

REALISE-Forum

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The Business of Producing RES-E in Italy Today

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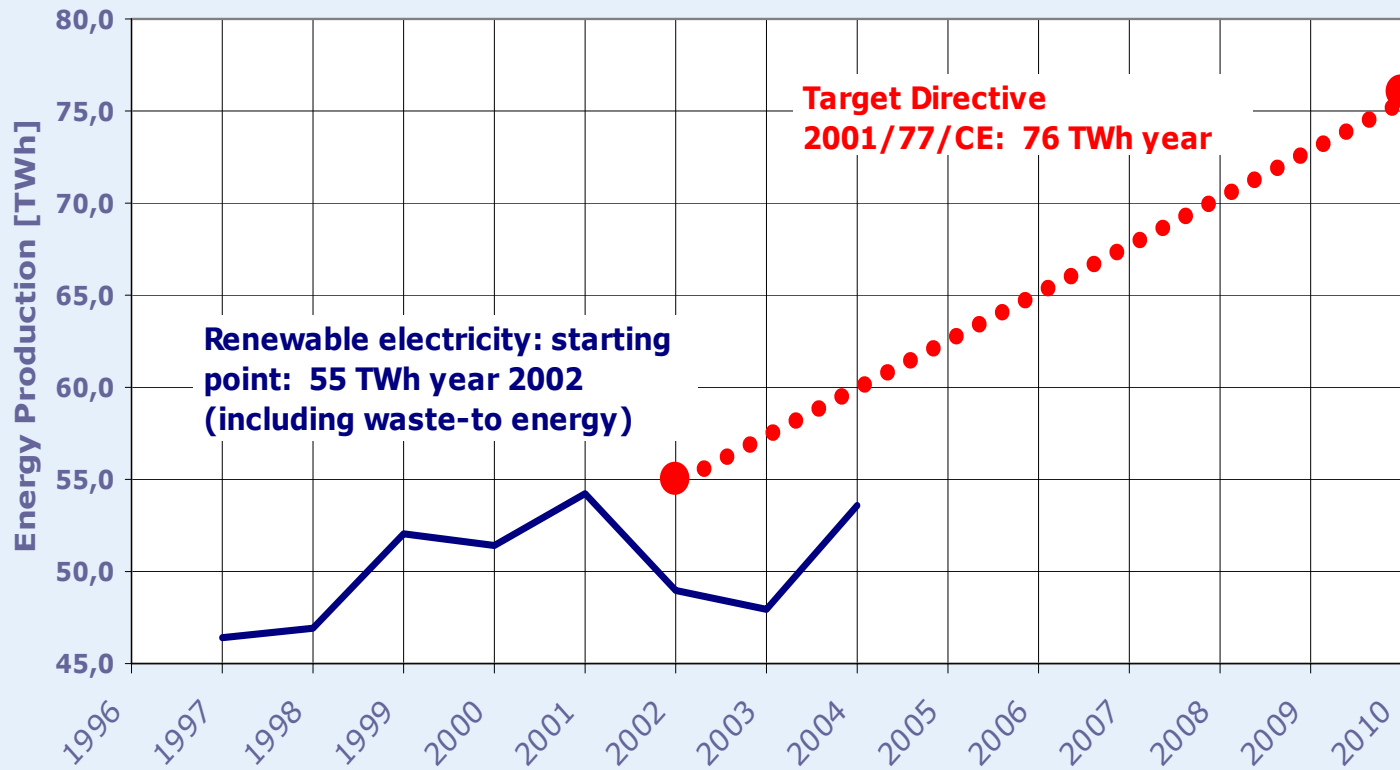
Who is APER?

- **APER is main Italian RES-E producer association with:**
- **more than 250 producers**
- **more than 400 production RES-E plants**
- **More than 2.000 MW installed power**
- **more than 7 TWh green energy produced every year**



Italian RES-E production and target

Delibera CIPE December 2002 (Directive 2001/77/CE)



The consequences

Year	2004	2010
Electricity production	55,7 TWh	75,0 TWh
Gap to goal	+19,3 TWh	

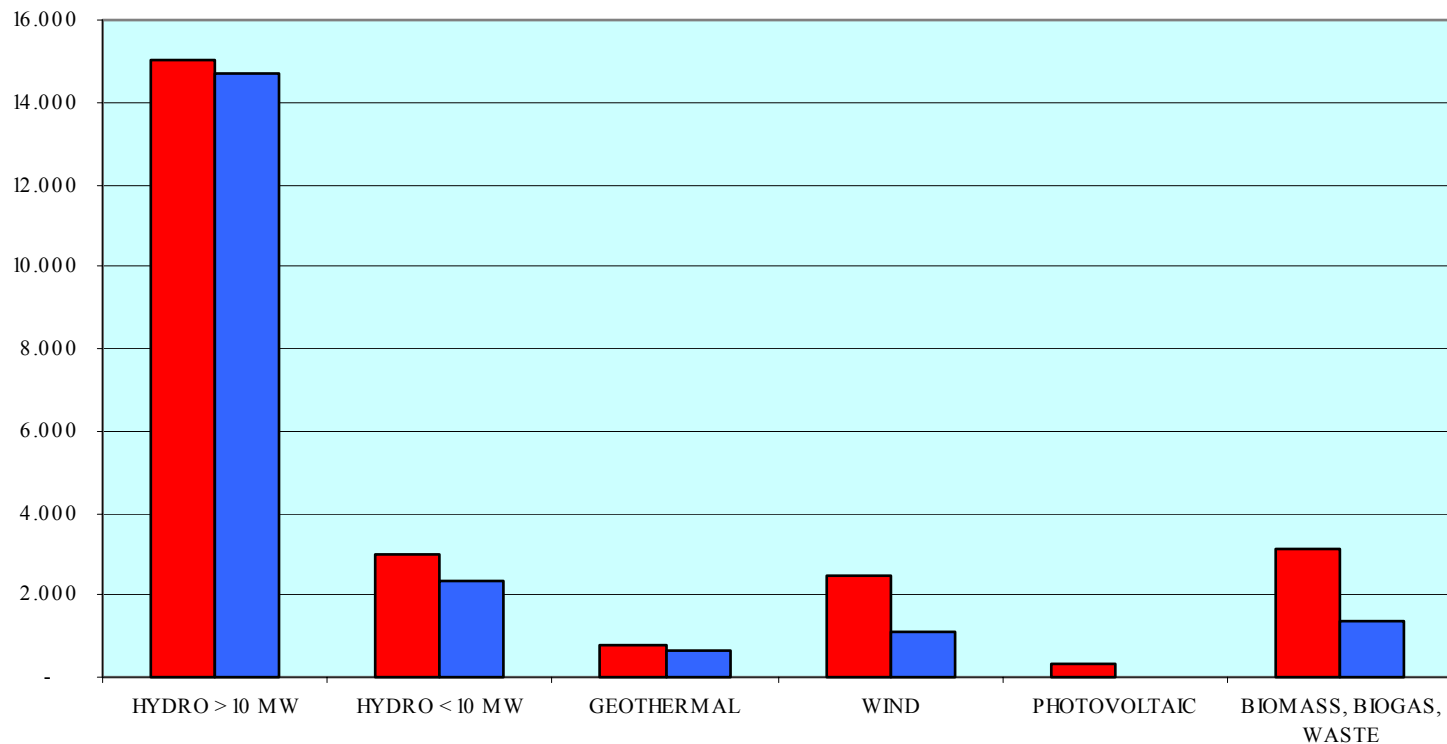
Needed Growth: + 5,7% per year*

..however Italian law fixes an annual growth of RES-E production around 2,35%

*Source: GRTN



Target 2008-2012 and installed power as 31th December 2004



RED: target

BLUE: Year 2004

(Source: MAP e GRTN)



COSTS – RES-E Power to be installed before 2008 - 2012

~ 5.000 MW new plants

7,5-10 Billion € of private investments

	Power to be installed [MW]	Cost per MW [k€/MW]	Investment [M€]
Wind	1.000/1.500	750 – 1.000	750 – 1.500
Hydro	400	1.000 – 1.500	400 – 600
Biomass – RSU	2.500	2.000 – 2.500	5.000 – 6.250
PV	300	6.000 – 8.000	1.800 – 2.400
TOTAL	4.200/4.700		7.950 – 10.750



Some important benefits

More than 1 billion € per year
of avoided expenses for fossil fuel purchase

More than 1 billion € per year
saved on estimated costs related to penalties for not complying
Kyoto Protocol targets.



Main barriers

AMMINISTRATIVE BARRIERS

- National targets vs. regional choices

GRID CONNECTION

- Lack of transparency and timetable of procedures and supposed Italian grid limits to support more RES-E power

LOCAL RES-E PLANT ACCEPTANCE

- Local opposition and NIMBY

SYSTEM BARRIERS

Sustainable incentive system (?) and uncertainty of CV prices year by year



EU 77/2001 Directive: the Italian Law

Decree structure

Decree “*29 dicembre 2003, n. 387*” (Decree 387/03), entered in force the 15th February 2004 as the Law of adoption of Directive 77/2001, has been structured as a framework with over 20 acts to be adopted after the issue of the Decree itself.

Several decrees of the Ministry of Industry (MAP), Ministry of Environment (MATT) or acts of the Italian Regulatory Authority for Electricity and Gas (AEEG) has to be issued in a 18-months period, in order to achieve all the measures disposed by Decree 387/03.

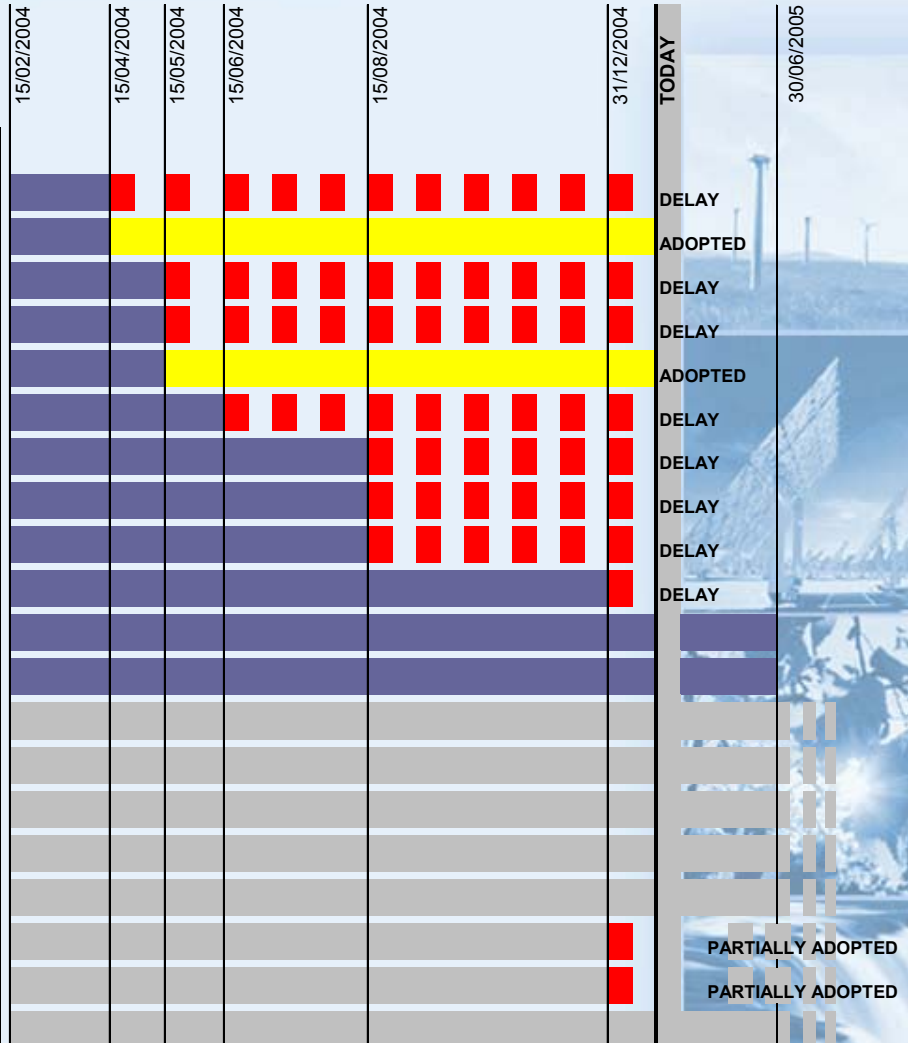
In the following slide a chart is shown, representing the situation at the time of Decree 387/03 issue.



EU 77/2001 Directive: the Italian Law

TIMETABLE OF ADOPTION OF CONSEQUENT DECREES OR ACT

ARTICOLO	TITOLO DELL'ARTICOLO	ENTE
rt. 5, comma 1	Rules for development of Biomass sector	MIPAF
rt. 16, comma 3	National Observatory on RES and RUE	MAP MATT
rt. 14, comma 1	Grid connection issues	AEEG
rt. 14, comma 4	Grid connection issues	AEEG
rt. 16, comma 6	National Observatory on RES and RUE	AEEG
rt. 17, comma 3	National position on waste-to-energy as renewable sources	MAP MATT
rt. 6, comma 1	Grid connection for RES plants smaller than 20 kW	AEEG
rt. 7, comma 1	Specific measures for PV electricity production	MAP MATT
rt. 20, comma 8	General issues on financial matters and temporary rules	MAP MATT
rt. 4, comma 1	Quota obligation adjustment	MAP MATT
rt. 3, comma 2	National target and measures	MAP MATT MEF
rt. 3, comma 3	National targets and measures	MAP MATT MEF
rt. 15, comma 1	Communication campaign on use of RES	MAP MATT
rt. 5, comma 5	Biomass specific measures	MAP MATT MIPAF
rt. 9, comma 1	Research and promotion on RE programm	MAP MATT
rt. 11, comma 11	Garantee of origin of RE	MAP MATT
rt. 12, comma 10	Administrative procedures simplification measures	CONF UNIF
rt. 13, comma 3	Electricity market rules for RES	AEEG
rt. 13, comma 4	Electricity market rules for RES	AEEG
rt. 20, comma 1	General issues on financial matters and temporary rules	MAP



Adoption of 77/2001 Directive: the present situation

Main issues concerning adoption of Decree 387/2003

1. Grid connection
2. Simplified administrative procedures
3. Support schemes



Adoption of 77/2001 Directive: the present situation

Grid connection (1)

What the Italian Decree 387/2003 set:

1. The Regulatory Authority (AEEG) is responsible for the issue of grid connection guidelines for grid operators (TSO and suppliers) within 3 months from the issue of the Decree (i.e. by 15th May 2004)
2. The grid operators adopt these guidelines by means of a set of rules giving evidence to:
 - the procedures to connect RE plants to the grid (administrative path, timing, ...);
 - the basis for calculation of grid connection costs;
 - the cost sharing between producers and System operator
3. The AEEG guarantees fair connection costs for RE power plants



Adoption of 77/2001 Directive: the present situation

Grid connection (2)

Which is the current situation:

1. Up to date guidelines has not been issued yet by the AEEG: only a discussion document has recently been issued (17 March 2005) by the AEEG (see website http://www.autorita.energia.it/docs/index_dc.htm) after a working group of several months where APER released a proposal with some criteria for grid connection of RES power plants (Annex 1 [IT]).
2. In the meantime the Italian TSO (GRTN) issued a grid connection temporary procedure (Codice di Rete) reporting main rules for connection of power plant to the High Voltage grid. Recently, as Annex to this document, were issued *Rules for connecting Wind Power Plant to the grid over 120 kV* (Annex 2 [IT]).
3. At present time no qualified (by AEEG) set of rules have been issued by grid operators, which impose their own former grid connection rules not complying with criteria of *transparency of connection costs, time scheduling, opportunity to producer to carrying on the administrative procedures*



Adoption of 77/2001 Directive: the present situation

Grid connection (3)

Main barriers:

- Lack of a guideline issued by the Regulatory Authority (last official document released by AEEG was “Deliberazione nr. 50/2002”, which acts as a framework document);
- Non-controlled connection procedures adopted by TSO and local grid operators;
- No respect to the principles of transparency, economics of connection procedures, defined time period to connect a RE power plant to the grid



Adoption of 77/2001 Directive: the present situation



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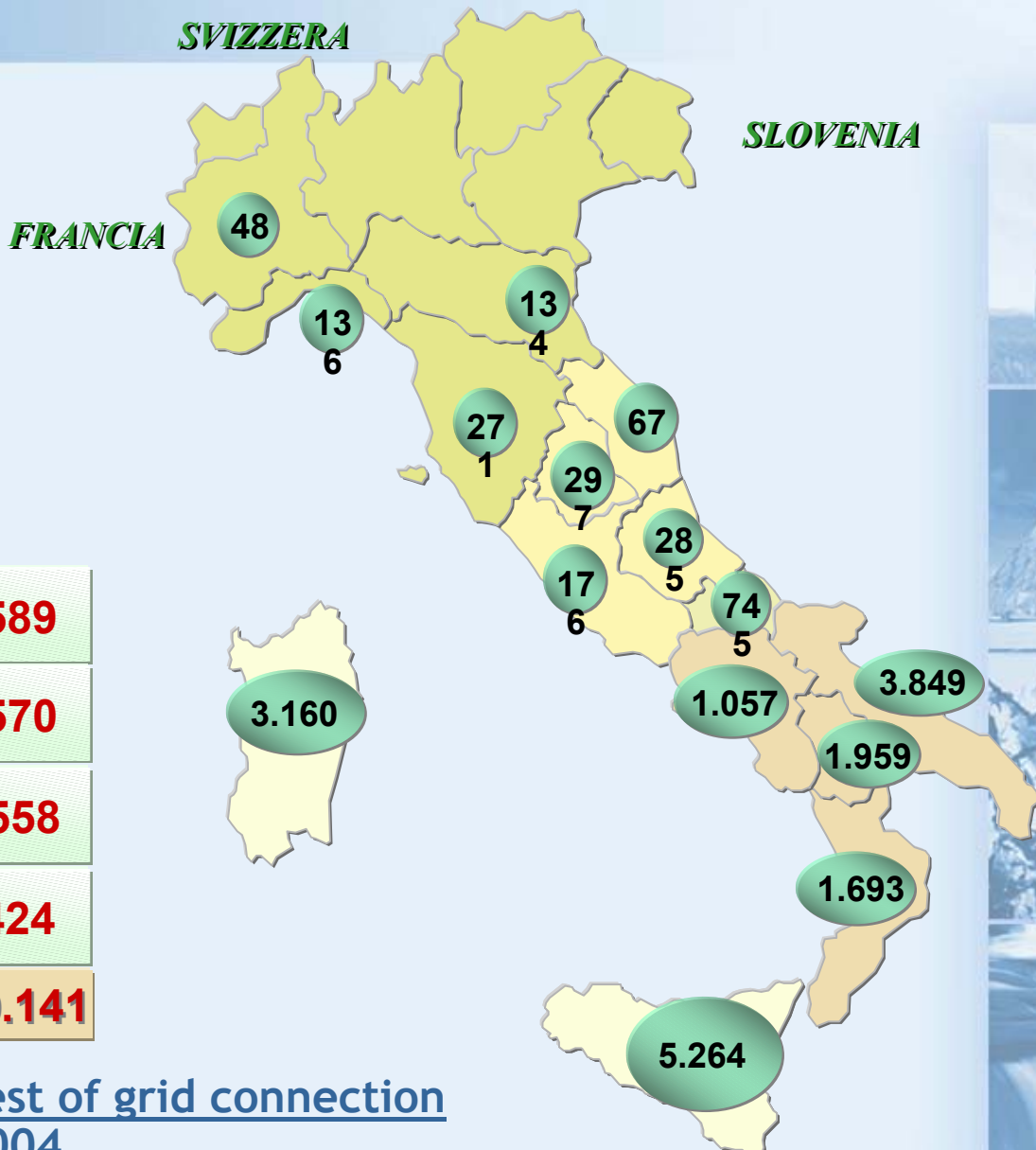


Grid connection: Wind installed capacity end 2004

Adoption of 77/2001 Directive: the present situation



© 1998 Danish Wind Turbine Manufacturers Association



Grid connection: request of grid connection feasibility study end 2004

Adoption of 77/2001 Directive: the present situation

FRANCIA + SVIZZERA

6.500

220

AUSTRIA

430

SLOVENIA

4.800

1.600 = 2.300

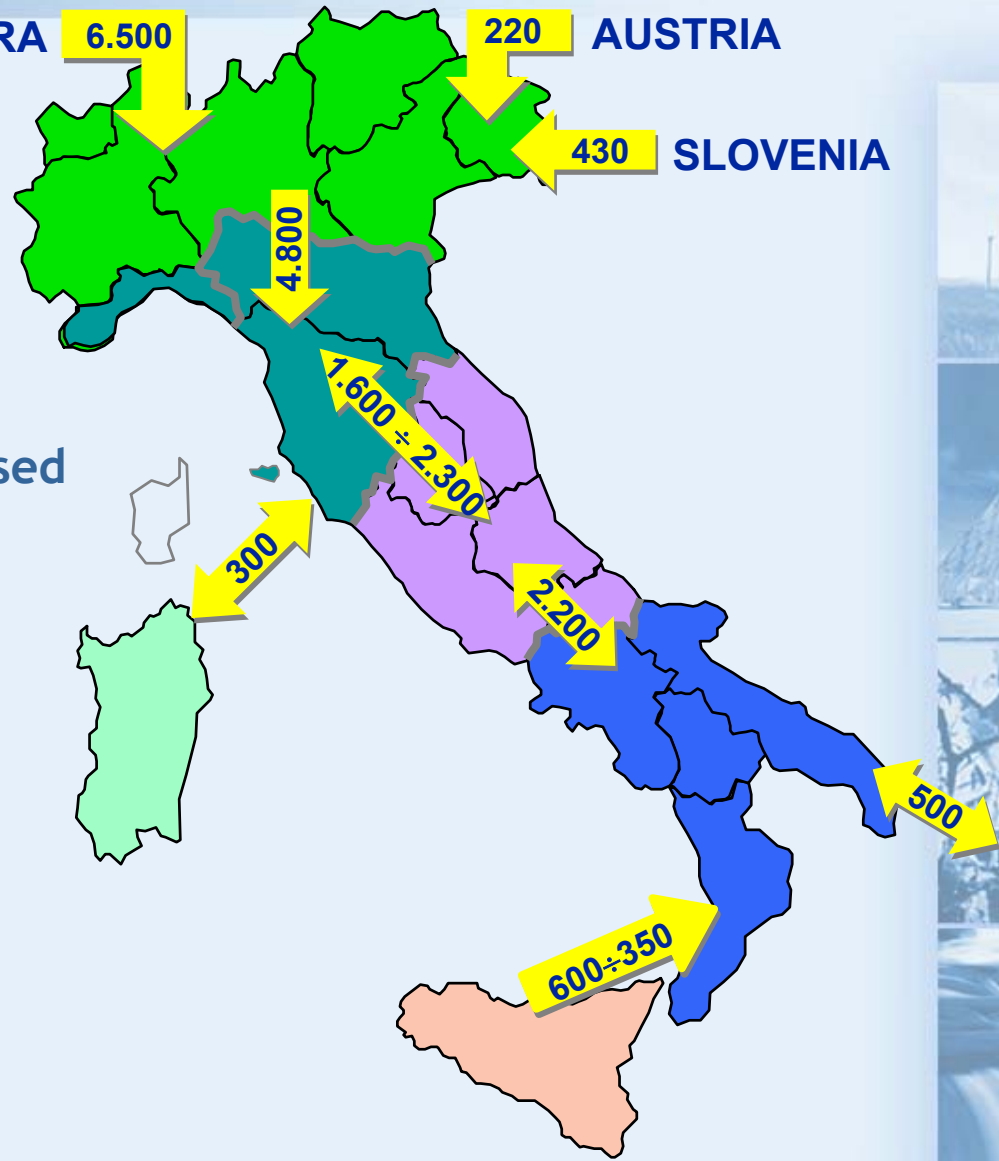
300

2.200

500

600 = 350

Grid connection:
Power transfer limits imposed
by the grid capacity



Adoption of 77/2001 Directive: the present situation



Italian Grid



Linea
400 kV
Gre

Adoption of 77/2001 Directive: the present situation

Grid connection

State of the art:

- Still waiting for the Regulatory Authority issue the OFFICIAL GRID CONNECTION GUIDELINES to TSO and Suppliers;
- Italian TSO (GRTN) released a GENERAL SET OF RULES and more recently a DISCUSSION DOCUMENT FOR GRID CONNECTION OF WIND POWER PLANTS;
- ENEL, which represents over 95% of the supplier capacity, IS QUITE FAR TO ISSUE RULES ACCORDING TO THE PRINCIPLES OF TRANSPARENCY, SCHEDULED TIMETABLE, EVIDENCE OF DETAILED COST OF GRID CONNECTION



Adoption of 77/2001 Directive: the present situation

Simplified administrative procedures (1)

What the Italian Decree 387/2003 set:

1. All the administrative procedures necessary to install and to manage a RE power plant are organized in a single procedure, according to Law "7 agosto 1990, n.241"
2. The entire simplified procedure has to be completed in 180 days (excluding those days necessary for documents update) from the documents release to the Administration in charge of the procedure;
3. The Ministry of Industry provide the *Conferenza Unificata* (which is a plenary board with representative from State, regional and local authorities) with guidelines, in order every Region to adopt its own procedure, according to regional laws (especially in the environment area)



Adoption of 77/2001 Directive: the present situation

Simplified administrative procedures (2)

Which is the current situation:

1. The proposed guideline for administrative procedures have not been neither issued by the Ministry of Industry nor adopted by the single Region
2. At present time only a few Region have adopted rules in order to speed up the administrative process and harmonize former laws with that one (Decree 387/2003), some other regional administrations are enfacing serious problems to adapt to the current set of laws the new one.
3. The RE producers are having problems to submit to the competent administrations the set of authorisation needed by the procedures, due to the not-well-defined situation



Adoption of 77/2001 Directive: the present situation

Simplified administrative procedures (3)

Main barriers:

- Lack of a guideline issued by the Ministry of Industry setting a clear procedural path to submit documents and to analyze them;
- Some local authorities adopted their own simplified administrative procedures instead of waiting for the Ministry of Industry and Conferenza Unificata;
- Some other local authorities are in difficulties to adopt a unique procedure, due to former laws not tuned to the new law Decree 387/2003.
- As result today the *Simplified administrative procedure* is not effective yet, over one year after the issue of Decree 387/2003



Adoption of 77/2001 Directive: the present situation

Simplified administrative procedures

State of the art:

- Ministry of Industry, among with Ministry of Environment and Conferenza Unificata, ARE UNATTENDING THE ISSUE OF GUIDELINE to transfer to the local authorities;
- Some local authorities adopted their own simplified administrative procedures such as:
 - PUGLIA (APER has addressed a legal procedure against PUGLIA Region);
 - BASILICATA (APER has addressed a legal procedure against BASILICATA Region);
 - CAMPANIA
 - VENETO
 - MOLISE
- Region SARDEGNA completely blocked every administrative procedure for request of installing wind power plants and EVER BLOCKED SOME RUNNING CONSTRUCTION OF WIND POWER PLANT



Adoption of 77/2001 Directive: the present situation

Support schemes (1)

What the Italian Decree 387/2003 set:

1. The quota obligation, equal to 2% of the electricity produced from fossil fuels, is update as follows (2,00% year 2004; 2,35% year 2005; 2,70% year 2006; 3,05% year 2007)
2. The Ministry of Industry and Ministry of Environment has recently issued a new Decree on green certificates necessary to re-define the qualification procedures of RE producers;
3. The Ministry of Industry and Ministry of Environment should issue among with the *Conferenza Unificata* a Decree (by 15th June 2004) with a classification of the waste typologies which will benefit of issue of green certificates



Adoption of 77/2001 Directive: the present situation

Support schemes (2)

Which is the current situation:

1. The update of quota obligation is OK
2. **Recent Legislative Decree October 24, 2005 set rules on Green Certificates**
3. Producers are waiting as well for a second Decree concerning on Waste-to-energy: in absence of this Decree no demand of green certificates are processed for this type of fuel
4. A recent Law issued last July (Legge 23 agosto 2003, n. 239) enlarge the set of plants able to ask for Green Certificates to the following categories:
 - Cogeneration plants for district heating;
 - Plants fuelled by H₂



Adoption of 77/2001 Directive: the present situation

Support schemes (3)

Main barriers:

- The introduction, among with “*pure*” RE plants, of new categories of non RE plants able to ask for green certificates (GC) is upsetting the system and giving strong uncertainty to the RE sector;
- District heating with cogeneration and use of H2 in power production should not be allowed to ask for green certificates.
- Should a combined cycle power plant, with a district heating section, qualified to ask for green certificates despite the rules of EU Directives on renewable and cogeneration, it could upset the GC market .



Adoption of 77/2001 Directive: the present situation

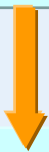
Support schemes (year 2004)

**GC demand
identified in 3,89
TWh**

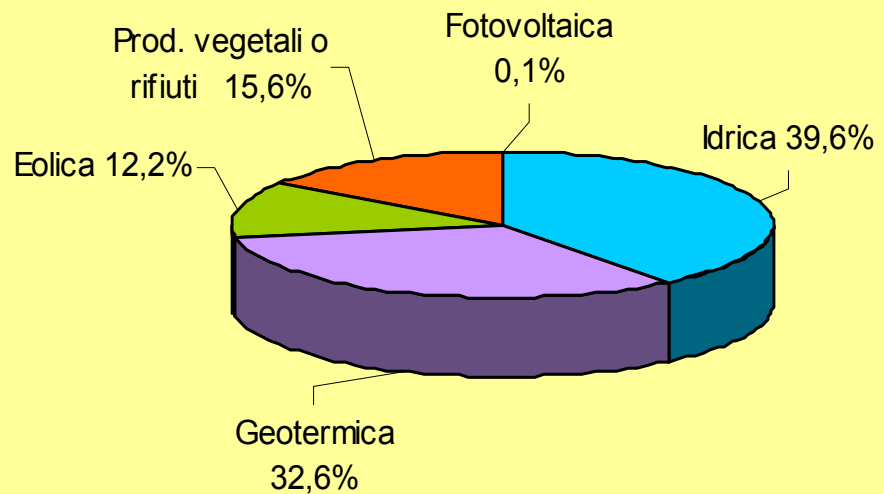


2,89 TWh

**GC issued by
GRTN: 1,00
TWh**



Green Certificates issued in order to support RES-E plants



Adoption of 77/2001 Directive: the present situation

Support schemes

State of the art:

- With Law Legge 23 agosto 2003, n. 239 the Italian Government ENLARGED THE SET OF POWER PLANTS ABLE TO RECEIVE GC TO 2 NON-RENEWABLE CATEGORIES (cogeneration with district heating and electricity produced by H₂, with no limit to H₂ origin);
- **Legislative Decree 24 October 2004 sets that GRTN will buy GC if they are not sold on the market in case Italian targets are not achieved**



Critical points of Green Certificate System

- Unpredictable yearly changes and low transparency of GC prices
- Uncertainty on demand growth
- Uncertainty on GC offer growth
- Low efficiency of the system
- Risk of fossil fuel cost growth



Adoption of 77/2001 Directive: the present situation

Market concern (1)

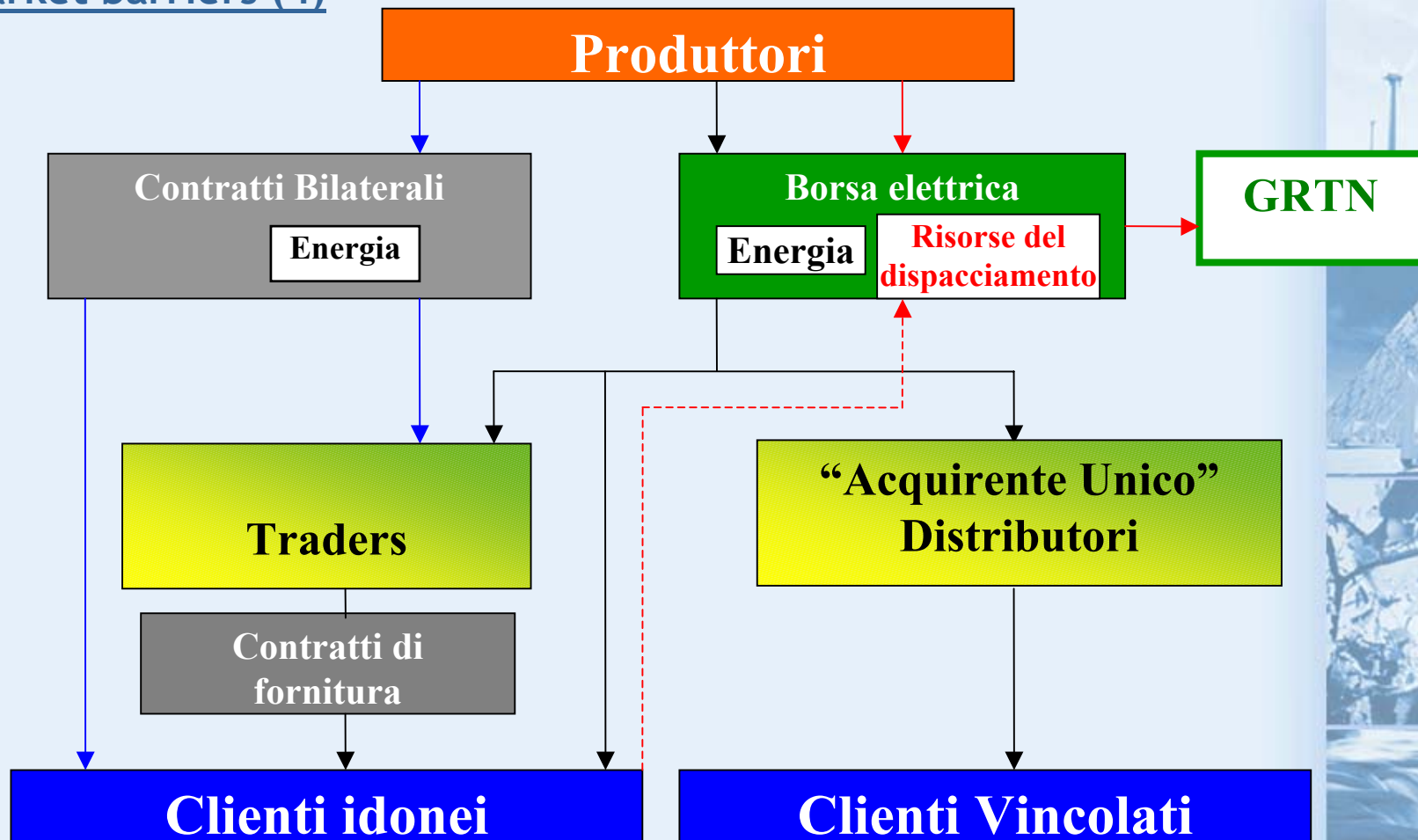
What the Italian Decree 387/2003 set:

1. The Regulatory Authority set rules for allowing RE producers to feed electricity into the supplier grid, on a basis of market related economical condition
2. Electricity (alternatively to the market) is sold to electricity suppliers (local distributors to captive customers)
3. These rules entered in force this year establish a market related tariff (based on electricity wholesale market) for RE power plants of:
 - capacity not exceeding 10 MW (if power is programmable);
 - With no capacity limit (if power not programmable)



Adoption of 77/2001 Directive: the present situation

Market barriers (4)



Adoption of 77/2001 Directive: the present situation

Other concern

1. Still waiting for NET-METERING RULES to be issued by the AEEG for RE plants under 20 kW
2. MAP Decree 28 July 2005 incentives installation of 100 MW PV plants



Some proposals from APER

- Agreed division between Italian regions of RES-E national targets by a burden sharing mechanism
- Effective communication campaign to promote RES-E plant acceptance
- Introduction of technical tools to ensure dispatching priority rules for FER-E as it happens in some other European Countries
- Issue of the regulation on grid connection by AEEG
- Radical revision of incentive system in order to respect article 15 of National Law 62/05.



Thank you!

APER

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