 MWt and 300 MWt of power*

The biomasses plants between 50 MWt and 300 MWt of power are under the competence of:

- **Region:** as far as EIA and the Single Authorization are concerned;

- **Province:** (within the Service Conference of the regional Single Authorization procedure) the delegated Province issues: (i) the IEA, (ii) the authorization for the construction and operation of power line, (iii) the mineral oil stocking authorization, (iv) opinions within the EIA procedure, (v) the authorization for emissions into the atmosphere, and (vi) the authorization for wastewater discharging not into sewage systems.

#### 4.3.3.2 *Biomass plants between 200 kWt and 50 MWt (250 kW for landfill gases, residual gases from sewage treatment plants, and biogases)*

The biomass plants (using the processes of combustion, gasification, pyrolysis, anaerobic digestion for the production of electric energy or for cogeneration plants) between **200 kWt and 50 kWt (250 kW for landfill gases, residual gases from sewage treatment, and biogas)** if not located (even partially) within the system of Protected Natural Areas, the projects are subject exclusively to Single Authorization granted by the Region or delegated Province.

The Single Authorization includes, where necessary, procedures for Incidence Assessment carried out at Regional or Provincial level (if delegated).

In case the project envisages a plant located in sites concerning the Natura 2000 Network<sup>15</sup>, such as Sites of Community Importance (SIC), Special Protection Areas (ZPS), Special Areas of Conservation (ZSC), Incidence Assessment is required. In addition, the Service Conference shall take into account the outcomes of the Incidence Assessment, which are embodied into the Single Authorization.

Moreover, it is worth mentioning that the supplementary Law 99/0916 has further modified the procedures for granting the authorization. More precisely, solely the non-thermal plants with total power less than or equal to 1 MWe are not subject to verification procedure for EIA liability (namely, Screening).

#### 4.3.3.3 *Biomass plants of total power less than 200 kWt (250 kW for landfill gases, residual gases from sewage treatment plants, and biogases).*

The construction and operation of biomass plants (using processes of combustion, gasification, pyrolysis, anaerobic digestion for electricity production, or for cogeneration plants) of thermal power less than **200 kW (250 kW for landfill gases, residual gases from sewage treatment plants, and biogases)**

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<sup>15</sup> Natura 2000 is an ecological network of protected areas in the territory of the European Union which is the result of the implementation of two distinguished directives: the Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora) and the Birds Directive (Council Directive 2009/147/EC on the conservation of wild birds). These two Directives are the basis of the creation of the Natura 2000 Network.

<sup>16</sup> Regarding Annex IV, Part II of the Legislative Decree 152/06.

are subject solely to Declaration of Activity Initiation (DIA). In case all the necessary conditions to carry out the Incidence Assessment are given, the DIA shall acknowledge the outcomes of the Incidence Assessment.

Moreover, plants using energy from biomass can make use of different fuels (woody biomass, biogases, liquid biofuels, etc). Those plants can also produce solely heat or even electric energy, and they can be used for both domestic and industrial purposes. Thus, types of licenses (authorizations) vary widely, depending on the type of biomass used (woody-cellulosic, starchy-sugar, oil, waste: animal residuals, sludge, etc), on the utilized energy conversion processes, and on plant's size.

The complexity of the authorization process increases in the presence of biomasses considered as waste. Indeed, plants that use waste are considered as "R1 activity" concerning energy recovery, and need to be authorized according to Part IV of Legislative Decree num. 152/06. The plants with consumption capacity higher than 100 t/day of waste are subject to Legislative Decree num. 152/06 and are, hence, subject to EIA; while plants subject to Integrated Environmental Authorization (IEA) are plants for waste management listed in Annex I of the Legislative Decree num. 59/2005.

#### *4.3.3.4 Wind-power plants exceeding 60 kW of power.*

The wind-power plants, regardless of their size, are subject to Screening procedure. Wind-power plants exceeding **60 kW** of power, which according to the project are realized even partially within the system of Protected Natural Areas, are subject to EIA procedure.

In case the project is subject to EIA, the latter includes and replaces the Single Authorization.

The Head of the EIA procedure should ensure that the procedure for granting the Single Authorization is coordinated under the procedure for Impact Assessment.

The EIA includes, where necessary, the procedures for Incidence Assessment.

#### *4.3.3.5 Wind-power plants with power less than 60 kW*

The wind-power plants with nominal power less than 60 kW are subject to DIA and not to Single Authorization. Moreover, wind-power plants, regardless of their size, are in any case subject to Screening and to the acquisition of the "nulla osta" according to the Legislative Decree 42/0417.

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<sup>17</sup> Legislative Decree n.41 of the 22<sup>nd</sup> January 2004 (OJ n. 42 of the 24<sup>th</sup> February 2004), concerning Cultural Heritage and Landscape protection.

Whether according to the project the plant is built, even partially, within the system of Natural Protected Areas, it is subject to EIA procedure, which includes, where necessary, the procedure of Incidence Assessment.

#### *4.3.3.6 Photovoltaic industrial plants exceeding 20 kW of power.*

In case the photovoltaic industrial plant exceeding 20 kW of power, not located (even partly) within the system of Protected Natural Areas, the applicant must submit the project to the Screening verification procedure.

The Single Authorization includes, where necessary, the procedures for Incidence Assessment.

However, whether following to the Screening procedure the need to submit the project to Environmental Impact Assessment procedure emerges, the latter encompasses and replaces the Single Authorization.

The EIA procedure includes, where necessary, procedures for Incidence Assessment.

#### *4.3.3.7 Photovoltaic non-industrial plants with power less than 20 kW.*

Power plants **not exceeding 20 kW** of power shall be considered non-industrial and therefore not subject to:

- the procedure for environmental verification (i.e. Screening) and EIA procedure (except for locations in Protected Natural Areas);
- the Single Authorization.

Therefore, photovoltaic non-industrial plants, non-located (even partly) in Protected Natural Areas, are subject to Declaration of Activity Initiation under the competence of the Municipality.

Given the necessary conditions, the Incidence Assessment procedure must be carried out.

If according to the project the plant should be located, even partially, within the system of Protected Natural Areas, it should always be submitted to EIA procedure. This procedure includes the Declaration Activity Initiation.

The EIA includes, where necessary, the procedure for Incidence Assessment.

#### *4.3.3.8 Integrated or partially integrated photovoltaic plants.*

The Municipal discipline is take into account for the realization of photovoltaic plants in case of, both "partially integrated" and with "architectural integration", in other words attached to or integrated into the roofs of buildings with the same inclination and orientation of the outer layer; moreover, the components shall not modify the shape of the buildings themselves, and the surface area of the plant should be smaller than the roof's one.

#### *4.3.3.9 Hydroelectric plants exceeding 100 kW of power.*

The hydroelectric plants exceeding 100 kW of power are subject to the Screening procedure according to the Legislative Decree 152/06. The submission of the project to the EIA procedure is excluded.

In case of negative outcome, the applicant shall submit to the competent authority in the field of EE (Region or delegated Province) the application for the Single Authorization.

The Single Authorization encompasses, where necessary, the procedures regarding the Incidence Assessment.

However, in case, as a result of the Screening procedure, the necessity to put the project before the Environmental Impact Assessment procedure emerges, the latter encompasses and replaces the Single Authorization.

The head of EIA procedure must ensure that the granting procedure for the Single Authorization is being coordinated within the EIA procedure.

The EIA procedure encompasses, where necessary, the Incidence Assessment procedure.

In case the according to the project the plant should be realised, even partially, within the system of Protected Natural Areas, it should always be subject to EIA procedure, which encompasses and replaces the Single Authorization.

The EIA procedure encompasses, where necessary, the Incidence Assessment procedure.

#### *4.3.3.10 Hydroelectric plants with less than 100 kW of power.*

For the construction and operation of hydroelectric power with less than **100 kW** of power, not located (even partly) within Protected Natural Areas, are subject to the Declaration of Activity Initiation.

Where necessary the Incidence Assessment procedures will be carried out.

In case the project is to be executed, even partially, within the system of Protected Natural Areas, it shall be submitted to regional EIA procedure, which encompasses and replaces the Declaration for Activity Initiation (DIA).

The EIA procedure encompasses, where necessary, the Incidence Assessment procedure.

#### 4.3.3.11 Geothermal plants.

The geothermal plants are subject to EIA procedure of regional competence, while those for civilian use with low level of enthalpy can be considered part of the hydro-sanitary settings. At the same time, eventually installed geothermal plants are normally exempted from being submitted to the Single Authorization process. This is due to the difficulty to find high enthalpy geothermal sources suitable for electricity production, and also because the sources of low enthalpy are used, considering the present technology, exclusively within sanitary field.

## 4.4 Non-technological barriers

### 4.4.1 National context

The table below shows the data emerged from the survey with particular reference to Provinces. Data concerned are the following: the approval year of the Regional Energy Planning (PEAR), the status of implementation of Article 12 of Legislative Decree num. 387/03<sup>18</sup>, the delegation from Region to Provinces regarding authorization procedures, and finally, the provincial PEP (Provincial Energy Plan) provision.

This framework should be used as reference in order to outline observations in relation to non-technological barriers for the development of electric EE plants from renewable sources.

REGION	PEAR	Former Art.12 387/03	Delegated Provinces	Num. of Provinces	Num. of PEPs
Abruzzo	2009	2004	no	4	1
Basilicata	2010	draft	no	2	0
Calabria	2005	2004	no	5	1
Campania	2009	2006	no	5	1

<sup>18</sup> Legislative Decree n.387 of the 29<sup>th</sup> December 2003 (OJ n.25 of the 21<sup>st</sup> January 2004), concerning the implementation of Directive 2001/77/CE regarding the promotion of RES electricity production in the EU.

Emilia Romagna	2007	2004	yes	9	3
Friuli Venezia Giulia	2007	2006	yes	4	0
Lazio	2001	2006	yes	5	2
Liguria	2003	**	no	4	2
Lombardia	2003	2003	yes	12	3
Marche	2005	draft	no	5	2
Molise	2006	2004	no	2	0
Piemonte	2004	**	no	8	3
Puglia	2007	2005	no	6	0
Sardegna	2006	2004	no	8	0
Sicilia	2009	**	no	9	1
Toscana	2007	2005	yes	10	3
Trentino-Sud Tirolo	2003	**	yes	2	2
Umbria	2004	2004	yes	2	0
Valle d'Aosta	2003	2006	no	1	0
Veneto	2005	2004	no	7	0

The appendix displays the provision of RES plants to the provincial level, and its energy production.

#### 4.4.2 Lead time for the completion of the procedure under provincial competence

The analysis shows that the lead time for the conclusion of provincial proceedings have always been complying with the regulatory setting that envisages a maximum of 180 days within which the *preliminary inquiry* shall explicitly end, although, the formal lead time is subject to the suspension period in case of supplementary documentation.

The figure shows that the lead time required to the permitting authority (Province) to carry out the preliminary inquiry is normally between 60 and 90 days. The days left are used for the acquisition of opinions and of “nulla osta”s, which are under the competence of other agencies and of other actors outside provincial administration.

Furthermore, it is worth mentioning the authorizations for RES plants that require Environmental Impact Assessment (EIA); indeed, the EIA procedure considerably extends the lead time for the conclusion of those proceedings.

#### **4.4.3 Difficulties and types of barriers to overcome**

The analysis of the data gathered through the survey highlights three critical areas that represent non-technological barriers. Those critical issues need to be addressed in order to enhance the installation activities of plants producing electricity from renewable sources and to avoid failures of submitted projects, which usually occur in the phase of preliminary inquiry for authorization granting.

1. Energy planning:

§ Inadequacy of spatial planning tools for plant installation scheduling

2. Normative reference:

§ Instability of the authorization procedure

3. Planning inadequacy:

§ Lack of compliance with territorial plans;

§ Failure to meet the technical and administrative requirements to obtain the authorization;

§ Post-authorization changes due to modifications during construction.

#### **4.4.4 Energy planning: inadequacy of spatial planning tools for plant installation scheduling**

The lack of energy planning at national level, which is gradually transferred to the regional and then to the provincial level, is considered by the provinces as an element of great uncertainty over the compliance with the preliminary inquiry process. This is due to the absence of a policy reference framework that should provide: (i) intervention priorities and (ii) defined programming elements for the identification of plant construction sites.

The natural consequences of the lack of uniform planning in various territories are the distortions regarding electricity production. Despite the fact that electricity production is of public interest and encouraged by the State, the plant installation in some territories may be forbidden, but in other territories, under similar conditions, may be instead authorized.

In lack of defined programming, which is a direct responsibility of the political sphere, the public officials, who are in charge for the management of the public authority (under the policy guidance given to them), face great difficulties in operating.

#### *4.4.4.1 Normative reference: instability of the authorization procedure*

The Legislative Decree 387 of 2003<sup>19</sup>, Article 12 has introduced a major simplification concerning the authorization procedures for plants using renewable sources. However, the same decree foresees the adoption of Guidelines that precisely illustrate modalities and technical criteria to be applied to the procedures for construction and operation of RES plants, with particular reference to criteria for the identification of plant construction sites.

The national Guidelines regarding the Single Authorization proceeding have been awaiting publication for more than six years (the measure is apparently ready but not released). The Regions, which are not competent in issuing the aforementioned Guidelines (the competence is reserved to the State), proceeded independently without central coordination on the basis of their own laws. As a consequence, the central government has challenged the regional laws before the Constitutional Court by asking their annulment.

As a consequence of the lack of a general, national, and unitary model, the Regions have produced – since the year 2003 until nowadays – an array of disciplines with differentiated provisions. Moreover, whereas the Regions have delegated the matter to the Provinces, the authorization process is being diversified between each Province within the same Region.

The possibility to transfer competences concerning authorization granting from the State to the Regions has facilitated the adoption of regional legislations according to Article 12 of the Legislative Decree 387/2003. Those regional laws have often breached the national directives and exceeded the very spirit of the national legislation. Hence, they certainly generated a proliferation of applicable rules that invalidated the homogeneity features of the national law underpinning the protection of other general values of the Italian legal order, such as for instance, the principle of competition on equal terms throughout the country.

In contrast, the differentiation of the legislation with regard to many different types of RES used by the plants have still not occurred. Indeed, this kind of measures would lead to a more effective authorizing process.

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<sup>19</sup> Ibid.

This is certainly considered the biggest non-technological barrier that jeopardises the development of RES plants, because it vanishes all awareness campaigns and support activities related to RES. Moreover, the investors are obliged to operate in different contexts from region to region and from province to province. Finally, the authorizing authorities issue legally binding measures that could subsequently be annulled by State's constitutional appeals.

#### *4.4.4.2 Inadequate planning: lack of compliance with territorial plans, failure to meet the administrative and technical requirements for obtaining consent, post-concession changes due to modifications during construction*

Last but not least, the analysis of data gathered from the survey, which was filled in by provincial officials who are in charge for public preliminary inquiry, shows that the inadequate planning is considered the main cause of failure and/or of difficulty for obtaining authorizations; especially the failure to meet technical and administrative requirements to obtain consent has been emphasised. This situation emerges from the combination of three factors.

##### 1. Two contrasting environmental interests:

- *An environmental-territorial interest* regarding the concerned Municipalities and those actors that take part to the procedure by protecting environmental interests related to their territory;
- *A superior environmental interest*, represented by the interest to develop RES plants with no environmental impact, that supports installation projects. Nevertheless, the agency in charge to sustain the overall environmental interest (namely, Ministry of Environment) does not play its role effectively.

By analyzing the different mechanisms clearly emerges the asymmetry between the two interests that concerns the role these interests assume. Indeed, on the one hand, territorial interests are placed on an antagonistic position in relation to plant's construction and operation. On the other hand, the national level steadily supports RES plants development through incentives, and information and awareness campaigns.

2. Disproportion in the number of actors called to participate in the proceedings.
3. The lack of territorial Energy planning and the fragmentation of regional/provincial regulatory setting provoke absolute uncertainty among citizens. Moreover, with the normal due diligence it is right to reflect doubts about the goodness and convenience of some initiatives. Indeed, although

these initiatives are truly related to the development of RES, sometimes they are not authorized by competent Authorities for health-care and environmental protection. This paradoxical situation generates confusion and consensus problems.

# 5 The Greek framework on the promotion of RES

## 5.1 RES development in Greece <sup>20</sup>

A European energy policy must pursue the objective of a sustainable, competitive and secure supply of energy. If the EU continues on its present course, this key objective will not be attained. In January 2007, the European Commission adopted an energy policy for Europe. This was supported by several documents on different aspects of energy and included an action plan to meet the major energy challenges Europe faces. Each European citizen must be informed of these challenges and the role they should play in meeting them. Renewable energies help combat climate change while increasing security of supply.

### **Key Issues**

Hydro power has traditionally been important in Greece, and the markets for wind energy and active solar thermal systems have grown in recent years. Geothermal heat is also a popular source of energy. The Greek parliament has recently revised the RES policy framework partly to reduce administrative burdens on the renewable energy sector.

### **Current national RES target**

The RES-E target to be achieved by Greece according to the EU Directive is 20.1% of gross electricity consumption by 2010. For biofuels, the following national targets have been set: 0.7% by 2005, 3% by 2007, 4% by 2008, 5% by 2009 and 5.57% by 2010.

### **Progress towards meeting national targets**

In terms of RES-E share of gross electricity consumption, the 1997 figure of 8.6% had risen to 9.56% by 2004.

### **Main supporting policies**

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<sup>20</sup> Renewable Energy Fact Sheet Greece, 2007.

General policies relevant to RES include a measure related to investment support, a 20% reduction of taxable income on expenses for domestic appliances or systems using RES, and a concrete bidding procedure to ensure the rational use of geothermal energy. In addition, an inter-ministerial decision was taken in order to reduce the administrative burden associated with RES installations.

Greece has introduced the following mechanisms to stimulate the growth of RES:

- Feed-in tariffs were introduced in 1994 and amended by the recently approved Feed in Law. Tariffs are now technology specific, instead of uniform, and a guarantee of 12 years is given, with a possibility of extension to up to 20 years

- Liberalisation of RES-E development is the subject of Law 2773/1999

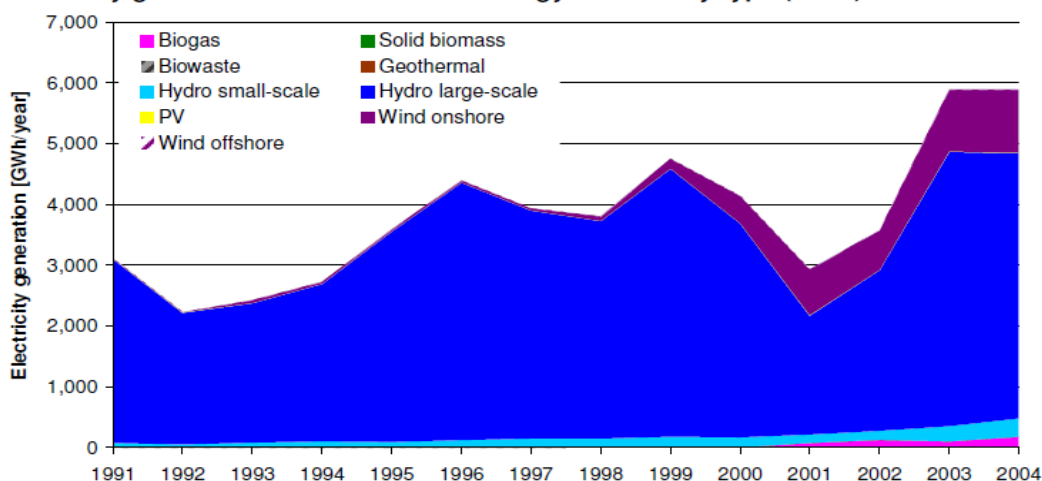
Fossil fuel taxes are not applied to biofuels.

Tax incentives were in place to promote RES-H, but these have been suspended for budgetary reasons.

### Key renewable energy statistics

Electricity from RES: Large-scale hydro power continues to hold the largest share of the RESE market (4,369 GWh in 2004). Onshore wind power accounted for 1,041 GWh in 2004, and grew at an average annual rate of 61% between 1997 and 2004. The level of production registered in 2005 was 1,243 GWh. PV accounted for 1 GWh in 2004, and grew annually, on average, by 27% between 1997 and 2004.

**Electricity generation from renewable energy sources by type (GWh)**



Source: European Commission  
[http://ec.europa.eu/energy/res/legislation/share\\_res\\_eu\\_en.htm](http://ec.europa.eu/energy/res/legislation/share_res_eu_en.htm)

	Penetration 1997 (ktoe)	Penetration 2004 (ktoe)	Av. Annual growth [%]
Biomass heat	911	920	0%
Solar thermal heat	101	128	3%
Geothermal heat incl. heat pumps	2	13	28%

Source: European Commission  
[http://ec.europa.eu/energy/res/legislation/share\\_res\\_eu\\_en.htm](http://ec.europa.eu/energy/res/legislation/share_res_eu_en.htm)

**Biofuels:** Production in the biofuels sector stood at 3 ktoe in 2005.

**Heating and cooling:** Biomass provides most of the RES-H in Greece (920 ktoe out of 1051 ktoe in 2004). Production has increased in the solar thermal sector, and the highest average annual growth, is that of heat from geothermal sources which stood at 28% between 1997 and 2004.

Installed Power of RES in Greece (in MW) (Hydroelectric projects with power >15MW are not included)

	2004	2005	2006	2007	2008	31/10/2009
WIND POWER	480,4	576,1	749,3	853,6	1015,6	1157,4
BIOMASS	20,5	20,5	37,6	37,6	39,4	40,8
MICRO HYDROELECTRIC	43,3	48,2	73,7	95,5	158,4	180,4
PHOTOBOLTAIC	0,3	0,5	0,7	0,7	11,0	42
<b>TOTAL</b>	<b>544,5</b>	<b>645,3</b>	<b>861,2</b>	<b>987,4</b>	<b>1224,4</b>	<b>1420,6</b>

Year	Installed Power (MW)
2004	101
2005	216
2006	126
2007	237
2009	196

## THE ROAD MAP TO DEVELOPMENT OF RES IN GREECE

### DEVELOPMENT OF INSTALLED POWER OF WIND PARKS IN EU COUNTRIES (MW)

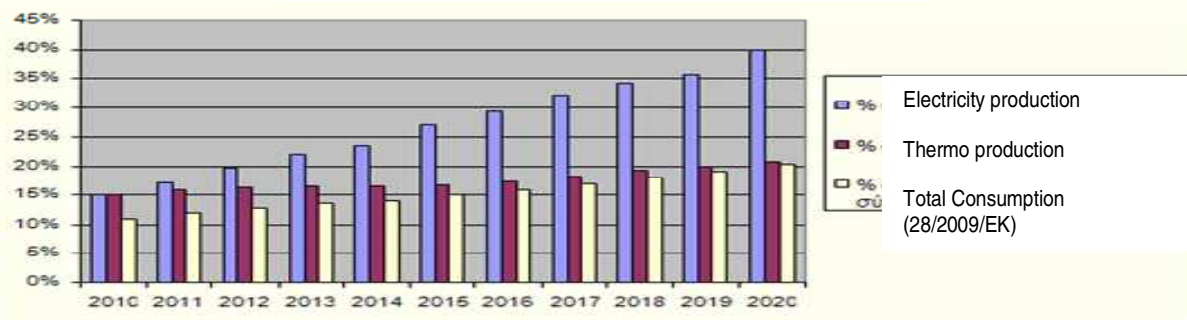
COUNTRY	END 2001	END 2002	END 2005	END 2006
Germany	8.753	12.001	18.415	20.622
Spain	3.335	4.830	10.028	11.615
Denmark	2.556	2.889	3.128	3.136
Italy	697	785	1.718	2.123
U.K.	485	552	1.332	1.963
Portugal	127	194	1.022	1.716
France	85	147	757	1.567
Netherlands	483	686	1.219	1.560
Austria	95	139	819	965
Greece	272	302	573	746
Ireland	125	137	496	745
Sweden	280	328	510	572
<b>EE-27</b>			<b>40.500</b>	<b>48.027 (+19%)</b>

In concluding, Greece's renewable energy sources sector is steadily growing, with power production from the industry totalling 878 MW at the end of 2006, an average annual growth rate of 23 percent in the period 1990-2006.

By the end of 2007 total electricity energy power production totalled 1,039 MW (up 18 percent from 2006), while total power production including large hydroelectric projects totalled 4,060 MW.

### National Targets & assessment of RES penetration

#### Assessment of RES penetration



## 5.2 Existing legal framework

There exists a large variety of regulations dealing with the field of Renewable Sources of Energy in Greece. Furthermore, the harmonization of the national legislation with Directive 2001/77/EC on the promotion of RES electricity on the domestic market has produced additional legislation. In the following lines, a first attempt of a general classification is presented.

### 5.2.1 General RES Legislation

- **PRESIDENTIAL DECREES**

- **P.D. 24/2010** “Order of Ministries”
- **P.D. 189/2009** “Order of Ministries”
- **P.D. 24.05.1985** (NG D’/270/1985)
- **P.D. 256/1989** (NG A’/121/11-05-1989) «Permit of water use»
- **P.D. 126/1986** (NG A’/44/17-04-86)«Exploitation of Woods»

- **LAWS**

- **Law 3734/2009** (NG A’/8/28-01-2009) “Promotion of co-production of useful sources of energy ”
- **Law 3468/2006** (NG A’/129/27-06-2006) “Production of Electric Energy from RES”
- **Law 3175/2003** (NG A’/ 207/ 29-8-2003) “Development of Geothermal Power”
- **Law 3010/2002** (NG A’/91/25-04-2002) “Harmonization of L. 1650/86 with the Directives 97/11/EC και 96/61/EC”
- **Law 2941/2001** (NGA’/ 201/12-09-01) «Simplification of Procedures for the establishment of companies, RES Permits»
- **Law 2773/1999** (NG /A’ 286/22-12-99) «Liberalisation of the electricity market-adjustment of energy policy»
- **Law 2647/1998** (NG A’ 237/22-10-98): «Devolution of competences to Regions and Local Governments»
- **Law 2503/1997**: «Organization and Recruitment of Local Governments»
- **Law 2244/1994** (NG A’/168/07-10-94 «Production of Electric Energy from RES»
- **Law 1739/1987** (NG A’/201/20-11-1987) “Management of Water Resources”

- **Law 1650/1986** (NG A'/160/15-16.10.1986) «For the Protection of the Environment»
- **Law 1475/1984** (NG A'/131/11-09-1984) “Development of Geothermic Power”

- **MINISTERIAL DECISIONS**

- **M.D. Δ6/Φ1/8786/2010** (NG B'/646/2010)
- **C.M.D. 29116/2009** (NG A.A.P 344/2009) “Use of Photovoltaic Power”
- **C.M.D. 29107/2009** (NG A.A.P 344/2009)
- **M.D. Δ6/Φ1/5707/2007** (NG B'/448/2007) “Authorization Licence for RES”
- **M.D. 104247/2006** (NG B'/663/2006) “Authorization Licence for Environmental Conditions”
- **C.M.D. 104248/2006** (NG B'/663/2006)
- **C.M.D. 145799/2005** (NG B'/102/2005)
- **C.M.D. 11014/2003** (NG B'/332/2003)
- **C.M.D. 15393/2002** (NG B'/1022/2002)
- **M.D. Δ6/Φ1/12230/3.8.99** (NG B'/1560/04-08-99) «Modified procedure for obtaining permission to construct power plants using renewable energy»
- **M.D. 12160/30-07-1999** (NG B'/1552/3-0-1999) “Establishment permit for small Hydro electric Projects”
- **M.D. 8860/11-05-1998** (NG B'/8295/19.4.1995/ «Amending provisions of the Decree of the Minister»
- **M.D. Δ6/Φ1/51298/2.8.1996** (NG B'/ 766/28.08.1996) «Amending provisions of the Decision of the Minister».
- **M.D. Δ6/Φ1/13129/2.8.1996** (NG B'/ 766/28.08.1996) «Amending provisions of the Decision of the Minister».
- **M.D. Δ6/Φ1/8295/19.4.1995** (NG B'/385/10.5.1995)
- **M.D. Δ9-8/Φ261/31928/21-12-93** (NG B' /958/31.12.1993) “Geothermic Power”
- **M.D. Φ. 16/5813/17.5.89** (NG/ B'/ 383/24.5.89) “License of project execution of water Resources for Legal Persons of Private Law ”

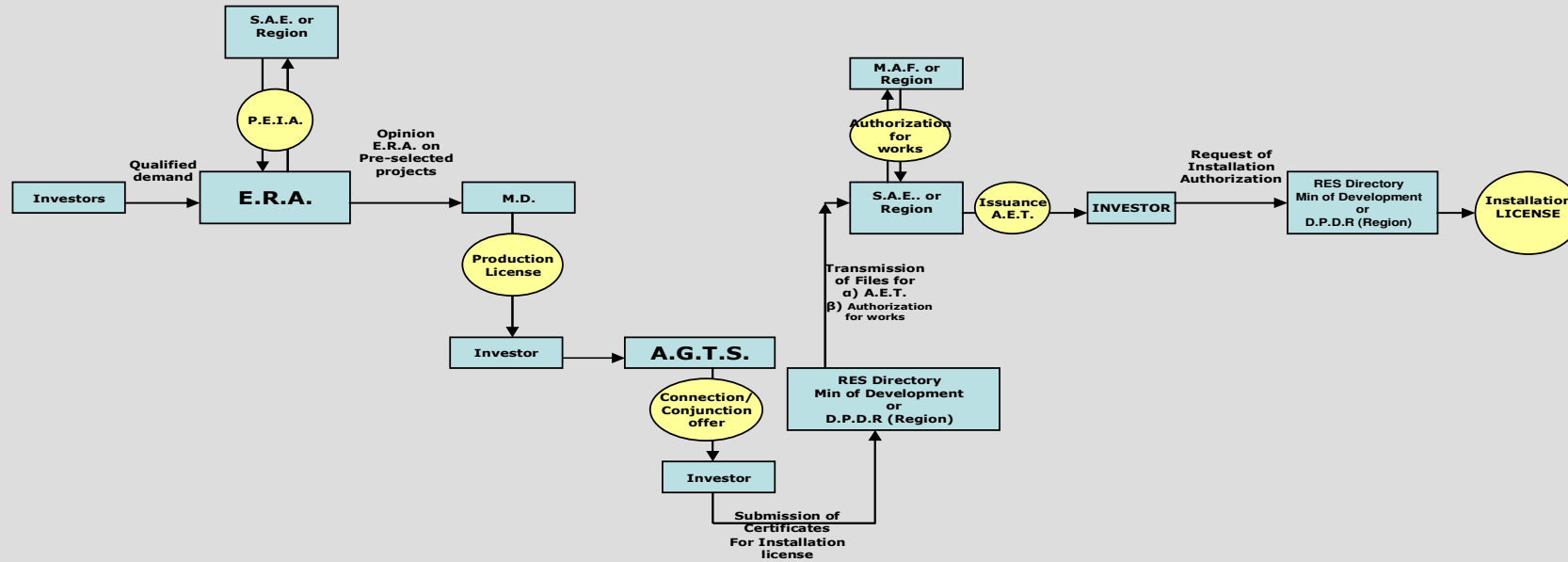
## 5.3 Procedure mapping

Under the above mentioned existing Laws, there exist the following Authorizations / Licenses to develop activities such as commercial exploitation of energy production capacities, supply and distribution of energy in relation to the RES.

<b>Types of Authorizations /Licenses</b>	<b>Existing Law</b>	<b>New Law (under way of implementation)</b>	<b>Comments</b>
<b>Licence of RES Production:</b> <b>a. Responsible Authority:</b> <b>Minister of Development after the opinion of Energy Regulation Authority (certain criteria i.e. national Security, etc.)</b>	<b>3468/2006</b> <b>Article 3</b>	<b>Article 2</b> <b>Licence of RES Production:</b> <b>a. Responsible Authority:</b> <b>Energy Regulation Authority (certain criteria i.e. national Security, etc.)</b>	<b>Valid for 22 Years and same renewal procedure</b>
<b>Licence of RES Installation :</b> <b>a. Responsible Authority:</b> <b>General Secretary of Region (Category A; and 3,4, Subcategory B') or the Minister of Development (category A')</b>	<b>3468/2006</b> <b>Article 8</b>	<b>Article 3 par. 2</b> <b>Licence of RES Installation :</b> <b>a. Responsible Authority:</b> <b>General Secretary of Region</b>	<b>Valid for 2 Years and same renewal procedure</b>
<b>Licence of RES Operation:</b> <b>a. Responsible Authority:</b> <b>General Secretary of Region (Category A; and 3,4, Subcategory B') or the Minister of Development (category A')</b>	<b>3468/2006</b> <b>Article 8</b>	<b>Article 3 par. 11</b> <b>Licence of RES Operation:</b> <b>a. Responsible Authority:</b> <b>General Secretary of Region</b>	<b>Valid for 20 Years and same renewal procedure</b>

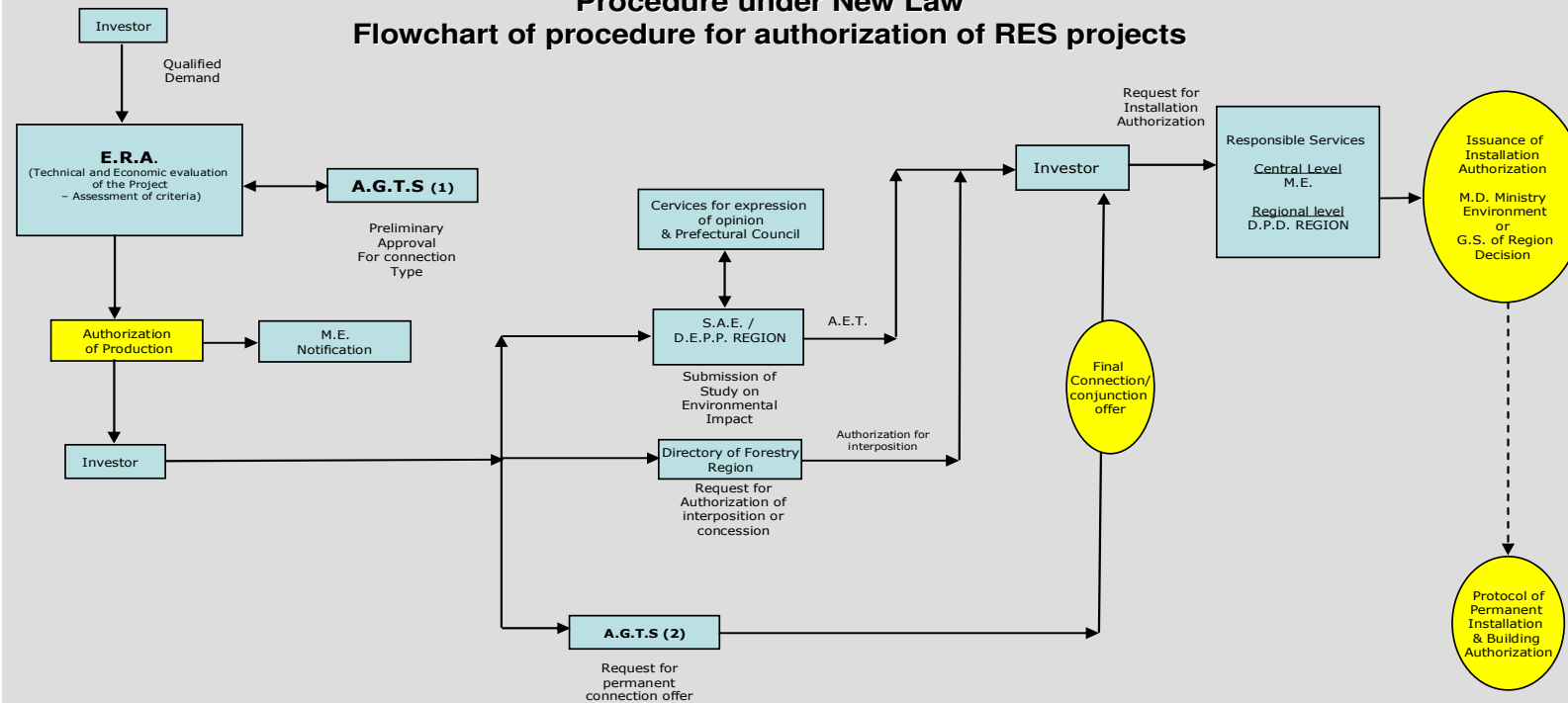
The step by step approach of the Administrative Procedures under the two regulations is presented in the following diagrams.

## Existing Procedure (Law 3468/2006) Flowchart of procedure for authorization of RES projects



- M.A.F. : Ministry of Agriculture and Food
- S.A.E. : Special Agency for Environment
- M.E. : Ministry of Environment
- M.D. : Ministry of Development
- E.R.A. : Energy Regulatory Authority
- A.G.T.S. : Administrator of Greek Energy Transfer System
- D.P.D. R. : Directorate of Planning and Development in Region
- D.E.P.P.R. : Directorate of Environment and Physical Planning in Region
- A.E.T. : Approval of Environmental Terms
- P.E.I.A. : Preliminary Environmental Impact and Assessment

## Procedure under New Law Flowchart of procedure for authorization of RES projects



- M.A.F. : Ministry of Agriculture and Food
- S.A.E. : Special Agency for Environment
- M.E. : Ministry of Environment
- M.D. : Ministry of Development
- E.R.A. : Energy Regulatory Authority
- A.G.T.S. : Administrator of Greek Energy Transfer System
- D.P.D. R. : Directorate of Planning and Development in Region
- D.E.P.P.R. : Directorate of Environment and Physical Planning in Region
- A.E.T. : Approval of Environmental Terms
- P.E.I.A. : Preliminary Environmental Impact and Assessment

### **5.3.1 Determination of National Targets under the implementation of the new Law on RES:**

- National target 20% for the participation of RES in the final consumption until 2020 instead of 18% (Directive 28/2009)
- National target 40%, for the participation of RES in the consumption of Electric Energy until 2020
- Climate protection through the promotion of RES projects production of energy

### **5.3.2 Simplifications under the New Law<sup>21</sup>**

The new Law on RES has introduced important simplifications not only in the procedures, but also in the time needed for acquiring the respective Licenses. More Specifically:

The new regulation aims at reorganizing the license procedure of RES projects, in order to:

- Reduce the time needed for acquiring the respective licenses from 3-5 years to less than 10 months
- Respect the deadlines set by the law for license opinions of respective services and Authorities
- Definition of the opinion content in order to safeguard the transparency, the equal treatment and effectiveness of the whole procedure
- Simplification of Production License Procedure. It is now related to the Technical and economic feasibility of the RES project and not to the procedure of Environmental License which follows as separate step
- The Production License is issued by the Energy Regulation Authority and not by the Minister of Development resulting to dramatic reduction in the time needed (only 2 months now)
- They are merged in one procedure the previous procedures of Preliminary Environmental Assessment and Evaluation and Approval of Environmental Conditions, the same process as in all the rest EU Member States
- Attribute (50%) of specific charge of RES Producers to the Local Governments.

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<sup>21</sup> The new Law is under Implementation. It was passed from the Parliament on May the 26<sup>th</sup>. The procedure for publication in the National Gazette is under way.

- The Special Spatial Framework of RES (CMD 49828/2008) is improved amended and supplemented and the respective regulatory framework in order to clarify critical regulations and to provide the opportunity of its effective implementation
- A Special Service for the facilitation of RES Investors is established in the Ministry of Environment, Energy and Climate Change(level of Directorate), in the philosophy of one-stop shop having as mission to provide information and processing of investors requests to invest on the production of electric energy through RES.

<b>New procedure for License Acquisition</b>	<b>Time Savings</b>
<b>1. Issuance of Production license from Energy Regulatory Authority</b>	<b>8 months</b>
<b>2. Abandon of Preliminary Environmental Impact Assessment</b>	<b>18 months</b>
<b>3. Parallel procedures of authorization of Environmental Conditions and connection Offer after the Production License</b>	<b>6 months</b>
<b>4. Independent procedures for authorization of Environmental Conditions and authorization of interposition</b>	<b>6 months</b>
<b>5. Parallel Procedures for Installation License, contracts for connection and trading, building Permits, installation Protocols, etc. after the authorization of Environmental Conditions</b>	<b>6 months</b>
<b>6 Regulations for Forest Characterizations</b>	<b>6 months</b>
<b>7. Regulation for exceptions</b>	<b>10 months</b>
<b>TOTAL TIME SAVING</b>	<b>44 - 50 months (3,5 – 4 years)</b>

### **Conclusions:**

1. The participation of Prefectures in the process of RES Installation, Production and Operation Licenses is very limited and indirect (under the already altered Law 3468/2006):
  - a) Directorate of Building Permits in the procedure of the issuance of Building Permits
  - b) Authorization of Environmental Conditions (Law 3468/2006, article 8 par. 7) for category B4, from the Department of Environment
  - c) Notification of the file of the Study of Environmental impact from Prefectural Council
  - d) Procedure of Authorization of Environmental Conditions (sub category 4 of B' category) article 10 of Ministerial Decision 104247/2006

2. The request of the Prefectural Personnel shown in the Questionnaires for unification of the whole procedure of Production License has been resolved in the procedure under the new Law, where the responsible Authority is now the Energy Regulatory Authority.

## **5.4 Non-technological barriers**

Needless to say, that the already mentioned to various reports barriers to the introduction of RES production of energy in the member states of EU, are present in the Greek regulatory and administrative reality of RES. Especially, under the already mentioned legal documents (Law 3468/2006 and C.M.D. 104247/2006) we could identify barriers of regulatory, administrative, social and financial nature that project developers and investors encounter when installing new RES capacities and requesting the issuance of licenses:

### **1. Large number of authorities involved and lack of coordination between them**

An important issue that could hinder the greater presence of renewable energy sources is the existence of several layers of competence for the authorisation of generating units.

Requirements imposed by the numerous authorities involved (national, regional) often lead to delays, investment uncertainty, a multiplication of efforts.

### **2. Long lead times needed to obtain necessary permits**

For onshore wind projects authorisation procedures may take two to five years, which has in some cases it has led to insinuations of totally ‘freezing’ the development of the market.

The track record of authorisation procedures for offshore wind projects is even more inefficient, as until recently no clear procedures were established for the division of responsibilities among the different government authorities concerned.

### **3. RES insufficiently taken into account in spatial planning**

In Greece, the future development of RES projects is not taken into account in drawing up spatial plans. This means that new spatial plans have to be adopted in order to allow for the implementation of an RES project in a specific area. This process can take a very long time. Often obtaining the permits

related to spatial planning accounts for the largest part of the overall period needed for the development of a project. This is especially the case for projects in the field of wind and biomass.

As implied in Part 5.3, the simplifications introduced under the “new legislation” will provide contemporary solutions for overcoming these barriers. Especially, the Simplification of Production License Procedure, the issuance of the Production License by the Energy Regulation Authority and not by the Minister of Development the merge in one procedure of Preliminary Environmental Assessment and Evaluation and Approval of Environmental Conditions, the improvement of the Special Spatial Framework of RES, and the establishment of one stop shop for the provision of information and processing of investors requests to invest on the production of electric energy through RES.

If all these simplification measures are implemented thoroughly over time, the picture of RES development in Greece will reach a new era.

# 6 The Romanian framework on the promotion of RES

## 6.1 The legal framework on RES

The EU integration of Romania also meant for the country's energy strategy, the strive to increase the installed capacity using RES in the coming years. Thus, the share of RES-E (Electricity from Renewable Energy Sources), including hydro over 10 MW should increase from 28.7% in 1997 to 33% in 2010. It is estimated however that the current installed capacity in the RES-E will not cover more than 26% of total energy by the end of 2010, so it is necessary to build new plants based on RES use in order to cover the remaining difference of 7%. Currently, in the total electricity production, the proportion of the hydro generated electricity is about 25-30%, of which only 5% from capacities below 10 MW; wind power represents less than 1%. The promotion of RES on the Romanian market not only requires legislative, but also financial and economical support. After analyzing different options to promote RES-E, the decision was made on a system of Green Certificates mandatory quotas, combined with a market system for their use (Green Certificates buying and selling).

The harmonization of the national legislation with Directive 2001/77/EC regarding the promotion of RES electricity on the domestic market, as mentioned in the beginning, was done by the following acts:

- GD 890/2003 on the approval of the Roadmap for Romania's energy sector
- GD 1535/2003 regarding the approval of the Development Strategy
- GD 1892/2004 on the establishment of the System to promote RES generated electricity
- Order A.N.R.E.No. 23 / 2004 - Procedure for the supervision of the issuing of certification of origin for RES produced electricity
- Order A.N.R.E. No. 40 / 2005 - Rules governing the organization and functioning of the GC market
- Order A.N.R.E. No. 45 / 2005- The procedure for the allocation of funds collected as penalties from suppliers who have not complied with mandatory quotas
- Order A.N.R.E. No. 46 / 2005 amending binding share purchase of GC by the electricity suppliers in 2005
- Order A.N.R.E. No. 52 / 2005 on the tariff for electricity purchased from hydro producers who do not have portfolio contracts and for electricity sold by producers participating in the system of promotion for electricity generated from RES.

According to art. 15 of the Energy Law, **ANRE (Autoritatea Nationala de Reglementare in domeniul Energiei)** issues the permit of foundation for RES and the licenses to develop activities such as commercial exploitation of energy production capacities, transport, supply and distribution of energy, etc.

Production, transportation, provision of system services, distribution and supply of electricity, and all the management activities for centralized energy market are subject to licenses issued by ANRE, based on which natural or legal persons, Romanian or foreign, are allowed to exploit commercially the power capacity.

- Steps in establishing a production capacity from RES:
- obtaining the necessary building permits and authorizations,
- building of the objective,
- obtaining the license to produce electricity
- obtaining the qualification to produce electricity for the production capacity,
- subscription to OPEE (SC OPCOM SA) – to sell E- RES in the market for the next day
- subscription to TSO (Transelectrica SA) - to obtain green certificates (GC)
- subscription to OPCV (SC OPCOM SA) - for registration in the GC registry and participation to the GC market.

The RES-E producer sells the RES-E on the market, as any other manufacturer, obtaining for that the market price, and in order to cover all production costs and achieve a reasonable profit receives for each 1 MWh of electricity delivered in the network, one Green Certificate (GC), that can be traded within the legally established price limits.

## **6.2 Documents needed for the establishment of RES electricity production plants**

***Documents issued by the county or local public administration, as appropriate:***

- certificate of zoning - including specification of all permits to be obtained;
- building permit.

***Documents issued by the grid operator to which the capacity is to be connected:***

- permit for the site – issued according to the methodology for permits approved by the ANRE Order no. 48/2008;

- technical permit for the connection - issued under the Regulation on connecting users to the electric network of local interest, approved by GD. 90/2008.

### *Documents issued by ANRE*

- **Establishment permit**
  - under Regulation for licensing and permits in the power sector, approved by GD 540/2004, with the ulterior amendments and additions approved by GD 553/2007;
  - only for energy capacities with an installed power exceeding 1 MW;
- **RES-E production license**
  - under the Regulation for licensing and permits in the power sector, approved by GD 540/2004, with subsequent amendments and additions approved by GD 553/2007;
- **Qualification to generate mainly electricity from RES**
  - according to the Regulation for qualification to generate electricity mainly from renewable energy sources, approved by the ANRE Order no. 39/2006.

## **6.3 The authorization procedure**

In order to obtain the permit, the law provides that the applicant must submit an application to the competent authorities, and attach to it all documents and documentation which show that all the requirements of economic, financial, technical and professional nature set for the electricity generation capacity and the specific activities, are met.

ANRE issues its decision granting or refusing the permit / license after a period of 30 days, maximum, from the date on which it has established that the documentation submitted by the applicant is complete according to the law and that the applicant has paid all taxes and provided proof of payment.

Although limited, the **County Council (Consiliul Județean)** detains a very important role for the development of energy production units of RES because of legislative requirements for issuing two permits. As revealed by the InterPares questionnaires, the County Council's competencies in the field consist mainly of these:

Issue of the Construction permit, namely the only document that allows the development of construction, which is issued upon request of the owner of the land title, or another party, based on a document which gives the right of building (concession), and is released by the empowered Local Council (President of the County Council, Mayor), depending on the importance of the project and its location in the administrative territory (urban, rural).

In order to simplify the licensing procedure and to minimize the time required for the completion of formalities for the approval of works to be done, the administrative institutions of the territory have specialized structures set up to issue a single agreement, respectively to obtain on behalf of the applicant the necessary legal permits:

- Verification of the project's compliance with legislation of water management, environmental protection, industrial safety, safety of human health and labour safety, civil protection, fire protection, etc.
- Evaluation of the project's capacity to meet local specific requirements or requirements related to special and protected areas
- Evaluation of the requirements for the connection to communication networks and utility networks in the area
- Determining what influences may have the new installations on the other technological facilities in the area.

The local administrative authorities empowered to authorize the construction works, issue a zoning certificate upon request of applicants who have defined the need and purpose of the construction by submitting a feasibility study of the works. The zoning certificate is a document of information that is issued no later than 30 days, as seen in all InterPares questionnaires. It informs the applicant on the legal, economic and technical status of the site and of the constructions on it and establishes the urban requirements to be met according to specific site. It also contains the list of legal permits and documents required in order to obtain the authorization.

## **6.4 Non-technological barriers**

### **6.4.1 Economical barriers - Price of energy/Green certificates scheme**

Energy price in Romania is relatively high, especially for industrial application, and the tendency is towards further increase in the next years in a manner even more accentuated than the prices in the Western Europe. This is despite the fact that internal production energy capacity represents, depending on the year and the sources used for production, between 70 % and 100% of the internal demand. In several years (with high precipitations) Romania becomes even an energy exporter in the Balkan region. No evaluation about the profits of RES installation is available on the Romanian market.

A special issue is the support offered through the Green Certificates. This is a special market that provides support only for the electricity production. Also, although the legal framework for the establishment of the Green Certificate system has been adopted, there are several unclear aspects

and administrative issues that hinder the economical effectiveness of the system, especially for the privately developed projects. Also, the system does not provide any support for the other types of RES.

#### **6.4.2 Social barriers**

Communication with social stakeholders is not considered a key element for the development of RES facilities in Romania. The only stage when an investor needs to communicate with the county councils or with interested social stakeholders is at the application for the issue of the environmental permit when the applicant also publically announces his intention of developing the project. The social stakeholders can challenge the validity of the project at this stage, but mostly on environmental grounds. If there are several challenges and the procedure for the issue of the permit proves to be a difficult one, then several round tables must be carried out. In this case, one should also consider that past projects have also significantly affected the way in which these projects are perceived. So, the main social barriers that have to be overcome depend very much on the specificity of the project, the area destined for its implementation and the social stakeholders affected by it.

#### **6.4.3 Legal & Administrative barriers**

As previously mentioned, obtaining the permission to build and operate any sort of RE facility proves to be a difficult process from this point of view. Due to the new developments (as a consequence of the implementation of different European policies) there is a trend towards renewable energy from wind, solar and biomass sources. Nevertheless there are also several inconsistencies in the implementing framework. The lack of a RES Integrated Plan is proving the lack of vision in dealing with complex problems at policy development level. This lack of sectoral approach is a huge barrier that needs to be overcome.

The questionnaire revealed that, depending on the project, there are up to 31 public and private entities that are involved in the approval phase of a RES project. Thus, the relations with the big number of authorities in order to obtain the needed permits are difficult to manage within a reasonable amount of time. Because at local regulatory level, there isn't a unified approach to this kind of projects, despite the existence of a unique legal framework, the time to complete the entire approval procedure was estimated very differently – from 1 to 24 months. On the other hand, most of the respondents indicated the one month deadline needed for the County Council to complete its part in the same procedure. As a conclusion, most of the administrative problems are related to

issues outside the County Council's jurisdiction that are generated by the lack of an integrated approach.

Also, the County Councils are direct beneficiaries of the national programs instituted at governmental level which ensure the co-financing of investment projects dealing with the use of renewable energy sources by final consumers. The County Councils can build, possibly by accessing structural funds, installations for RES electricity production and can benefit from the system of RES electricity promotion adopted by Romania, namely the system of compulsory quotas combined with the system of commercialization of green certificates at legally limited prices.

Even so, the County Councils have not been implementing any RES projects for now, and the only projects have been made by other stakeholders, public or private (according to the Romanian legislation concerning the capitalization of renewable energy sources, they are not required to generate electricity from renewable energy sources).

In the Romanian specific case, the County Council is involved from the administrative point of view only at the stage of issuing the certification. Thus, the focus of many county council is not directed to the implementation of RES projects but towards the implementation of national legislation on the matter, to the dissemination of European policies at regional level regarding RES. As a matter of fact, most of the County Councils, undertake to contribute to the accomplishment of the national targets related to the share of electricity produced from RES in the final electricity consumption (33%, 35% and 38% for the years 2010, 2015 and 2020), they have to promote, by various actions and instruments, the capitalization of renewable energy sources.

Because the permits issued by County Councils do not refer to energy output, they do not know the exact size of projects developed in their administrative territory, the questionnaires revealed in a proportion of more than 70%.

Based on the same data, the County Councils dedicate no particular attention to the RES due to different reasons: their involvement in the private sector is minimal, limited to issuing permits as established by the law, they lack specialized personnel and they lack the funds dedicated to the establishment of specialized agencies.

According to data from the questionnaires in about 90% of respondent County Councils in Romania lack the specialized personnel in RES as there are no energy agencies established at County level, or if there are, their collaboration with County Councils is a limited one.

Although promoted through special programs in Romania, RES is a relatively new field, and does not benefit from many specialists, as revealed by the respondents who considered the establishment of an Energy Office within the County, just as they would like to have more staff

dedicated to the field. Even if there is dedicated staff or a department dedicated to RES, there is a clear need for additional expertise through further training in the field.

In terms of importance assigned by the County Councils to RES, only a few aim towards changing the current structures ( only 15% of respondents showed interest and intention to establish an Energy Office).

Although many responding County Councils have implemented RES promotion activities, very few of them see the importance of providing information on the field, as evidenced by the lack of websites dedicated to RES and of Energy Agencies at County levels. This is also because this would go beyond the jurisdiction of County Councils, as they are currently structured and organized.

The ways to eliminate the main barriers to RES development, acceptance and penetration in Romania consist of an integrated approach to different policies including renewable energy production, transportation and use, as well as on environmental issues.

The harmonization with the EU policies and regulations as an whole should be a priority and learning from other countries' experiences could prove a good opportunity not only for Romania, but for the entire Eastern European area.

## 7 Conclusions

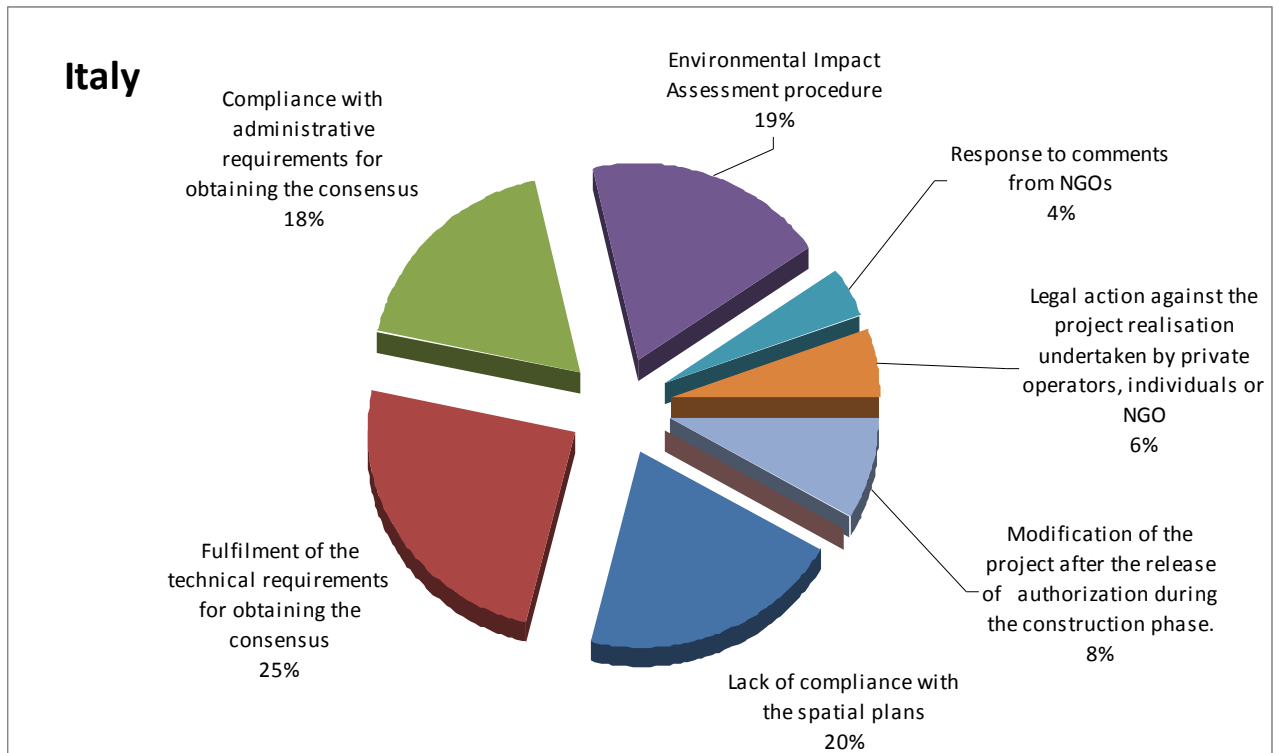
The results presented in this section are derived from data collected through questionnaires, as described in paragraph 2. The following table represents the number of provinces that responded to the request for information. On the basis of the received answers, the following charts have been prepared with having in mind a double aim. First, to highlight the situation and features typical of each Country involved in the project, and second, to identify common characteristics to all three Member States, besides the fact that are related to different geographical, social, economic contexts.

Country	Total no	No of valid questionnaires	Percentage on the total
Italy	110	62	56,4%
Greece	54	28	51,9%
Romania	41	23	56,1%
Total	205	113	55,1%

In order to ensure data readability the chars have been drawn up by following the order of the questions enlisted in the questionnaire.

The fist issue concerns the most frequent non-technological barriers faced by public authorities that jeopardise the deployment of RES plants are discussed in the following section.

Figure 1 – Italian non-technological barriers for RES plant development and their relative perception weight



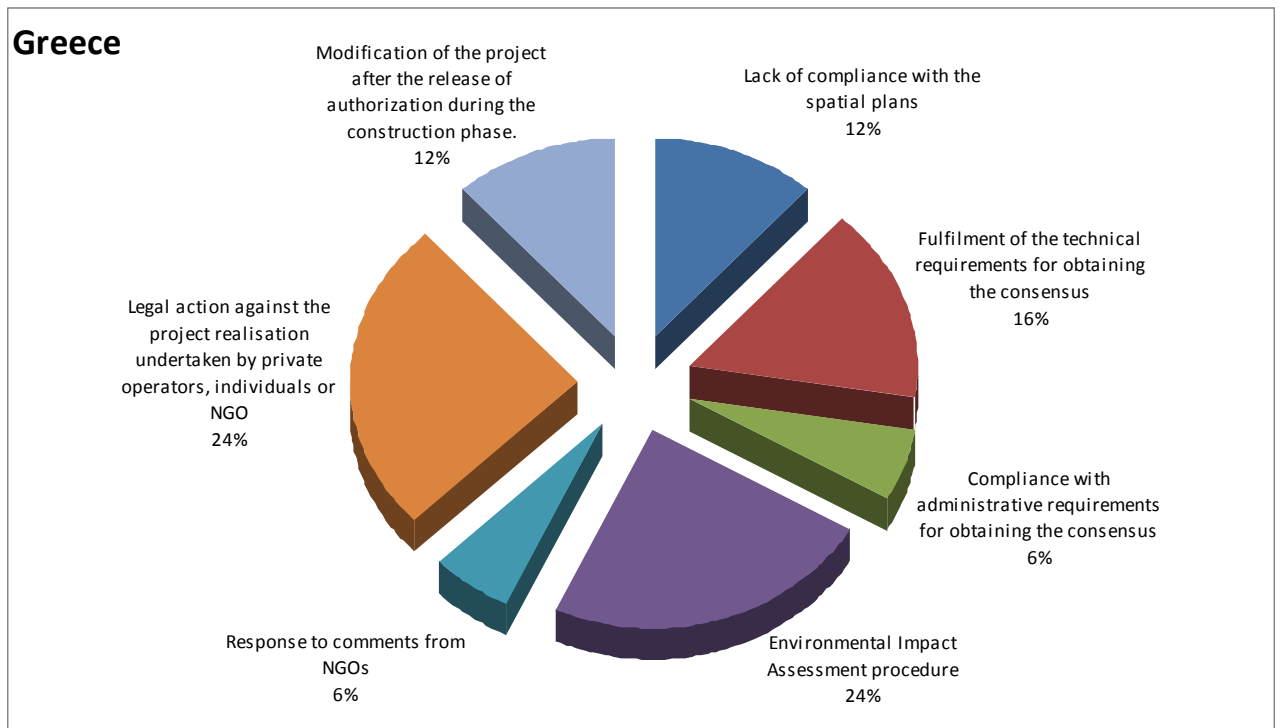
The Figure 1 depicts the Italian critical administrative barriers, which are mainly related to consensus building (43%), lack of sound spatial planning (20%), and finally the procedure for Environmental Impact Assessment (19%). These factors are closely linked to each other as consensus-building results from spatial planning and knowledge.

It is evident that the lack of planning, besides the presence of public concertation (e.g. the observation period to which all planning acts are subject), generates uncertainty among citizens who react with hesitation or disapproval.

The consensus factor seems to be almost the same in Greece (Figure 2) and in Romania (Figure 3), respectively with a share of 22% and 24%, which substantially differs from Italian 43% of share. Besides, the factor “legal actions against the submitted projects” has a perception weight of 25% in Greece, 12% in Romania and 6% in Italy, which depicts a non-common characteristic.

The largest share of “consensus building” factor of Italy compared to the other two countries is due to Italian higher number of plants under authorization procedure.

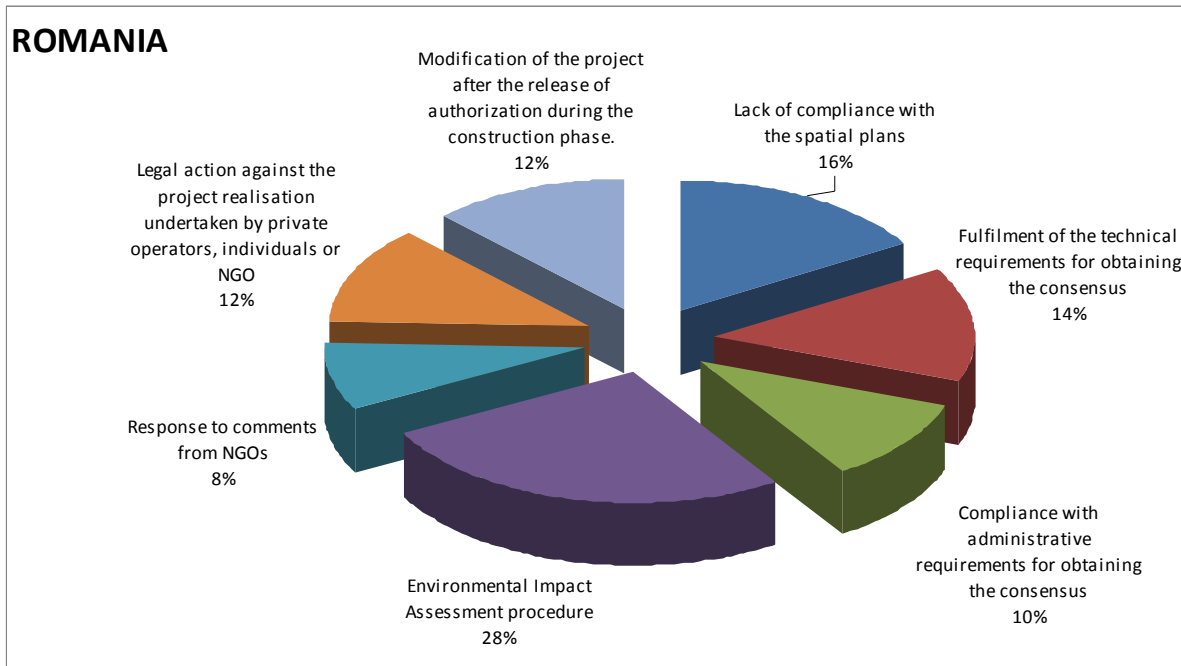
Figure 2 – Greek non-technological barriers for RES plant development and their relative perception weight



In addition, another significant data needs to be noted, though not predominant but common to all countries analysed. It concerns the Environmental Impact Assessment procedure, which is an important administrative obstacle and, hence, the streamlining process should intervene in this direction.

There is no doubt that this procedure guarantees environmental compatibility of the intervention and the identification of all possible negative impacts and effects of project, and therefore, constitutes a prerequisite for the initiative itself. However, simplification of the procedure for plants with minor environmental impact should certainly favour the development of RES.

Figure 3 – Romanian non-technological barriers for RES plant development and their relative perception weight



It is therefore clear that the management of consensus is considered a significant factor for the development of renewable sources, especially in Italy where it represents almost half of the detected criticalities. Nevertheless, consensus building must deal with two contrasting interests: (i) the national interest for the development of RES and (ii) the local interest concerning the opposition of local people for the realization of RES plants, namely the not-in-my-backyard phenomenon.

Figure 4 – The consensus building related administrative barriers weighted in % for Italy, Greece, and Romania (2010)

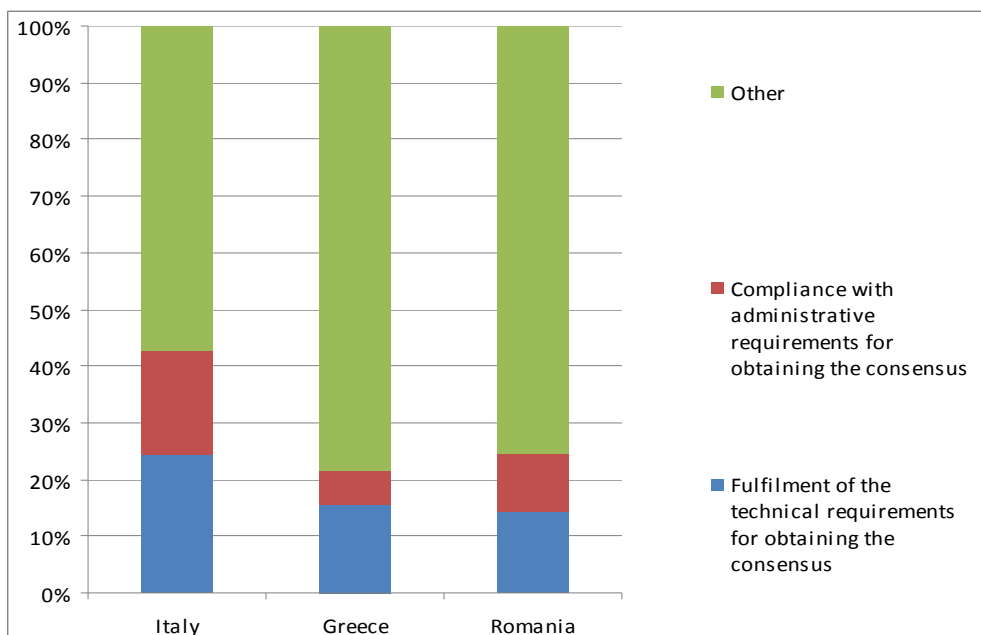
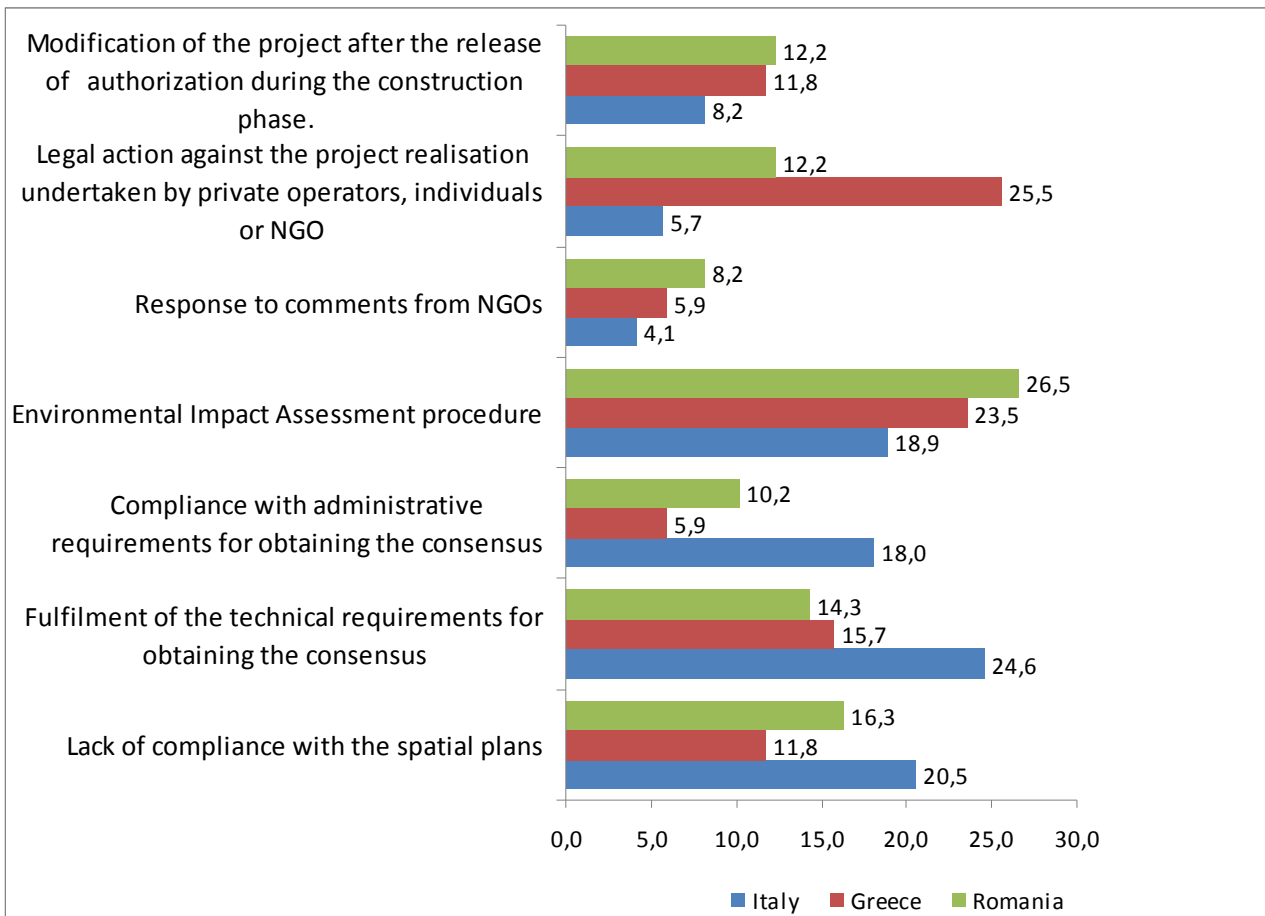


Figure 5 – Non-technological barriers for RES plant development and their relative perception weight for Italy, Greece, and Romania (2010).



The second issue concerns the progress capacity of each public authority of the three countries under observation. Indeed, this section shows the data collected through the questionnaire concerning the causes that blocks RES plant installation projects, in other words, causes that stirred project's stalemate and/or project's failure.

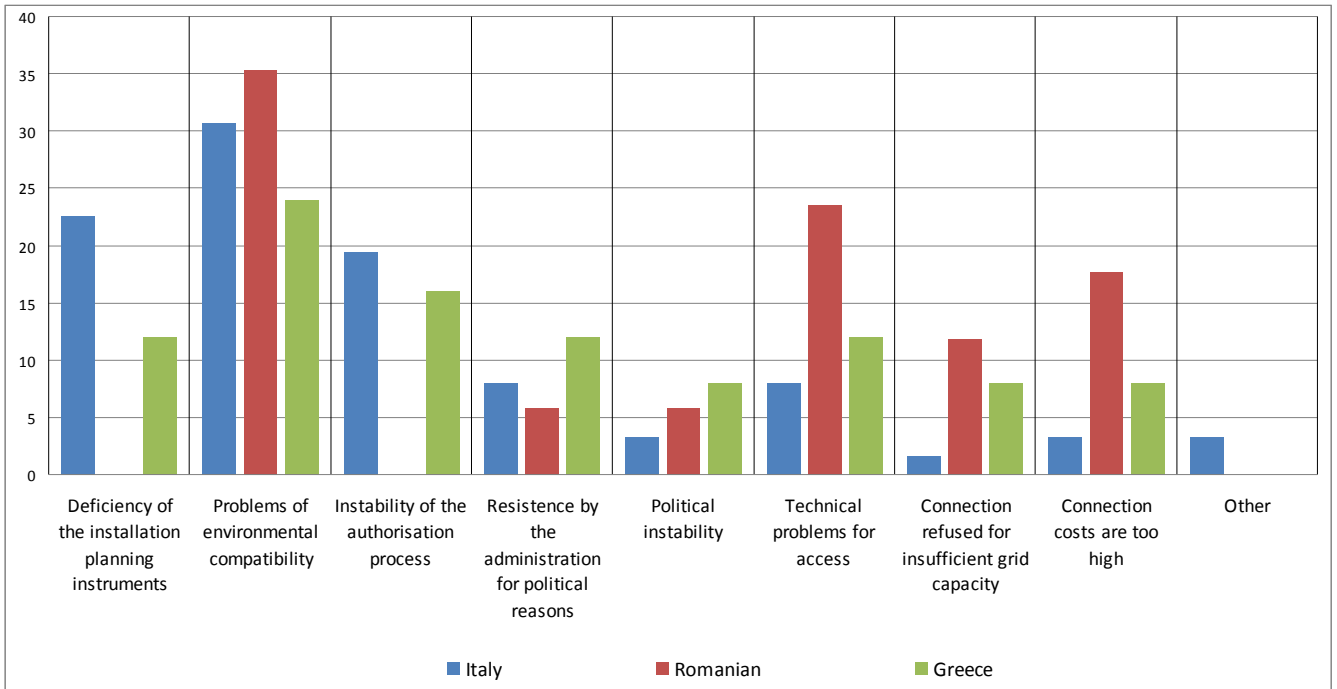
The situation differs from country to country and reflects the specificity of the territory. Greece and Romania have major problems of grid connection capacity. The subsequent difficulty, or even, rejection with regard to grid connection is surely a considerable not-technological barrier, however marginal for the Italian case.

It should be noted once more in this section that the Environmental Impact Assessment procedure is considered a major cause for action blocking.

The political instability and the local political resistance do not emerge as particularly significant factors. Nevertheless, the instability of the authorization process, along with the absence of spatial planning, determines a major negative repercussion against the procedure for

Environmental Impact Assessment. These factors are surely a major characteristic of the Italian authorization regime due to its persisting normative fragmentation.

Figure 6 – The foremost causes for blocking the RES plant installation projects in Italy, Greece, and Romania in terms of perceived relative weight (2010).



The three charts below depict the current situation of the single countries concerned.

Figure 7 – The Italian causes for blocking the RES plant installation projects in terms of perceived relative weight (2010).

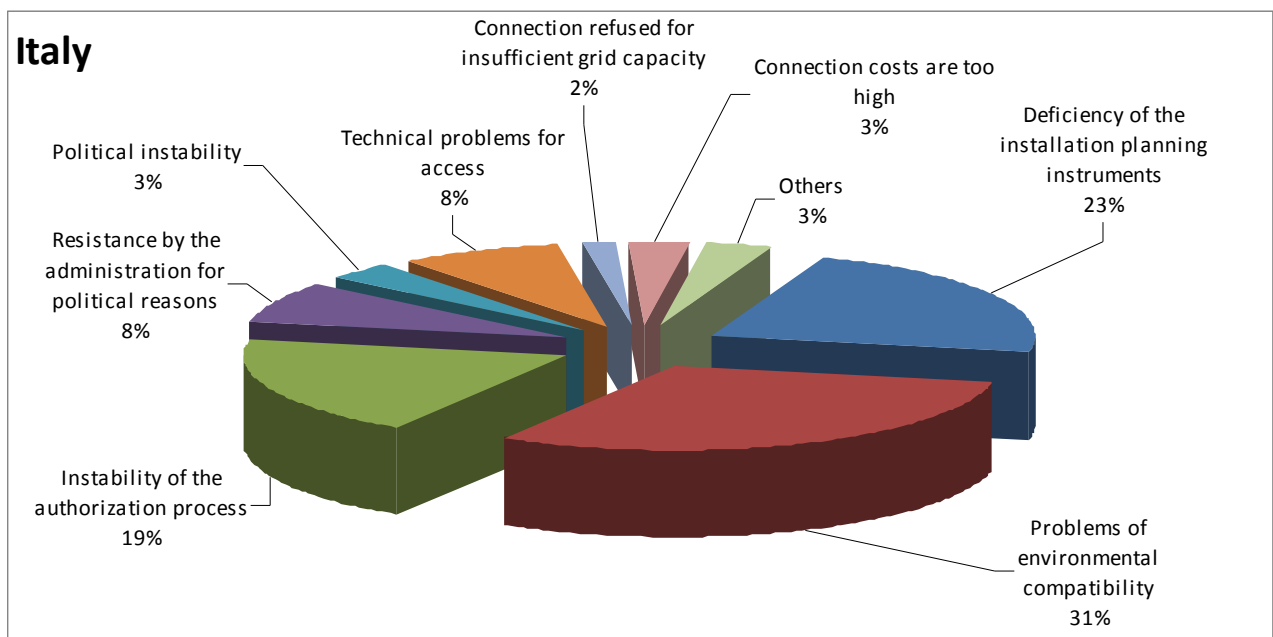


Figure 8 – The Greek causes for blocking the RES plant installation projects in terms of perceived relative weight (2010).

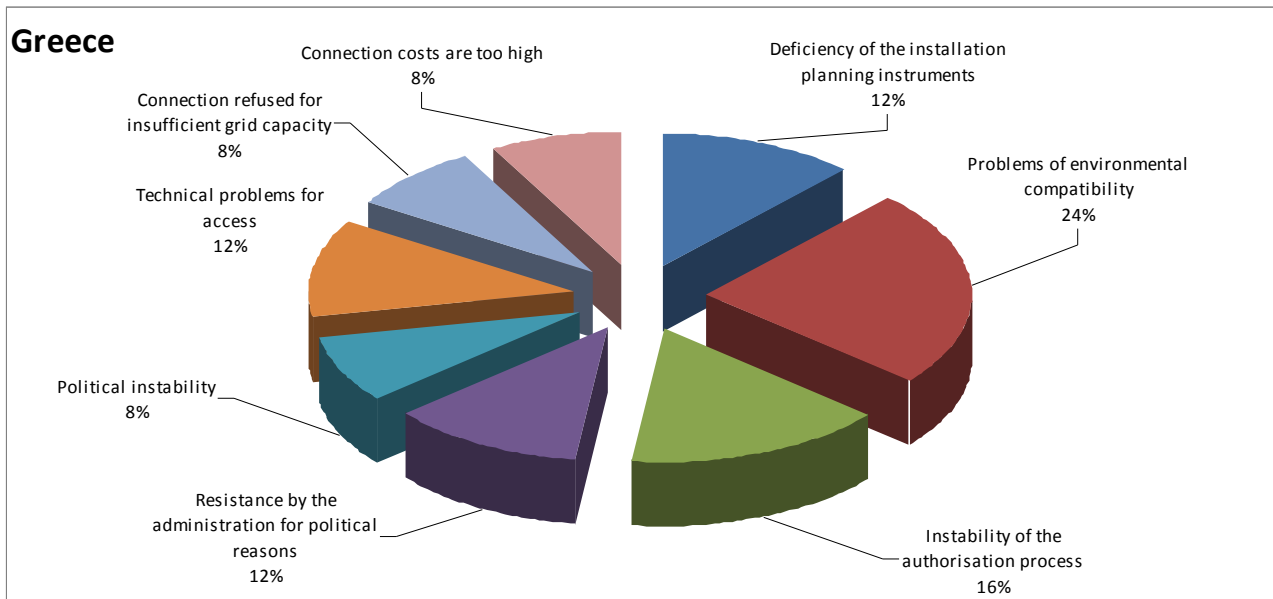
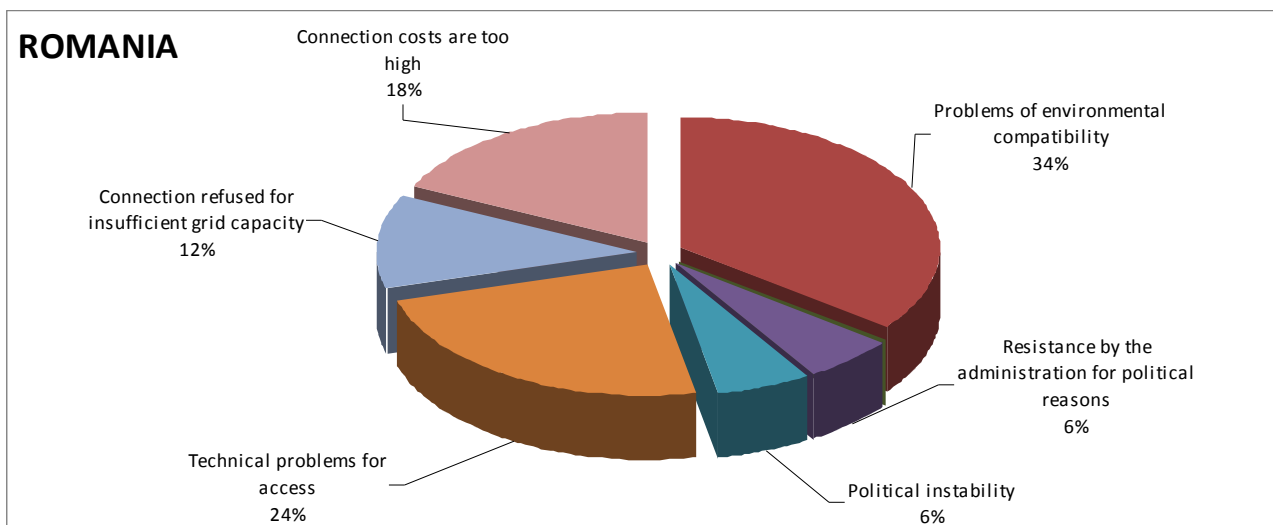


Figure 9 – The Romanian causes for blocking the RES plant installation projects in terms of perceived relative weight (2010).



The last issue analysed in this paper still regards the progress capacity of the project, however, from the point of view of the stage in which project' development has come to a stop. Solely the data regarding the Italian and Greek case have been compared because all Romanian projects have come to a stops in the phase of authorization request.

The shares of projects for each country concerned that have been blocked at the stage of authorization request during the questionnaire fill-in period are the following: Italy (60%), Greece (60%), Romania (100%).

The causes are those highlighted above, however, it is necessary to note that when a project reaches the stage of authorization request it certainly has already passed the stage concerning pre-feasibility and feasibility studies. Hence, the initiative should be in compliance with general and specific requirements before the authorization request is submitted.

The figures below (Figures 10 and 11) appear to contradict this assertion since the stage of authorization request seems used as a feasibility screening of the initiative itself, which determines for the investor a substantial rise of costs.

It is likely that the normative fragmentation, lack of professional skills, and the unavailability of local planning makes project managers unintentionally omit analysis and studies, which in turn reveal to be essential for the project conformity. As a consequence, in many cases the project managers realise project's non-conformity in a later stage, when the project planning is coming to the end.

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Figure 10 – The Italian stages in which RES plant installation projects are blocked and the relative weight of each phase.

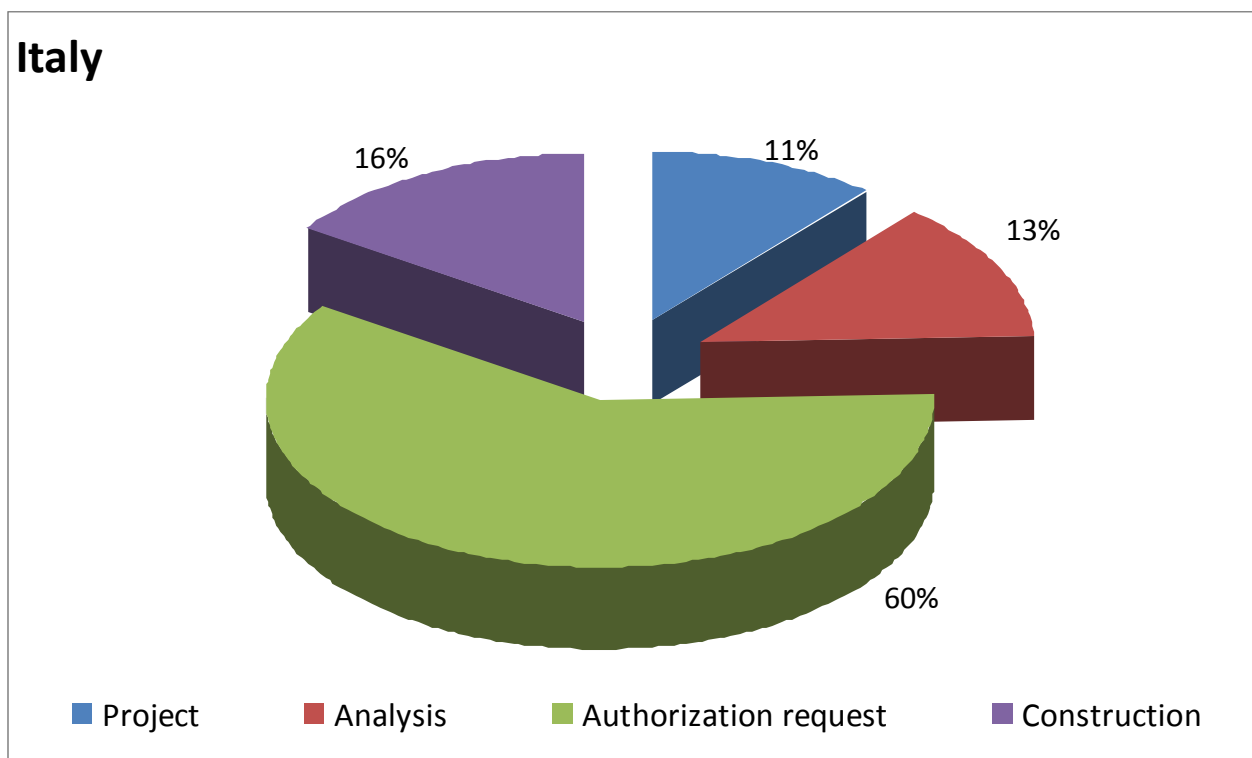


Figure 11 – The Greek stages in which RES plant installation projects are blocked and the relative weight of each phase.

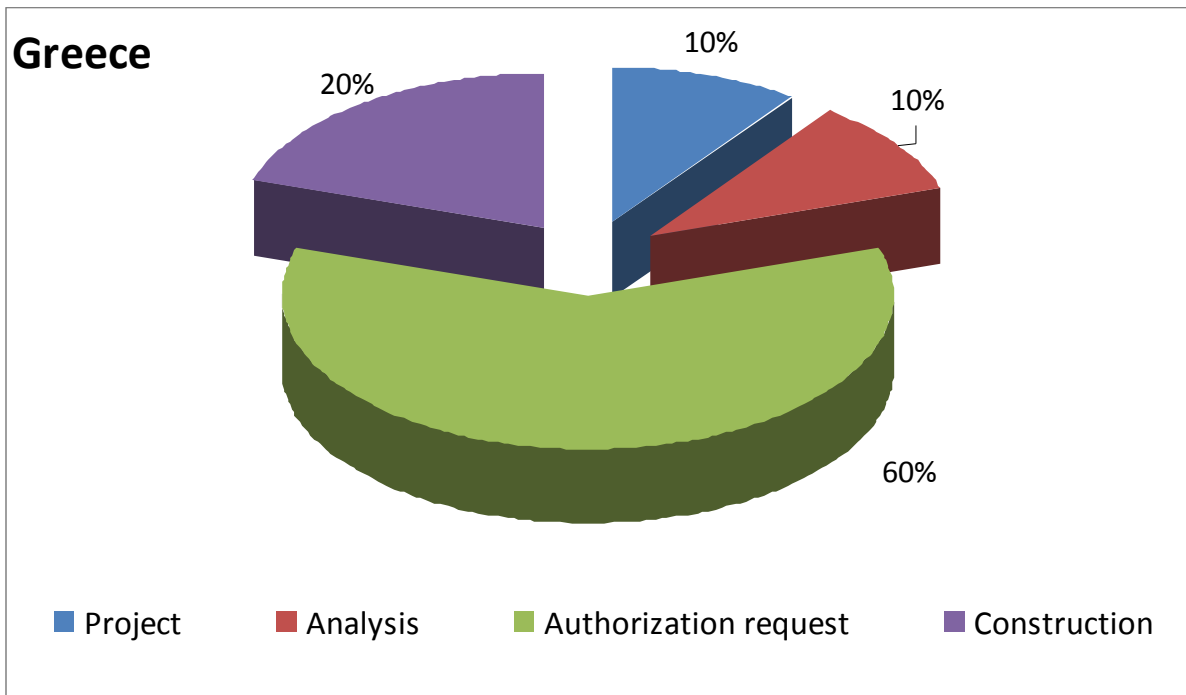
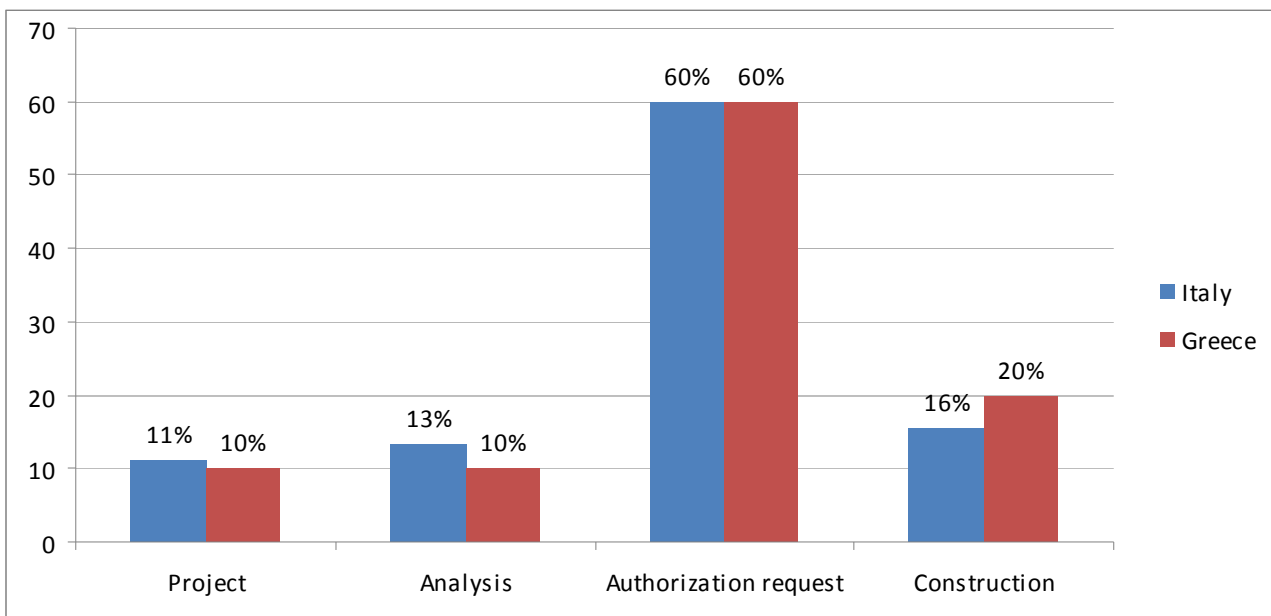


Figure 12 – Comparison between Italy and Greece in terms of relative weight of stages in which RES plant installation projects are blocked (2010).



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## **Annex I: endowment of RES plants at the provincial level and provincial energy production.**

### ***Photovoltaic plants***

As far as the Italian plant distribution at provincial level is concerned, the major plants are located in the north of the country. Some Provinces detain significant weight in terms of RES plants number on their territory in relation to the whole country, such as Brescia (which holds the Italian record with 3.82% of share), Rome (which stands at the second place with 3.62% of share), and Torino (with 3.25% of share). Among southern Provinces those included in the class between 2% and 3% of share are solely two: Lecce and Bari.

In terms of photovoltaic plant production four Provinces need to be highlighted. In first place Bolzano on which territory is produced the 4.88% of the national share: about 50% of the power produced derives from major productive plants with capacity exceeding 70 kW of average power. The following are the Provinces of Bari (4.79 of share) and Lecce (4.18% of share). The share realized by the Province of Rome is also of great regard with its 3.07%, due to the spreading of plants on residential buildings but also on industrial and commercial facilities.

### ***Hydro-power plants***

The hydro-power plants are found in almost all Italian northern provinces. The Province of Bolzano, Trento, Torino are the most significant from the point of view of power produced and number of operational plants. The provincial distribution reproduces the already seen situation at the regional level, even though the provinces show a high degree of ununiformity between themselves. An important feature of southern Italy is the complete absence of plants in the Province of Napoli. The Region of Sardegna detain low and heterogeneous values within its provinces, with the exception of the Province of Caronia-Iglesias, which detains no plants. In the Region of Sicilia 4 provinces out of 9 have no plants.

The production of electric energy from hydro-power plants shows considerably high values in the northern regions, while in the southern provinces those values are low or absent. Moreover, with the comparison between previously shown data regarding regional production, for instance those of Sardegna, arises that not all provinces that detain hydro-power capacity have produced electric energy. This applies, for example, to the Province of Cagliari. Finally, the Province that holds the national production record is Bolzano (with 13.27% of share at national level). Those that follow are the Provinces of Sondrio and Trento with respectively 13.13% of share and 9.01% of share.

### ***Wind-power plants***

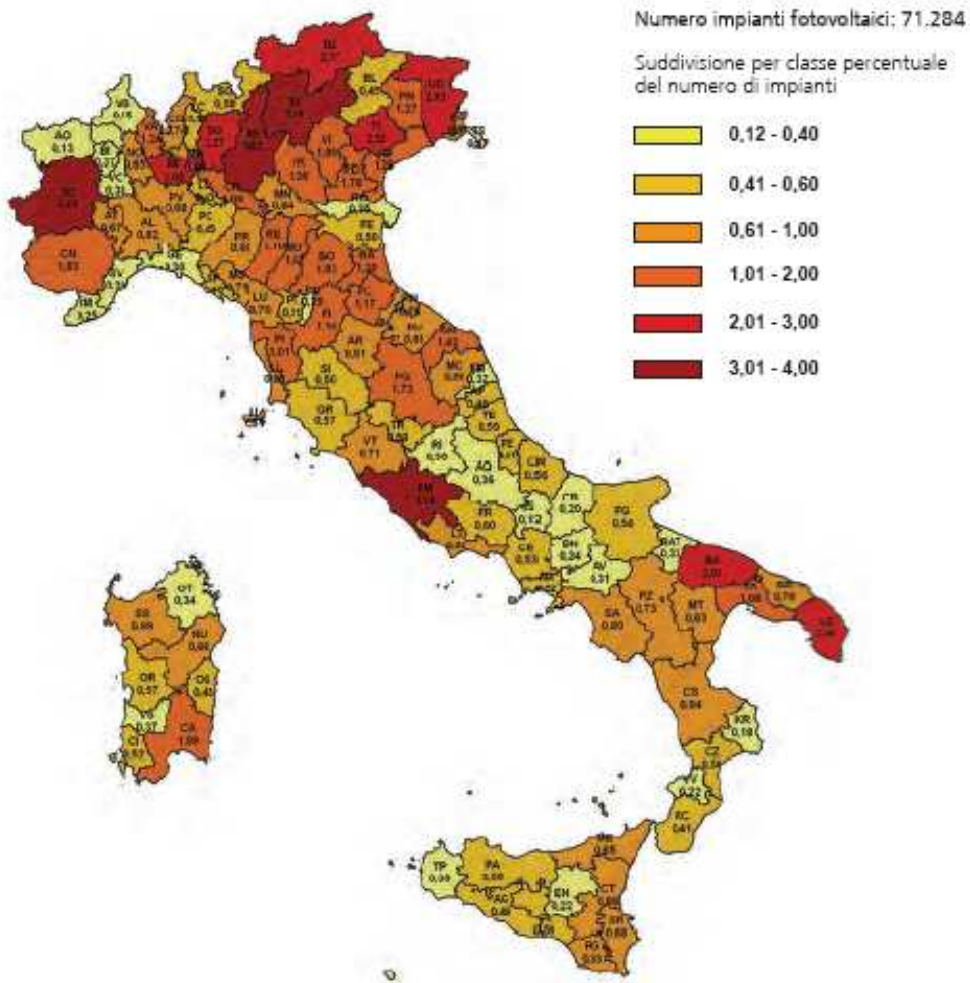
The wind-power plants are not found in almost all provinces of northern Italy. The northern provinces of Bolzano and Savona, however, have the most significant values at national level. The provincial distribution depicts the situation already seen at the regional level, although the provinces of Puglia region show a high degree of ununiformity between themselves. The Province of Foggia (Puglia) features the highest concentration of wind-power plants in Italy (19.8%), while in the other provinces the share is marginal or even null. The Region of Sardegna features on its territory low and uniform values between its provinces, with the exception of the Province of Sassari which has a considerably high value (5.0%).

The cartographic projection regarding the distribution at provincial level of electricity production from wind-power shows very high values in southern regions and islands, while in the northern provinces values are very low or absent. Moreover, with the comparison between previously shown data regarding production of certain regions, for instance those of Sardegna, arises that not all provinces detaining wind-power capacity have produced electric energy. Finally, the Province that holds the national production record is Foggia (with 24.96% of share at national level). Those that follow are two provinces from the Region of Campania, namely Avellino and Benevento with respectively 9.04% of share and 8.68% of share. The Province of Sassari (5.96%) and the province of Agrigento (8.59%) recorded the highest values in their regions, respectively Sardegna and Sicilia.

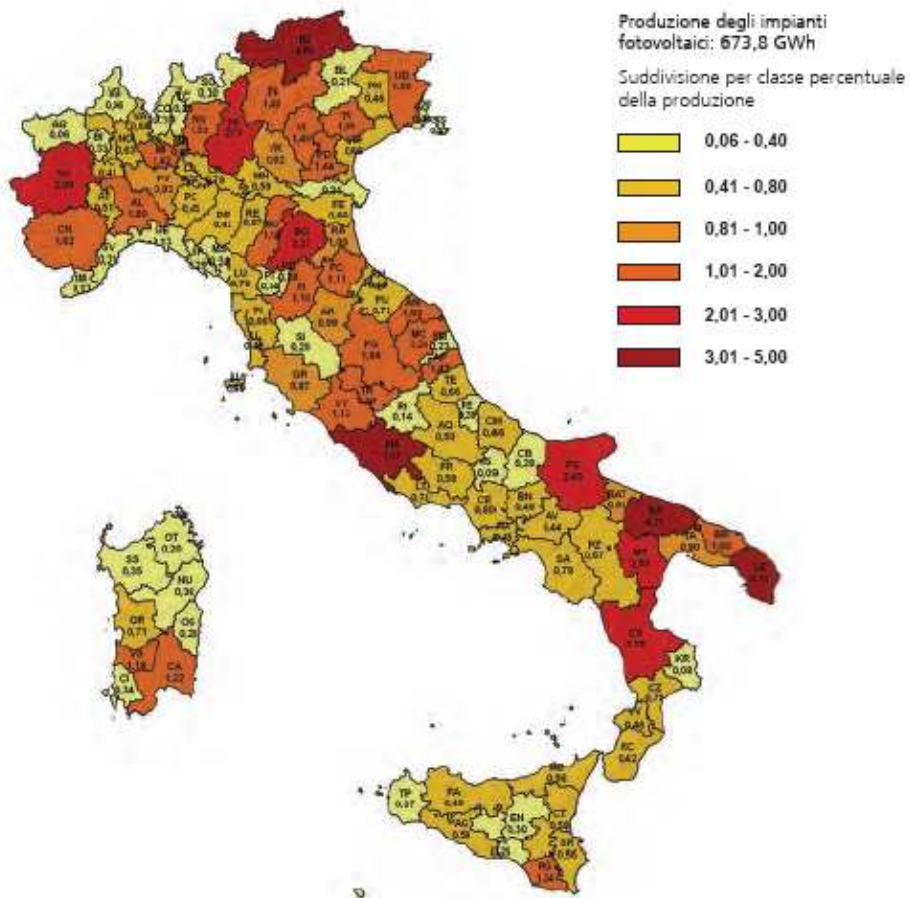
### ***Biomass plants***

The cartographic projection regarding the distribution at provincial level of electricity production from biomasses shows a major concentration of shares in the northern provinces in relation to those in the south, which values are concentrated in a few provinces and completely absent in the others. For instance the Province of Bari (Puglia region) that holds the national production record with a share of 24.5%, and the Province of Crotona (Calabria region) with of share 23%. The other provinces of the Region of Calabria the shares are insignificant or even null. The fair value achieved at regional level by the Region of Sardegna is due solely to the Province of Carbonia-Iglesias.

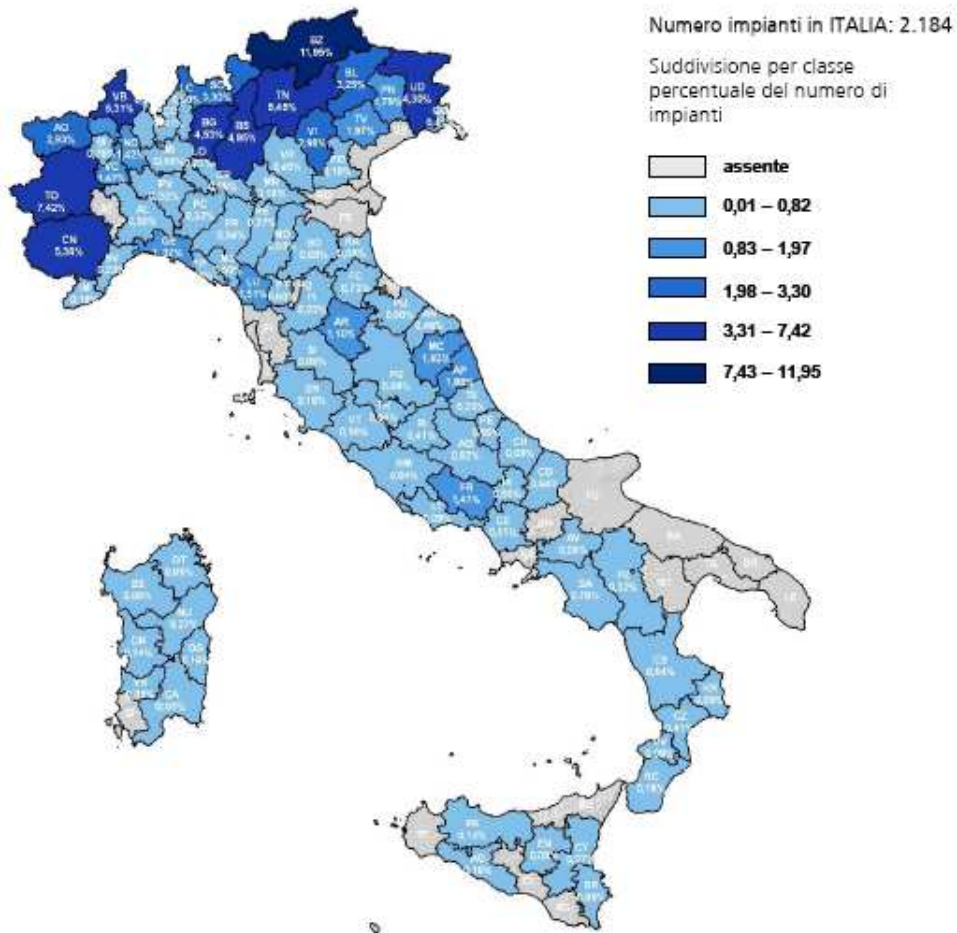
# Number of photovoltaic plants by Province in % - 2009



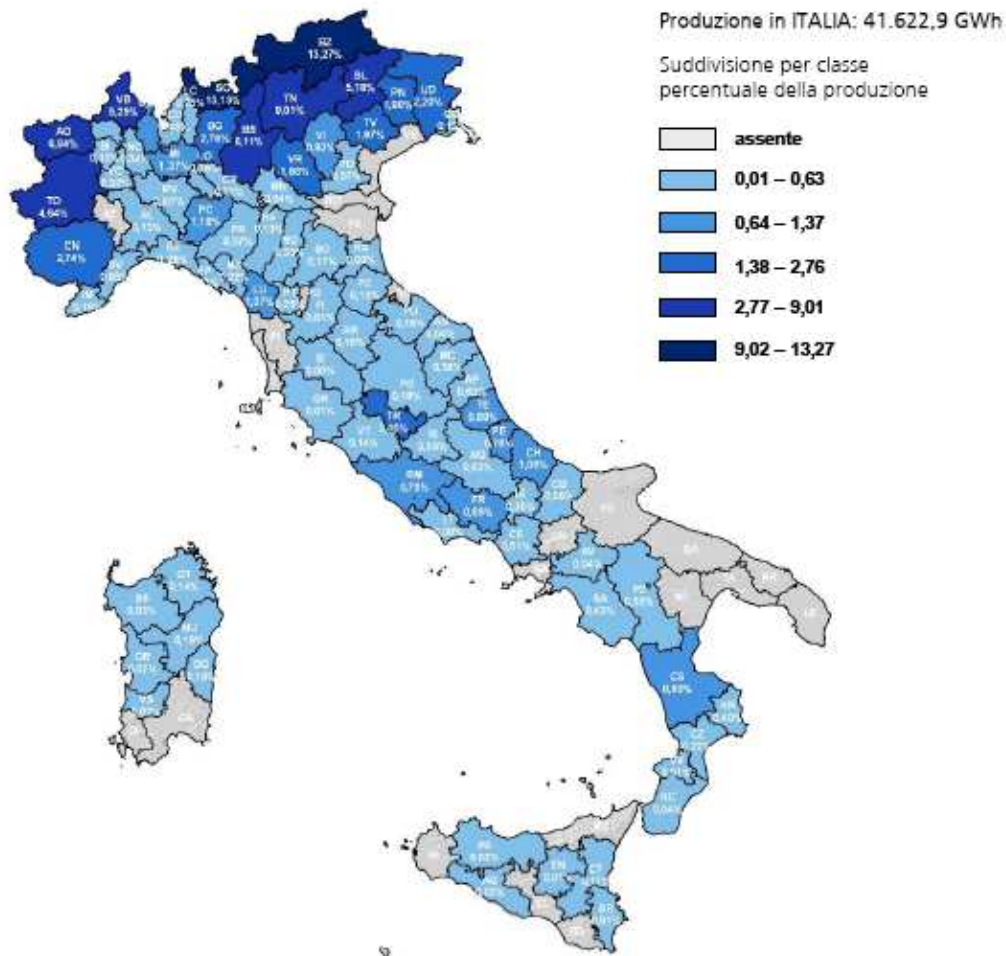
# The EE production from photovoltaic plants by Province in % - 2009



## Distribution of hydro-power plants by Province in % - 2008



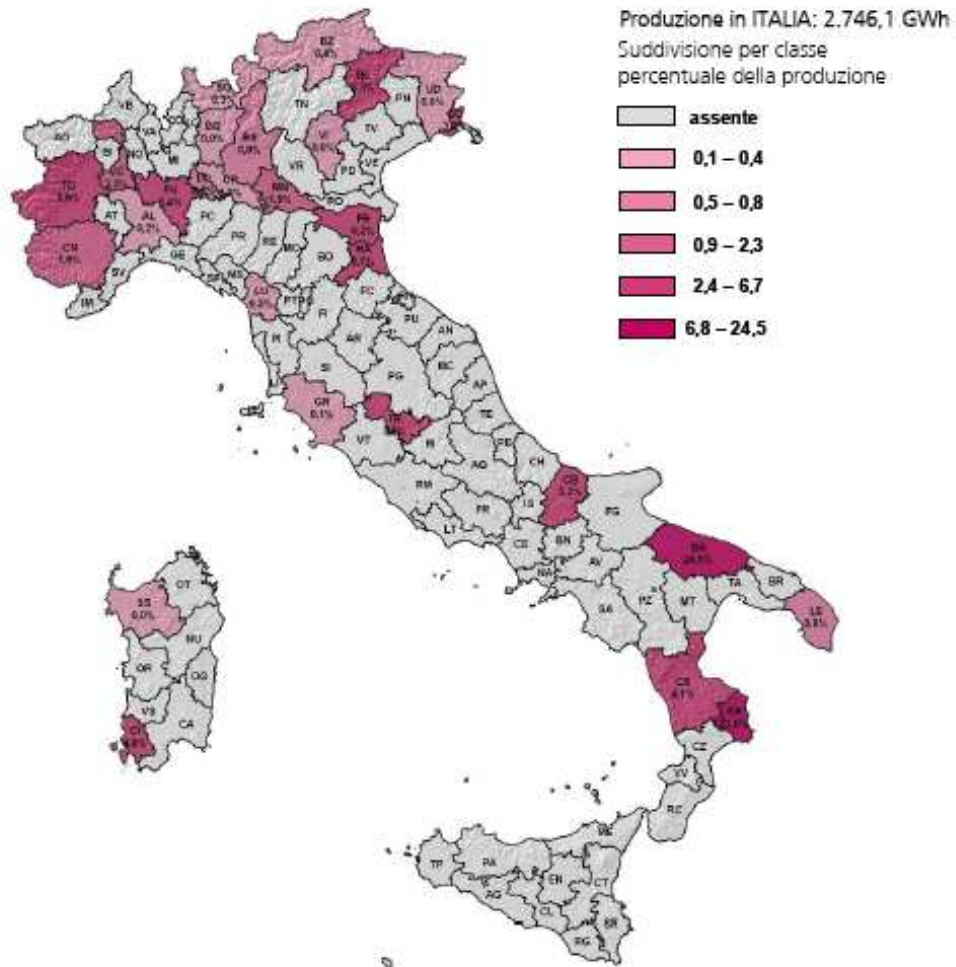
## Distribution of the EE production from hydro-power by Province in % - 2008







Distribution of EE production from biomasses by Provinces in % - 2008



# Annex II: Inter Pares Questionnaire

**PART A) GENERAL OVERVIEW**

**A.1 - Contact person** (In order to guarantee the proper communication please specify one contact person for your County in the area of renewable energies).

<b>Contact person</b>	
Mr, Mrs, Miss	
First name	
Last name	
Institution	
Street / P.O. Box	
Post Code / City	
Country	
Phone	
Fax	
e-mail	
homepage	

**A.2 - General description of the County** (to have a short overview of your County)

Name of your County:	

Internet webpage or link where you can acquire information about the County	
---	--

**A.3 - Renewable energies – energetic profile of the County**

<b>A.3.1 - Installed capacity and number of installations</b>		
Solar power	installed capacity ( kW)	
	number of installations	
Solar thermal	collector area (m <sup>2</sup> )	
	number of installations	
Bioenergy	installed electrical capacity ( kW)	
	installed thermal capacity ( kW)	
	number of installation	
Biofuels	primary capacity (t)	
	bio diesel fuel (t)	
	bio ethanol (t)	
Wind	installed capacity (kW)	
	number of installations	
Geothermal:	installed electrical capacity (kW)	
	installed thermal capacity (kW)	
	number of installations	
Hydro power	installed capacity (kW)	
	number of installations	

**PART B: FUNCTIONS AND ORGANISATION OF THE PREFECTURE ON RES**

<b>B.1 - Is there dedicated staff in the field of RES in the County?</b>	<input type="radio"/> YES <input type="radio"/> NO
If yes, specify the number of employees	N° of employees:
If yes, the dedicated staff is considered sufficient?	<input type="radio"/> YES <input type="radio"/> NO
If yes, there is a need for further training activities in the field of RES?	<input type="radio"/> YES <input type="radio"/> NO

<b>B.2 - There is an “Energy Office”?</b>	<input type="radio"/> YES <input type="radio"/> NO
If no, is the County planning to establish an energy office?	<input type="radio"/> YES <input type="radio"/> NO
If yes, specify the year of establishment	year:
If yes, specify the number of employees	N° of employees:
If yes, the dedicated staff is considered sufficient?	<input type="radio"/> YES <input type="radio"/> NO
If yes, there is a need for further training activities in the field of RES?	<input type="radio"/> YES <input type="radio"/> NO

<b>B.3 – There is an Energy Agency at county level?</b>	<input type="radio"/> YES <input type="radio"/> NO
If yes, specify the legal form	<input type="radio"/> Public <input type="radio"/> Private <input type="radio"/> Prticipated <input type="radio"/> Other (specify) -----
If yes, specify the number of employees	N° of employees:
If yes, specify the year of establishment	year:

<b>B.4 - There is a specific web page on RES?</b>	<input type="radio"/> YES <input type="radio"/> NO
---	--

**PART C – LEGAL FRAMEWORK**

**C.1 - The County has jurisdiction in issuing the authorization for which of the following technologies? And for what size of the power plant?**

Technology	Type of jurisdiction	Size
Solar power	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	
Solar thermal	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	
Bioenergy	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	
Biofuels	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	
Wind	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	
Geothermal	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	
Hydro power	<input type="radio"/> direct <input type="radio"/> indirect <input type="radio"/> No	

*Help. Type of competence: direct when the request is made directly by the applicant to the County; Indirect when the involvement in the authorization process is activated by other Authorities.*

**C.2 – Specify, for each technology, the main legal references for the regional authorization on the localization of RES plant.**

Technology	Other governmental regulations (at regional and municipal level)	Regulation and standards	Permit system
		<ul style="list-style-type: none"> <li>- Safety</li> <li>- Grid connection</li> <li>- Life time</li> <li>- Visual effects</li> <li>- Noise pollution</li> </ul>	-Building permit -Environmental permit
Solar power			
Solar thermal			
Bioenergy			
Biofuels			
Wind			
Geothermal			
Hydro power			

**C.3 - Specify, for each technology, the main legal references for the provincial authorization on the localization of RES plant.**

<i>Technology</i>	Local regulations	Regulation and standards <ul style="list-style-type: none"> <li>- Safety</li> <li>- Grid connection</li> <li>- Life time</li> <li>- Visual effects</li> <li>- Noise pollution</li> </ul>	Permit system <ul style="list-style-type: none"> <li>Building permit</li> <li>Environmental permit</li> </ul>
Solar power			
Solar thermal			
Bioenergy			
Biofuels			
Wind			
Geothermal			
Hydro power			

<b>C.4 – Planning framework</b>	
The County draws up an energetic planning instrument?	<input type="radio"/> YES <input type="radio"/> NO
It is voluntary or mandatory?	<input type="radio"/> Vol <input type="radio"/> Man
This instrument incorporates objectives and directions of other plans drafted at upper level of administration?	<input type="radio"/> YES <input type="radio"/> NO
In drafting the instrument, are involved other stakeholders like the economic operators?	<input type="radio"/> YES <input type="radio"/> NO
The County draws up a spatial planning tool?	<input type="radio"/> YES <input type="radio"/> NO
The planning tools include RES aspects in the forecasted development of the territory?	<input type="radio"/> YES <input type="radio"/> NO
If yes, how?	<i>please specify</i>

**PART D – ADMINISTRATIVE BARRIERS**

<b>D.1- Number of Authority</b>	
How many authorities a private operator has to contact directly in order to obtain the authorization for its project? How many authorities are involved without a direct contact by the applicant?	Authorities involved with a direct contact: Authorities involved with no direct contact: (approximately)
How is organised the coordination between the authorities directly and indirectly involved in the authorization procedure?	<i>please specify</i>

<b>D.2 – Duration of the procedure</b>	
How many months are required to complete the entire authorization procedure?	Duration in months:
How many months are needed by the County to complete his part in the authorization procedure?	Duration in months:

<b>D.3 – Administrative costs</b>	
Which is the total administrative costs for the applicant for the entire administrative procedure?	Total costs:
Which are the administrative costs for the part of the administrative procedure implemented by the County?	Total costs:

<b>D.4 - Transparency</b>	
In your opinion, the administrative procedure for obtaining the authorization is well known, properly documented, clear and understandable?	<input type="radio"/> YES <input type="radio"/> NO
Which authority/es is/are responsible/s for the communication to the applicants about the administrative procedure?	<i>Please specify</i>

Do you consider the entire decision-making process transparent?	<input type="radio"/> YES <input type="radio"/> NO
How the County guarantees the proper transparency of the administrative procedures and the decision making process?	<i>Please specify</i>
There are any fixed deadlines for the County in giving the feedback to the authorization requests?	<input type="radio"/> YES <input type="radio"/> NO
Such deadlines are always respected during the proceedings?	<input type="radio"/> YES <input type="radio"/> NO

<b>D.5 – Obstacles</b>	
Which of the following obstacles are more frequent in the implementation of the projects?	<input type="radio"/> Lack of compliance with the spatial plans <input type="radio"/> Fulfilment of the technical requirements for obtaining the consensus <input type="radio"/> Compliance with administrative requirements for obtaining the consensus <input type="radio"/> Environmental Impact Assessment procedure <input type="radio"/> Response to comments from NGOs <input type="radio"/> Legal action against the project realisation undertaken by private operators, individuals or NGO <input type="radio"/> Modification of the project after the release of authorization during the construction phase.
<b>D.6 – Progress capacity</b>	
How many projects, within the provincial territory, have not advanced over the last year?	Number:
In your opinion, which is the reason why these projects are blocked?	Administrative aspects <ul style="list-style-type: none"> <li><input type="radio"/> Deficiency of the installation planning instruments;</li> <li><input type="radio"/> Problems of environmental compatibility;</li> <li><input type="radio"/> instability of the authorization process;</li> <li><input type="radio"/> resistance by the administration for political reasons;</li> </ul>

	<ul style="list-style-type: none"> <li>○ political instability.</li> </ul> <p>Problems of access to the grid:</p> <ul style="list-style-type: none"> <li>○ Technical problems for access;</li> <li>○ Connection refused for insufficient grid capacity;</li> <li>○ Connection costs are too high.</li> <li>○ Other problems (please specify)</li> </ul>
In which stage the project are blocked?	<ul style="list-style-type: none"> <li>○ Project</li> <li>○ Analysis</li> <li>○ Authorization request</li> <li>○ Construction</li> </ul>

**PART E – PROMOTION, AWARENESS AND SUPPORT TO THE DEVELOPMENT OF “RES”**

<b>E.1 – The activity of promotion and awareness about RES is legally required?</b>	○ YES ○ NO
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<b>E.2 – Did the County implemented any awareness campaign about RES?</b>	○ YES ○ NO
If yes, for which technology?	<ul style="list-style-type: none"> <li>○ Solar power</li> <li>○ Solar thermal</li> <li>○ Bioenergy</li> <li>○ Biofuels</li> <li>○ Wind</li> <li>○ Geothermal</li> <li>○ Hydro power</li> <li>○ All</li> </ul>
If yes, in coopeartion with	<ul style="list-style-type: none"> <li>○ Universities</li> <li>○ Research institutes</li> <li>○ Other (please specify)</li> </ul>
If yes, to who addressed?	<ul style="list-style-type: none"> <li>○ Citizens</li> <li>○ Enterprises</li> <li>○ School</li> <li>○ All</li> </ul>
If yes, through which tool?	<ul style="list-style-type: none"> <li>○ Press</li> <li>○ Internet</li> <li>○ Conferences and workshop</li> <li>○ Others (please specify)</li> </ul>

<b>E.3 – Did the County carried out any demonstrative initiative on RES?</b>	<input type="radio"/> YES <input type="radio"/> NO
If yes, could you describe the initiative?	please specify
Did the County allocated financial resources for the RES?	<input type="radio"/> YES <input type="radio"/> NO
If yes, which was the aim?	<input type="radio"/> Promotion <input type="radio"/> Awareness <input type="radio"/> Development of energy production from RES

<b>E.4 – The support of RES by the County is legally required?</b>	<input type="radio"/> YES <input type="radio"/> NO
Did the County allocated financial resources in order to support energy production from RES?	<input type="radio"/> YES <input type="radio"/> NO
If yes, please specify for which sector	<input type="radio"/> Solar power <input type="radio"/> Solar thermal <input type="radio"/> Bioenergy <input type="radio"/> Biofuels <input type="radio"/> Wind <input type="radio"/> Geothermal <input type="radio"/> Hydro power <input type="radio"/> All
If yes, it is a funding on a grant scheme?	<input type="radio"/> YES <input type="radio"/> NO
If yes, which is the funding procedure?	<input type="radio"/> Capital account <input type="radio"/> Interests reduction

<b>E.5 – Has the County planned to promote and encourage the development of some renewable energy sources?</b>	<input type="radio"/> Solar power <input type="radio"/> Solar thermal <input type="radio"/> Bioenergy <input type="radio"/> Biofuels <input type="radio"/> Wind <input type="radio"/> Geothermal <input type="radio"/> Hydro power <input type="radio"/> All
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I authorize the processing of data collected by this questionnaire for the scope and with the procedures foreseen in the project "INTER PARES".
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