

Background

The general policy lines set out in the NAP were converted into legislative provisions – and thus better defined – with the transposition of Directive 2009/28/EC by means of Legislative Decree No 28 of 3 March 2011.

REQUESTED ADDITIONS TO THE NAP

Authorisation procedures (Q4.2.1):

- The main obstacle identified by Italy is the different ways regions apply the single authorisation procedure, which can lead to delays. Italy proposes guidance to be issued on how single authorisation should be carried out, how to integrate on-shore renewable electricity into the landscape, how to optimise work to connect plants to the network. Therefore, the calendar for the approval of the national guidelines should be indicated, as well as the calendar for the adaptation of the regions' regulations in line with the guidelines.

Point 4.2.1(e) of the NAP

[The NAP already contained the answer. Some additional details are set out below.]

The National Guidelines are the instrument developed by the Italian government to standardise the local authorisation procedures. The Guidelines were published in the Official Gazette of the Italian Republic on 18 September as an annex to the Ministerial Decree of 10 September 2010. In accordance with the Decree, the Regions had 90 days (i.e. until 2 January 2011) to bring their regulations into line with the national rules, after which the national Guidelines would be deemed to be directly applicable in any case.

The text contains standard rules and criteria for the authorisation procedure for installations fuelled by renewable sources. In particular, it aims to ensure the proper integration of installations into the landscape, particularly wind farms. The latter are covered by a specific technical annex, which will be supplemented by other annexes concerning other renewable sources. Pursuant to these Guidelines, the Regions are to use the criteria laid down therein to identify areas and sites that are not suited to the building of specific types of installation. The result will be to speed up the procedures and ensure the well-ordered geographical development of energy infrastructure as a result of the existence of clear-cut rules encouraging investment and allowing the need for growth to go hand in hand with that for respect for the environment and the landscape. As far as associated works are concerned, the Guidelines not only make clear the criteria on the basis of which the requirement for connection to the installation applies but also introduces a significant simplification, in particular for network infrastructure. This stipulates that the network operator must take account, in a coordinated manner, of applications for the connection of installations in the same geographical area. It will thus be possible, after an investigation, to ensure that the estimate for the connection includes a collection station that can potentially be used by several renewable installations. There is also a provision on the basis of which concession holders of transmission and distribution systems must inform the Regions, on a half-yearly basis, of connection solutions developed and then accepted by applicants with the aim of facilitating the coordination of installation authorisation activities.

With a view to their possible subsequent updating, the Guidelines provide for regional authorisation activity to be monitored. The Regions must therefore from time to time provide information and data concerning cases and put forward proposals for pursuing the greatest degree of efficiency in administrative activity concerning authorisation of the building and operation of installations.

Buildings (Q4.2.3):

- The calendar for the adoption of the legislation setting up certain minimum levels of renewables in certain buildings should be provided. It should also be clarified whether the incentives considered in the action plan, such as premium paid on volume of renewables and discounts to cover development costs for construction, have been further developed; a calendar for their adoption should be provided as well.

Point 4.2.3(c) of the NAP

[The following may be added as the second last paragraph:]

Following transposition of Directive 2009/28/EC by means of Legislative Decree No 28/2011, it is provided that, where plans for new buildings and major renovations of existing buildings ensure coverage of heat, electricity and cooling consumption that is at least 30% higher than certain compulsory minimum values, a volume bonus of 5% is to be granted when the building permit is being issued, without prejudice to the rules on the minimum distances between buildings and the minimum safe distances from the roadway.

Point 4.2.3.(e) of the NAP

[The following may be added as the last paragraph:]

Article 11 of Legislative Decree No 28/2011 transposing Directive 2009/28/EC increased the requirements for the use of renewable sources in new buildings and existing buildings subject to major renovations (existing buildings with a usable surface area exceeding 1 000 m² subject to full renovation of the elements making up the building envelope or buildings of any surface area that are demolished and rebuilt).

Plans for new buildings and for major renovations of existing buildings must provide for the use of renewable sources to cover the consumption of heat, electricity and cooling.

In particular, installations for the production of thermal energy must be designed and built in such a way as to guarantee, through the use of energy produced by installations powered by renewable sources, the simultaneous coverage of 50% of the expected consumption of domestic hot water and the following rates of the total expected consumption of domestic hot water, heating and cooling:

- a) 20% where the application for the relevant building permit is submitted between 31 May 2012 and 31 December 2013;
- b) 35% where the application for the relevant building permit is submitted between 1 January 2014 and 31 December 2016;
- c) 50% where the application for the relevant building permit is submitted on or after 1 January 2017.

These requirements may not be met via renewable installations that produce only electricity that, in turn, powers devices or installations for the provision of domestic hot water, heating and cooling.

The requirement does not apply when the building is connected to a district heating network that covers its entire heat needs in respect of building heating and the supply of domestic hot water.

In addition, plans for new buildings and for major renovations of existing buildings must provide for the inclusion of installations using renewable energy for the production of electricity, with the power, in kW, to be calculated using the following formula:

$$P = 1/K * S$$

Where S is the plane surface area in m² of the building at ground level and K is a coefficient (m²/kW) with the following values:

- a) K = 80, where the application for the relevant building permit is submitted between 31 May 2012 and 31 December 2013;
- b) K = 65, where the application for the relevant building permit is submitted between 1 January 2014 and 31 December 2016;
- c) K = 50, where the application for the relevant building permit is submitted on or after 1 January 2017.

For public buildings the requirements are increased by 10%.

Information provisions (Q4.2.4):

- It should be specified how guidance to professionals (e.g. architects, planners) will be provided, in accordance with Article 14(5) of Directive 2009/28/EC.

Points 4.2.4(d) and 4.2.4(f) of the NAP

[These points may be updated with the addition of the following:]

Legislative Decree No 28/2011 transposing Directive 2009/28/EC introduced significant new rules on the provision of information to architects and planners. Indeed, Legislative Decree No 28/2011 lays down that, by September 2011, the GSE (*Gestore dei Servizi Energetici SpA* [Energy Services Operator]) must create an information website containing '*guidance enabling all interested parties, in particular planners and architects, to properly consider the optimal combination of renewable energy sources, high-efficiency technologies and district heating and district cooling systems during the planning, design, building and renovation stages in industrial and residential areas*'.

In addition to this guidance, the website will contain information aimed at the general public on many other issues including, for example, information on the incentives for renewable sources for electricity production, heating and cooling; information on the net benefits, costs and energy efficiency of equipment and systems for the use of heating, cooling and electricity from renewable energy sources; and information concerning best practices and the authorisation procedures followed in the regions.

The website is currently being developed and will be available to the general public by September 2011.

The GSE has also been assigned the task of signing agreements with the local authorities for the development of information, awareness-raising, guidance and training programmes.

Lastly, Legislative Decree No 28/2011 also provided for a decree to be issued laying down the procedures by means of which suppliers or installers of installations using renewable sources are to provide final users with information on the costs and performance of these installations.

Certification of installers (Q4.2.5):

- Detailed information should be provided on how the installer certification scheme will be applied in Italy, in order to ensure that there is consumer awareness about the scheme.

Question 4.2.5(d)

[To be added at the end:]

Legislative Decree No 28/2011 stated that a Decree of the Minister for Economic Development would lay down the conditions and procedures by means of which suppliers or installers of installations using renewable sources were to provide final users with information on the costs and performance of these installations.

With regard more generally to the issue of installer certification, the Decree also lays down that, by 31 December 2012, in accordance with Annex IV to the Directive, the Regions and Autonomous Provinces are to launch a training programme for installers of installations using renewable sources or authorise training providers, and to notify the Ministry of Economic Development and the Ministry of the Environment and Protection of Natural Resources and the Sea thereof. In order to facilitate consistency with the criteria in Annex IV and uniformity at national level, or if the Regions and Autonomous Provinces do not act by 31 December 2012, the ENEA (National Agency for New Technologies, Energy and Sustainable Economic Development) is putting in place training programmes to issue the training certificate.

District heating development (Q4.2.9):

- As Table 11 projects a significant increase (80ktoe in 2005 increasing to 900 ktoe in 2020), a more detailed assessment of the plans to improve the district heating/cooling network should be provided.

Question 4.2.9(a)

The reasoning behind the estimates provided on the development of district heating is explained below.

As far as urban district heating is concerned, the figures from the AIRU (*Associazione Italiana Riscaldamento Urbano* [Italian Urban District Heating Association]) show that a total volume of around 227 Mm³ was heated with district heating in 2009 (211.9 Mm³ in 2008, 199 Mm³ in 2007), with the total thermal energy supplied to final users being 6 374 GWh or 0.58 Mtoe (6 257 GWh or 0.54 Mtoe in 2008; 5 697 or 0.49 Mtoe in 2007). Around 18.3% of this energy came from renewable sources (biomass, MSW, recoveries from geothermal heat

processes), an increase on previous years (18% in 2008, 17% in 2007). Around 850 00 [sic] housing units are served by urban district heating.

In order to estimate the trend up to 2020, use was made of a potential analysis on the sector (RSE study, 2008). This study was carried out in a state of the art manner on the basis of several reference statistical parameters, including demographic trends and building trends (understood in terms both of increases in the volume to be heated and of improvements in the energy efficiency of buildings). On the basis of these estimates, it can be conservatively hypothesised that 4.0 million [? – *not fully legible*] housing/tertiary units will be heated using district heating in 2020, for a total energy demand of around 2.4 Mtoe. It was then assumed that the percentage coverage of this energy demand with renewable energy sources would increase at a rate faster than the historic trend (12% in 2000, 17% in 2007, 18% in 2008) to reach 37%, giving final consumption of renewable sources of around 900 ktoe, including 650 ktoe from biomass.

In order to exploit the potential thus identified, the following series of actions was initiated:

Treating district heating networks as primary urbanisation works

Infrastructure for the installation of distribution networks for energy from renewable sources for heating and cooling are now treated for all intents and purposes (except for the rules on value added tax) as primary urbanisation work. In other words, it is counted among those works (such as roads and electricity and gas networks) that must be carried out in all new settlements (Article 22(1) of Legislative Decree No 28/2011).

Municipal development plans for district heating and district cooling

These plans, drawn up by the municipalities in coordination with the Provinces in a manner consistent with the Regional Energy Plans, will be the local planning instrument that will allow significant increases in the development of heating and cooling transmission networks. Among other provisions, these plans will require the municipalities to check the willingness of third parties to incorporate equipment and systems for the production and use of energy from renewable sources and district heating and district cooling networks, including those powered by non-renewable sources, during the planning and design stages, including with reference to renovation plans for residential, industrial or commercial areas as well as roads, sewers, water networks, electricity and gas distribution networks and telecommunication networks (Article 22(2) of Legislative Decree No 28/2011).

Incentives to finance heat transmission infrastructure

A specific standing guarantee fund has been set up. Established at the Electricity Sector Adjustment Fund (*Cassa congruaglio per il settore elettrico*), this fund will be financed by the application of a tariff on methane gas consumption. The fund will allow the financing of the necessary district heating infrastructure (Article 22(4) and (5) of Legislative Decree No 28/2011). Simultaneously, the instruments for incentivising thermal energy will allow the building of production plants (see the reply to question 4.4).

Heating support schemes (Q4.4):

- It should be further explained how support schemes will target the uptake of renewable heat, as most of the measures presented are not targeted to renewable

heating/cooling but more generally to achieving energy efficiency. If relevant, detailed information should be provided on the potential options for new incentive schemes, as well as the timetables for their adoption.

Question 4.4

[Update]

Legislative Decree No 28/2011 transposing Directive 2009/28/EC made several significant changes regarding support for the production of thermal energy from renewable sources and energy efficiency.

Article 27 of the Decree lays down new methods for incentivising measures and interventions aimed at increasing energy efficiency and the production of energy from renewable sources:

- through subsidies for natural gas charges for small-scale interventions;
- through the issuing of 'white certificates' (energy efficiency certificates).

More specifically, small-scale interventions carried out after 31 December 2011 to produce thermal energy from renewable sources and increase energy efficiency will be incentivised on the basis of the following general criteria:

- a) the purpose of the incentive will be to ensure fair remuneration of the investment and operating costs and it will be proportionate to the production of thermal energy from renewable sources or with the energy savings made by the intervention;
- b) the period of entitlement to the incentive may not exceed ten years and will run from the date of completion of the intervention;
- c) the incentive is to remain constant for the entire entitlement period and may take account of the financial value of the energy produced or saved;
- d) the incentive may be awarded exclusively to interventions that do not benefit from other State incentives, except for guarantee funds, revolving funds and interest relief.

Within six months of the entry into force of Legislative Decree No 28/2011, the Ministry of Economic Development will publish a Decree in which the implementing rules for the new incentivisation measures will be examined in more detail. In any case, up to now, the new guidelines on white certificates issued by the Regulatory Authority for Electricity and Gas (Resolution 9/11) have established new measures to bolster the financial support for district heating based on biomass and cogeneration. In particular, the multiplier coefficient in favour of these interventions has been increased from 1 to 3.36 alongside a reduction in the minimum threshold for eligible projects (40 toe for analysis-based projects).

Biofuels support schemes (Q4.5):

- (a) The concrete obligations/targets per year (per fuel or technology) should be provided. The obligations/targets should refer to the period until 2020, as the reference period for the action plan.
- (b) It should be noted that the level of ambition for 2nd generation biofuels should be consistent with the support measures envisaged. Therefore, additional information on the support measures for 2nd generation biofuels should be provided.

- Additional, detailed information on the measures envisaged to increase the share of renewable energy in transport after 2012 should be provided. It should be noted that the measures should be sufficient to ensure the achievement of the 2020 target.

Question 4.5(a)

[Update:]

Legislative Decree No 28/2011 requires achievement, by 2014, of a minimum 5% target for biofuels released for consumption. Although requirements for the release of biofuels for consumption are not laid down for years after 2014, a target of 10% by 2020 has been assumed, with the setting of requirements for later years being left to subsequent measures. These requirements will be defined taking account of the trend observed in earlier years and the content of the report to be drawn up by the Commission pursuant to Article 23(8) of the Directive. The interim targets may thus be assumed to increase in a linear manner between the 5% for 2014 and the 10% for 2020.

Question 4.5(b)

[Update]

The support measures have been incorporated into the requirement for releasing biofuels for consumption provided for by Legislative Decree No 28/2011: parties who demonstrate at they have released for consumption biofuels produced from waste and waste by-products, algae and materials of non-food origin including cellulosic and ligno-cellulosic material shall be entitled to a certificate of release for consumption once they have released a quantity of 5 Gcal (rather than 10 Gcal) of such biofuels. Such release for consumption can thus be deemed to count for twice the release for consumption of other biofuels.

Question 4.5(c)

[Update]

The measure on the requirement for mixing is deemed sufficient for achieving the 10% target for 2020 with the new provisions introduced by Legislative Decree No 28/2011. Please refer to what has already been stated on the setting of the minimum target up to 2014 and up to 2020 (see 4.5(a)).

In this connection, it should also be made clear that, in order to maximise the contribution to the reduction of greenhouse gas emissions of biofuels produced close to the place of final consumption, the energy contribution of biofuels is deemed to be higher than the actual energy content provided they are produced in establishments located in European Union countries and when they use raw material grown in the territory of the same countries. An identical theoretical increase is applied to biofuels released for consumption outside the conventional fuel distribution network, provided that the percentage of biofuel used is at least 25%, without prejudice to the sustainability requirements. To these ends, entitlement to a certificate of release for consumption for the purposes of compliance with the aforementioned requirement shall be attained when 9 Gcal of biofuels have been released for consumption (rather than 10 Gcal).

Biomass supply (Q4.6.1):

- Table 7: the columns 'imported', 'exported', and 'net amount' should be filled in.
- Table 7a clarification: Regarding agricultural biomass supply to be used for biofuels production, could it be indicated whether the data provided in the columns 'primary energy production' (2015 and 2020) include the final energy contained in biofuels or the primary energy from raw feedstock used to produce such biofuels?
- The imports question is not answered: it should be indicated what is the estimated role of imported biomass up to 2020, while specifying the expected quantities (ktoe) and indicating possible imports countries.

Question 4.6.2(a) – Table 7

At present, all the statistics on the use of biomass for energy purposes are undergoing statistical revision, as the information currently available from the national statistical system leads to a significant underestimate of the use of this source of energy. Statistical investigations carried out by ENEA with reputable statistical research companies in the first decade of the 2000s gave usage figures for the residential and tertiary sector that differed significantly from the estimates in the official statistics (essentially based on ISTAT (National Statistical Institute) studies of forestry statistics that completely exclude 'do-it-yourself', non-commercial and undeclared activity) and thus in the national energy balance data and the Eurostat and Commission questionnaires. As happened following the discoveries made in other EU countries which have corrected their past statistical information in this field in recent years, Italy has also launched a series of statistical investigations, expert analyses and scenario models to completely rework the statistical data on the use of biomass as an energy source.

In this connection, ISTAT and ENEA have been charged with carrying out an extensive survey (around 30 000 families interviewed using a questionnaire given using CATI methods), the pilot survey for which will begin in 2012 with the aim of having the results by December 2012.

After being analysed and crosschecked against other information on the number of pellet boilers, the number of fireplaces, etc., these results will allow a full and correct estimate of wood consumption in Italy in the residential sector.

The scenario model prepared using the information referred to above will give estimates for the intermediate years between each extensive survey. Given the high cost of such investigations (around €800 000), they will presumably be carried out once every five years.

A similar survey is being carried out (by ISTAT again) to estimate biomass use in the tertiary sector (restaurants, pizzerias, etc.).

In other words, the data supplied thus far to Eurostat and the European Commission are 'provisional and under revision' as far as the use of biomass is concerned. The new historical data will be supplied as soon as they are available together with a methodological report, as agreed with Eurostat and in line with what has been done by other EU countries.

Only then will the new historical data be provided with the disaggregated estimates of domestic production, imports, exports and the net quantity.

More generally speaking, Legislative Decree No 28/2011 provides for the updating of the statistical methodology needed to measure the degree of achievement of targets. This will make it possible to estimate the level of consumption for each source in a structured rather than disorganised manner.

Question 4.6.2(b)

The energy shown in table 7 is primary energy from the raw feedstocks whose quantities are shown in the same table.

Question 4.6.2(c)

At present there is no information on the quantity to be imported up to 2020 or the country of origin. This information will be provided after the process described under question 4.6.2(a).

Biomass mobilisation (Q4.6.2):

Impact on other sectors:

- (b): This question should be answered.

The Decree transposing Directive 2009/28/EC provided for the development and operation by the GSE of a system for monitoring and assessing the direct and indirect impact of biomass use, with particular focus on the reduction of greenhouse gas emissions.

Italy expects a potential increase in competition for land use (food products; wood products for industrial use; transport; energy). Accordingly, Italy wants to examine the issue of bioenergy in terms of its economically and environmentally efficient development, avoiding possible conflicts in respect of land use. It has thus paid particular attention to residues and waste, which do not entail competition for land use.

With regard in particular to electricity production from biomass, Legislative Decree No 28/2011 provides for the provision of a financial incentive based on the following criteria:

- 1) for biogas, biomass and sustainable bioliquids, the incentive takes account of the traceability and origin of the raw material and the need for the following priority uses to be made of such fuels:
 - a) wood-based biomass should be treated by mechanical means only for thermal use;
 - b) sustainable bioliquids should be used for transport;
 - c) biomethanol should be released into the natural gas network and used for transport.
- 2) for biogas, biomass and sustainable bioliquids, the incentive is also aimed at promoting:
 - a) the efficient use of waste and waste by-products, biogas from livestock waste or the by-products of agricultural, agri-food, agri-industrial, animal rearing and forestry activities, products obtained from dedicated non-food crop growing, as well as biomass, sustainable bioliquids and biogas from short supply chains, framework contracts and supply chain agreements;
 - b) the creation of cogeneration and micro-cogeneration installations;

- c) the creation and operation by farmers of biomass- and biogas-powered installations used in agricultural activities, in particular micro- and mini-cogeneration installations, in line with the EU rules on State aid.