



Ministry of Economic Development

Directorate-General for the Electricity Market, Renewables and Energy Efficiency, and Nuclear Energy

**Annual report on energy efficiency
Results achieved and targets for 2020**

April 2017

Table of Contents

1	Summary of the main indicators	3
2	National 2020 energy efficiency targets.....	3
3	Energy consumption and savings	3
3.1	Energy demand and use	3
3.2	Energy intensity	4
3.3	Energy savings achieved to comply with the provisions of Articles 5 and 7 of the Directive.	5
4	Principal energy efficiency measures	7
4.1	White certificates	7
4.2	Tax relief	9
4.3	'Conto Termico' (Thermal energy account).....	10
4.4	Programme for upgrading the energy efficiency of central government buildings (PREPAC).....	11
4.5	Co-financing of energy audits in SMEs	11
4.6	Structural funds	12
4.7	National Energy Efficiency Fund	13
4.8	Kyoto Fund for the energy efficiency of educational buildings.....	13
4.9	Fund for the purchase and/or restructuring of buildings (Plafond casa).....	14
4.10	Green Public Procurement	15
4.11	Legislative trends in energy efficiency for the transport sector: transposition of Directive 2014/94/EU	16
	Appendix A – Guiding template.....	17

This report was drawn up by ENEA [Italian Agency for New Technologies, Energy and Sustainable Economic Development - *Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile*] and approved by the Italian Ministry of Economic Development in accordance with Article 17(2) of Italian Legislative Decree No 102 of 4 July 2014 transposing Directive 2012/27/EU on energy efficiency.

1 Summary of the main indicators

This report, drawn up in accordance with Article 24(1) of Directive 2012/27/EU, will, after briefly discussing the energy efficiency targets which Italy has established for 2020, set out the results achieved during the period 2014-2016, in accordance with the compulsory energy efficiency schemes provided for in Articles 5 and 7 of the Energy Efficiency Directive (EED). It also describes the main measures which have been taken and which are planned in order to meet energy efficiency targets. Lastly, it contains the annual report based on the template provided by the European Commission (Appendix A).

2 National 2020 energy efficiency targets

The national energy efficiency targets for 2020 already discussed in previous annual reports and indicated in accordance with Article 3(1) of Legislative Decree No 102 of 2014, transposing the EED, include an energy efficiency improvement programme designed to save 20 Mtoe of primary energy per year and 15.5 Mtoe in final energy per year. Primary energy consumption is expected to be 158 Mtoe and final energy 124 Mtoe by 2020.

Table 2.1 shows expected savings for final and primary energy by 2020, by sector and by intervention measure.

Table 2.1 – Energy efficiency targets for 2020 (final and primary energy, Mtoe/year)

Sector	Planned measures for 2011-20					Expected savings by 2020	
	White certificates	Tax relief	“Conto Termico” (Thermal energy account)	Regulatory standards	Investments for mobility	Final energy	Primary energy
Residential	0.15	1.38	0.54	1.60		3.67	5.14
Tertiary	0.10		0.93	0.20		1.23	1.72
Public Administration	0.04		0.43	0.10		0.57	0.80
Private	0.06		0.50	0.10		0.66	0.92
Industry	5.10					5.10	7.14
Transport	0.10			3.43	1.97	5.50	6.05
Total	5.45	1.38	1.47	5.23	1.97	15.50	20.05

Source: National Energy Efficiency Action Plan, 2014

3 Energy consumption and savings

3.1 Energy demand and use

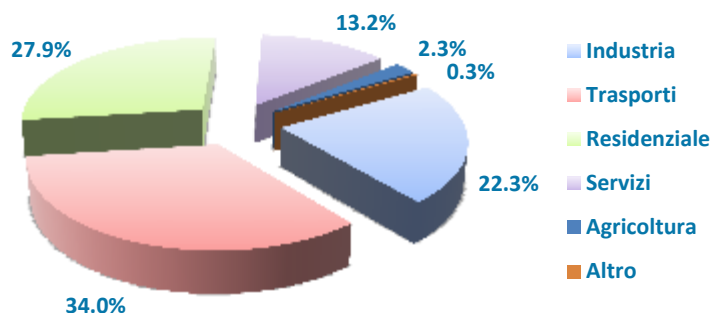
2015 saw a reversal in trends: the demand for primary energy was 149.6 Mtoe, representing a 4% increase compared to 2014, after five years of having fallen on a constant basis.

Final energy consumption in 2015 was 116.4 Mtoe (excluding non-energy uses), an increase of 2.7% compared to 2014. This was mainly due to the residential sector (an increase of 10%) and services sector (an increase of 4.9%), where consumption of 32.5 Mtoe and 15.4 Mtoe were recorded respectively. In the

first of these sectors, this was linked to climate¹, and in the second case, to economic growth within the sector. By contrast, in the industry and transport sectors, industry has confirmed the negative trend of recent years with an admittedly modest decrease of 0.5%, and energy consumption of 26.0 Mtoe. The transport sector saw consumption fall, as it has every year since 2012, with the exception of 2014: energy consumption was 39.5 Mtoe, 1.4% less than in 2014, due to the reduced use of road transport (a reduction of 1.9%).

The breakdown in consumption data in terms of end uses in 2015 (Figure 3.1) indicates a high frequency of residential use (41.1% of all end uses, an increase since 2014: 27.9% of all consumption was seen in the residential sector and 13.2% in the services sector). The transport sector represented approximately one-third (34%), followed by industry (22.3%). Lastly, agriculture accounted for 2.3 % of consumption.

Figure 3.1 - End energy consumption for each sector (%), 2015



Source: EUROSTAT

[Key:

Industria - Industry

Trasporti - Transport

Residenziale - Residential

Servizi - Services

Agricoltura - Agriculture

Altro - Others]

Given the slight economic recovery seen in 2016, final energy consumption in 2016 is forecast to have increased slightly.

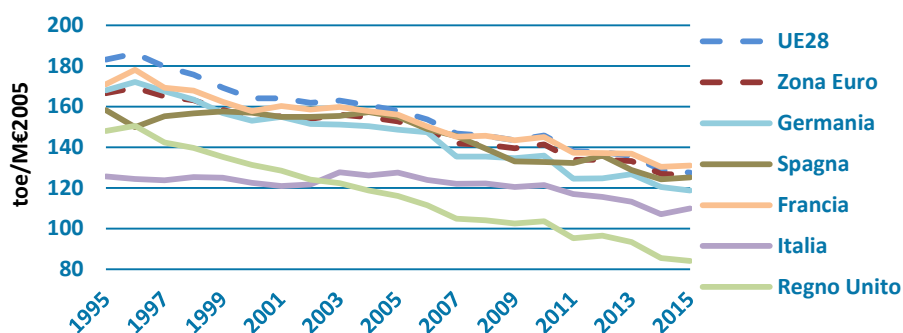
3.2 Energy intensity

Primary energy intensity in Italy during 2015 was 109.9 toe/M€₂₀₀₅, a 2.6% increase compared to 2014. This was due to an increase in primary consumption in excess of GDP (0.8%). Despite the increase in the values of primary energy intensity when compared to 2015, Italy is still below the EU-28 and Eurozone average (Figure 3.2). The gap between these last two groups is constantly shrinking: in 1995 the difference between

¹ On this subject, we would mention that in 2015, 1 809 degree days were recorded, as opposed to 1 632 degree days in 2014.

Italy and the Eurozone average was approximately 40 toe/M€2005, whilst in 2015 it fell by 60% to less than 20 toe/M€2005.

Figure 3.2 - Primary energy intensity in EU28 countries (toe/M€2005), 1995-2015



Source: EUROSTAT

[Key:

UE28 - EU 28

Zona Euro - Eurozone

Germania - Germany

Spagna - Spain

Francia - France

Italia - Italy

Regno Unito - United Kingdom]

3.3 Energy savings achieved to comply with the provisions of Articles 5 and 7 of the Directive.

The table below shows the consolidated figures for 2014 and 2015 and the estimated results for 2016 in terms of compliance with Articles 5 and 7 of the Directive² through the measures notified in June 2014³.

The figures for 2016 are still being verified for two reasons: in the case of White certificates, they are usually calculated on the basis of primary energy savings and in order to obtain a definitive assessment of final energy saving, a detailed analysis of the individual practices approved is required; However, in the case of tax relief for work to upgrade energy efficiency, users may amend the figures relating to the measure until September 2017. This means that the data can only be consolidated once the deadline for meeting the required tax obligations has passed.

Concerning the obligation to upgrade the energy efficiency of 3% of the floor area of buildings occupied by central government, an inventory of the property occupied by central government offices (constituting

² For the purposes of estimating the results, the common methods and principles for calculation referred to in Annex V to the EED were used.

³ [Applicazione dell'articolo 7 della direttiva 2012/27/UE sui regimi obbligatori di efficienza energetica. Notifica del metodo.](#) [Implementation of Article 7 of Directive 2012/27/EU on energy efficiency obligation schemes. Notification of the method]

4 112 workspaces in an area of about 15 million m²), was performed in 2016. During the three-year period between 2014 and 2016, work was performed or planned on an additional 150 buildings, amounting to a total surface area of 1 414 972 m². This figure can be attributed for the most part - both in terms of measures taken and the area for energy efficiency upgrading - to the programme for improving the energy performance of central government buildings ('Prepac'), whilst the rest is due to other specific incentive measures (Interregional Operational Programmes for Energy) and the measures taken by the Agenzia del Demanio (Italian State Property Agency) under the Central Maintenance System ('Single Maintenance') referred to in Decree-Law No 98 of 2011.

Table 3.1 shows the total area to be upgraded and the surface area of the buildings concerned.

Table 3.1. Upgrading the energy efficiency of central government buildings – results from 2014 and 2015 and estimates from 2016

	2014	2015	2016
Total surface area of buildings with a total useful floor area of more than 500 m ² , owned and occupied by central government, not meeting the energy performance requirements laid down in Article 5(1) of the EED.	14 828 984	14 441 992	13 973 749
Total surface area of buildings with a total useful floor area of more than 250 m ² , owned and occupied by central government, not meeting the energy performance requirements laid down in Article 5(1) of the EED.	Not monitored as not mandatory	361 360	361 360
Total surface area of heated and/or cooled buildings owned and occupied by central government which has been upgraded or is scheduled to be so during the year	386 992	468 243	559 737
Percentage of surface area which is subject to the upgrading requirement	2.61%	3.16 %	3.90 %

Source: ENEA, based on data from the Italian State Property Agency , MISE (Ministry of Economic Development) and MATTM (Ministry of the Environment)

It is therefore clear how the target provided for in Article 5 of the EED has been met.

As regards the minimum target of energy saving of 25.5 Mtoe of cumulative final energy to be achieved between 2014 and 2020 under Article 7 of the Directive⁴, Table 3.2 below shows the savings achieved in 2014 and 2015 and estimated for 2016 by means of the measures notified. The results achieved are essentially in line with the savings trends provided for in order to meet the target for 2020. However, the table does not show the reduction in energy consumption resulting from other measures to promote energy efficiency, especially at regional level. In this regard, it should be noted that we have started to monitor detail the above measures, which will be notified to the Commission during the current year.

Table 3.2 – Mandatory savings (Mtoe) in accordance with Article 7 of the EED – 2014-2016

Policy measures notified	New savings achieved	New savings achieved	New savings achieved (estimated)	Cumulative savings	Cumulative savings anticipated by 2020
	2014	2015	2016	2014-2016	
Obligatory scheme – White certificates	1.050	0.896	1.135	3.081	16.00
Alternative measure 1 – Conto Termico	0.000004	0.001	0.002	0.003	5.88
Alternative measure 2 – Tax relief	0.248	0.502	0.731	1.481	3.92

⁴ For the calculation of the energy efficiency target as well as the evaluation of the 'early actions' carried out after 2008, please refer to the report submitted to the Commission notifying the method used for implementing Article 7.

Total savings	1.298	1.399	1.868	4.564	25.80
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Source: GSE and ENEA data processed by ENEA

4 Principal energy efficiency measures

4.1 White certificates

Updates to legislation. The 'White certificates mechanism' was recently updated by means of the Ministerial Decree of 11 January 2017⁵ establishing the quantitative national energy savings objectives to be achieved between 2017 and 2020 and redefining the criteria and methods for ensuring access to the Energy Efficiency Certificates mechanism.

In particular, the new decree:

- establishes the national quantitative energy savings objectives to be achieved between 2017 and 2020 through the White Certificates mechanism, in line with national energy efficiency objectives and in conjunction with other energy efficiency support and promotion measures;
- establishes the annual requirements in terms of increasing energy efficiency for electricity and gas distributors between 2017 and 2020;
- sets out the new Guidelines for the preparation, implementation and evaluation of energy efficiency projects and for defining the criteria and procedures for issuing White Certificates;
- defines the methodology for evaluating and certifying the savings achieved and how to recognise White Certificates;
- identifies those persons eligible for the White Certificate mechanism and the means of accessing the mechanism;
- introduces measures for enhancing the overall effectiveness of the White Certificates mechanism, including administrative simplification;
- introduces measures to facilitate compliance with the obligations planned;
- updates the provisions on control and verification of the technical and administrative implementation of the projects eligible for the White Certificates mechanism and the relevant penalties system.

The targets for the period 2017-2020 are set out below.

Table 4.1 - National quantitative saving targets 2017-2020 [Mtoe]

	2017	2018	2019	2020
Primary savings	7.14	8.32	9.71	11.19

Source: MiSE

⁵ Decree of 11 January 2017 of the Minister for Economic Development, with the agreement of the Minister for the Environment and the Protection of the Territory and the Sea 'determining the national quantitative energy savings objectives that must be pursued by electricity and gas distribution companies between 2017 and 2020 and approving, in accordance with Article 7(5) of Legislative Decree No 102/2014, the new Guidelines for the preparation, implementation and evaluation of energy efficiency projects', published in the Official Gazette of the Italian Republic, General Series, No 78 of 3 April 2017.

Projects implemented and savings achieved. The volume of primary energy savings certified in 2016 for new energy efficiency projects came to a total of around 0.27 Mtoe:

- 34% relate to primary energy savings achieved through energy efficiency projects for reducing consumption of electricity (TYPE I);
- 51 % relate to primary energy savings achieved through energy efficiency projects for reducing consumption of natural gas (TYPE II);
- around 15% relate to primary energy savings other than electricity and natural gas (TYPE III).

As regards negotiable certificates, in 2016 the GSE recognised a volume of Energy Efficiency Certificates equivalent to 667 996 Type II-High-Efficiency Cogeneration certificates.

Most Energy Efficiency Certificates were obtained in 2016 by means of projects carried out in the industrial sector (approximately 56% of all Energy Efficiency Certificates), with particular reference to energy efficiency projects for optimising production processes in the most energy-intensive sectors. The residential sector represents some 40% of Energy Efficiency Certificates recognised in 2016, about 2.2 million certificates, mainly concerning projects relating to air conditioning and hot water production. Table 4.2 lists the savings certified for each type of intervention and sector over the last four years.

Table 4.2 – Savings certified per type of intervention and sector (toe), 2016

TYPE OF RVC (REQUESTS FOR VERIFICATION AND CERTIFICATION)		2016
RVC-S (standard) + RVC-A (analytical)		1 055 038
RVC-C (final)*		877 249
Total savings certified (TOE)		1 932 287
Breakdown for RVC-C		
Industry	IND-T	536 116
	IND-FF	189 534
	IND-E	32 022
	IND-GEN	19 164
Industry subtotal		776 836
Residential	CIV-INF	56 655
	CIV-T	14 973
	CIV-GEN	2 632
	CIV-ELET	828
	CIV-FC	51
	CIV-ICT	33
Residential subtotal		75 172
Lighting	IPRIV-NEW	7 463
	IPRIV-RET	4 571
	IPUB-RET	426
Lighting subtotal		12 461
Networks and Transport	TRASP	12 521
	NETWORKS	260
Networks and Transport subtotal		12 781

Source: GSE

4.2 Tax relief

Updates to legislation. The 2017 Budget Law (Law No 232 of 11 December 2016) extended the 65% tax relief (known as 'Ecobonus'), for expenditure incurred before 31 December 2017 in respect of work to upgrade the energy efficiency of buildings. In the case of measures intended to ensure energy efficiency upgrades carried out in communal areas of multi-apartment buildings, the law also provided for an increase in the deductions rate to 70%, where the measures affected at least 25% of the building envelope, and to 75% for measures designed to improve winter and summer energy performance and which ensure 'average quality' for the envelope, subject to a ceiling of EUR 40 000 for each property unit. In this case, costs incurred between 1 January 2017 and 31 December 2021 are deductible.

Measures implemented and savings achieved. Since the figures for measures taken in 2016 will not be consolidated before September 2017, the deadline for tax compliance for the measure in question, we have provided the breakdown for the consolidated results for 2015.

Table 4.3 provides a breakdown of approximately 336 000 measures carried out in 2015 broken down by type, representing a total of approximately EUR 2.8 billion of active investments, following which total savings of approximately 0.0845 Mtoe/year of primary energy have been achieved. Net of renewable sources, the energy savings achieved are 0.0774 Mtoe/year.

Table 4.3 – Tax relief in respect of work to upgrade the energy efficiency of existing residential buildings: requests submitted, costs incurred and savings achieved (2015)

	No. of cases	Expenditure (€)	Savings (Mtoe)
Section 344 – Total upgrade	3 551	185 486 874	0.0058
Section 345a – Measures on building envelope	22 591	701 760 542	0.0248
Section 345b – Replacement of fixtures	181 414	1 297 548 416	0.0368
Section 345c – Solar shading systems	47 673	97 944 267	0.0011
Section 346 – Solar panels for hot water	10 611	69 006 588	0.0038
Section 347 – Winter heating systems	70 120	531 653 776	0.0134
Total	335 960	2 883 400 462	0.0857

Source: ENEA

In addition to the 'Ecobonus', described above, further tax relief is also provided for, 50% of costs incurred in respect of building renovation work, as laid down in Law No 449 of 27 December 1997.

The main building renovation measures benefiting from this deduction include condensing boilers and locks, for which incentives are also provided by means of the tax relief for energy efficiency upgrading work, as described above. However, the number of measures for which incentives are provided via tax relief for work to upgrade energy efficiency is lower than those indicated by the figures on sales on the domestic market, because many incentives are provided for interventions through tax relief for building renovation.

By adopting the unitary energy saving, deductible from the tax relief for work to upgrade energy efficiency, for condensing boilers and the savings resulting from the replacement of single glazing windows with double glazing for fixtures, the reduction in consumption achieved in 2015 by the installation of condensing boilers and the replacement of fixtures, for which incentives were provided through tax relief for building renovation, is 0.175 Mtoe/year, net of the energy savings certified by means of White Certificates for the same types of measure.

Therefore, the energy savings achieved in 2015 through the two type of tax relief described comes to a total of 0.255 Mtoe/year.

As regards 2016, to date over 400 000 applications for tax relief for the energy upgrading of buildings have been submitted: On the basis of that preliminary information and bearing in mind that from October 2015 the placing of non-condensing boilers on the market (subject to stocks) has been prohibited, the total energy saving from both tax relief measures is estimated to be 0.229 Mtoe/year.

4.3 'Conto Termico' (Thermal energy account)

Updates to legislation. Operating since July 2013, pursuant to the Ministerial Decree of 28 December 2012, this mechanism was updated by Ministerial Decree of 16 February 2016⁶, to promote greater access to resources for businesses, households and public administration, and implementing regulatory provisions adopted in recent years with an impact on the types of investment for which incentives are provided⁷. The Decree concerned has strengthened the instrument: : in particular, new measures which may be the subject of incentives have been included; in some cases (e.g. the conversion of public buildings into NZEBs) the decree has integrated efficiency targets with safety targets, and included in the eligible costs also those incurred in respect of measures to ensure earthquake-proofing that help ensure thermal insulation. On the other hand, the introduction of measures to replace lighting systems and the installation of home system instruments constitute a significant boost to energy efficiency by encouraging new and more efficient technologies.

The ceiling applicable to the size of the measures which may be the subject of incentives under the Conto Termico scheme has been increased, and the range of eligible beneficiaries extended, allowing social cooperatives and entirely publicly owned companies (which are responsible for the management of local services and networks of public interest) to access the system for measures restricted to public administration.

Lastly, the new guidelines have amended the arrangements for granting incentives, by confirming payment in 1, 2 or 5 annual instalments, depending on the size and type of measures, and by introducing the possibility of requesting payment in a single solution, for amounts of up to EUR 5 000, for claims submitted by private individuals, and for amounts exceeding this amount, if the beneficiary is a PA [public administration].

Measures implemented and savings achieved. At the end of 2016, nearly 26 000 requests were approved for the incentive, constituting a total spending commitment of around EUR 92 million, EUR 18 million of which related to energy efficiencies in the PA. An analysis of the trends in 2016 in terms of requests per type of Responsible Party reveals the PA's growing interest in the new mechanism for access by means of

⁶ The Decree of the Minister for Economic Development, in conjunction with the Minister for the Environment and the Protection of the Territory and the Sea and also the Minister for Agricultural, Food and Forestry Policies '*updating the system of incentives for the production of thermal energy from renewable sources and small energy efficiency measures referred to in Article 28(2)(g) of Legislative Decree No 28 of 3 March 2011 and the Interministerial Decree of 28 December 2012*', published in the Official Gazette of the Italian Republic, General Series, No 51 of 2 March 2016.

⁷ In particular, the Ministerial Decree of 26 June 2015, which updated the 2009 National Guidelines for the energy certification of buildings, and Law 164/14, which extended to social housing groups and residents' cooperatives the possibility of applying for incentives for the same categories of intervention previously reserved to the public administration.

reservation, which enables the administration to commit the sum relating to the incentive, until the energy diagnosis for the building concerned. As a result, the PA is able to carry out larger measures, which are reflected in the higher average figure of incentives requested.

In particular, in 2016 around 950 applications were received in respect of energy efficiency measures for the PA, with over EUR 32 million of incentives requested. In particular, measures involving energy efficiency for the PA resulted in a total primary energy saving of approximately 1 800 toe/year (Table 4.4).

Table 4.4 – Conto Termico: breakdown of requests per type of measure in 2016

Type of measure	Number of measures	Incentives requested per intervention [M€]	Amount of primary fossil energy saved (toe/year)
1.A - Opaque building envelope	175	9.09	653
1.B - Transparent closures	71	9.89	295
1.C - Condensation generators	548	2.21	781
1.D – Shading	23	0.17	
1. NZEB buildings	21	9.66	45
1.F - Lighting systems	67	1.13	
1.G - Building Automation	40	0.45	
Total	945	32.6	1 774

Source: GSE

4.4 Programme for upgrading the energy efficiency of central government buildings (PREPAC)

Article 5 of Legislative Decree No 102/2014 states that, every year, from 2014 and until 2020, the competent administrations⁸ are to prepare the programme for improving the energy performance of central government buildings ('PREPAC'), the methods for the implementation of which have been defined by the Interministerial Decree of 16 September 2016⁹. The programme is based on the project proposals submitted by 15 July each year by the central PAs concerned and relates to measures to be taken on buildings owned and occupied by those authorities. The decree of 5 December 2016 approved the 2014 and 2015 annual programmes, which include 68 projects currently being implemented, with a total value of approximately EUR 73 million.

For 2016, the programme will cover 32 projects, totalling around EUR 60 million. Three of these projects meet the requirements laid down by the legislation in terms of being 'exemplary', i.e. they are capable of ensuring energy savings of at least 50% compared to ex-ante annual consumption.

4.5 Co-financing of energy audits in SMEs

⁸ Pursuant to Article 5(2) of Legislative Decree No 102/2014, the 'Prepac' programme is prepared by the Ministry of Economic Development and Ministry of the Environment, after consulting the Ministry of Infrastructure and Transport, in cooperation with the Italian State Property Agency, following a technical enquiry by the ENEA and the GSE.

⁹ Decree of 16 September 2016 of the Minister for Economic Development and Minister for the Environment and the Protection of the Territory and the Sea, with the agreement of the Ministers for Infrastructure and Transport and for Economy and Finance, published in the Official Gazette of the Italian Republic, General Series, No 262 of 9 November 2016.

Article 8(10) of Legislative Decree No 102/2014 reserves up to EUR 15 million per year over the period 2014-2020 for the co-financing of regional programmes aimed at supporting the implementation of energy diagnosis or the adoption of management systems compliant with ISO 50001 in SMEs.

In accordance with that Decree, two calls for applications were launched (12 May 2015 and 4 August 2016) and the programmes submitted by the regions were then approved: specifically 14 programmes for the first year, and 11 programmes for the second, with resources of approximately 9.8 million and 8 million respectively being made available. The calls provide for the co-financing of the programme through national and regional resources in equal measure and 50% of the cost of energy diagnosis being covered. Access is conditional on the implementation of at least one of the measures included in the energy diagnosis or alternatively ISO 50001 certification. A number of regions, as shown in the table below, have already started their own programmes, providing the SMEs operating in the relevant regions with incentives. The initiative will be repeated on an annual basis using similar resources until 2020.

Table 4.5 lists the regions which have issued calls for applications in respect of the resources for co-financing regional programmes. As regards the call for 2015, six regions have made over EUR 11.5 million available to SMEs for the co-financing of energy diagnoses and the adoption of energy management systems in accordance with ISO 50001.

Table 4.5 - Programmes supporting the performance of energy diagnoses in SMEs and the adoption of energy management systems in compliance with ISO 50001, within the meaning of the public calls dated 12 May 2015 and 4 August 2016

Programme	Programmes authorised - Director's Decree of 21 December 2015		Programmes authorised - Director's Decree of 21 December 2016	
	Resources allocated under the Call	Resources entirely available	Resources allocated under the Call	Resources entirely available
Region of Abruzzo	€298 500		€298 500	
Region of Basilicata	€149 250			
Region of Calabria			€298 500	
Region of Campania			€1 194 000	
Region of Emilia Romagna	€1 194 000	€2 388 000		
Region of Friuli-Venezia Giulia	€298 500	€597 000	€298 500	
Region of Liguria	€402 975			
Region of Lombardy	€2 686 500	€5 373 000	€2 686 500	
Region of Marche	€447 500		€447 750	
Region of Piedmont	€1 194 000	€2 388 000	€1 194 000	
Region of Sardinia	€298 500	€597 000	€298 500	
Region of Sicily	€895 500		€895 500	
Region of Umbria	€298 500		€298 500	
Region of Valle d'Aosta	€149 250			
Region of Veneto	€1 343 250			
Autonomous Province of Trento	€149 250		€149 250	
Total	€9 805 475	€11 343 000	€8 059 500	€0

Source: MISE

4.6 Structural funds

Table 4.6 provides a breakdown of the calls for applications concerning energy efficiency launched so far in the context of the 2014-2020 planning of Structural Funds: as of April 2017, 64 calls had been launched, involving around EUR 800 million of allocated resources, most of which was earmarked for businesses (approximately half of resources) and measures taken for public buildings (more than one-third).

Tables 4.6 - Structural Funds 2014-2020: Calls launched and resources awarded (€), by sector

Sector	Number of calls	Amount awarded (€)	Amount awarded (%)
Public buildings	22	276 790 792	35 %
Businesses	34	356 008 564	45 %
Smart grid	2	83 900 000.00	11 %
Transport	6	78 257 294	10 %
Total	64	794 956 650	100 %

Source: Regions and Autonomous Provinces

A methodology is currently being developed for monitoring these projects as well as those relating to the 2007-2013 programming cycle which began in 2014, in order to assess the relative energy savings achieved, to be counted in the context of the compliance referred to in Article 7 of the Directive, subject to notification to the Commission.

4.7 National Energy Efficiency Fund

Legislative Decree No 102 of 2014 established a National Energy Efficiency Fund within the Ministry of Economic Development. The aim of the fund is to support energy efficiency measures carried out by public authorities, ESCOs and businesses to increase the energy efficiency of their own buildings, systems and production processes. The fund is used to support measures aimed at upgrading the energy efficiency of buildings owned by public authorities, creating district heating and/or cooling networks, streamlining public services and infrastructure (including public lighting), upgrading the energy efficiency of whole buildings (including social housing) and reducing the energy consumption of industrial processes.

The Fund is revolving in nature and is divided into two sections which are designed to ensure:

- the issuing of guarantees in respect of financing granted to companies for the implementation of energy efficiency measures;
- the granting of financing, whether directly or by means of banks or financial intermediaries, for investment in energy efficiency.

The Fund is intended to prioritise projects and programmes aimed at:

- creating new jobs;
- upgrading the energy efficiency of entire buildings;
- promoting new NZEBs (nearly zero-energy buildings);
- installing earthquake protection measures in addition to upgrading energy efficiency.

An estimated total of EUR 490 million will be paid into the fund for the period 2014–2020. The Fund is expected to be operational by the end of this year.

4.8 Kyoto Fund for the energy efficiency of educational buildings

The Kyoto Fund for Schools provides funding at a preferential rate (0.25%) for the purposes of carrying out energy efficiency measures in publicly-owned school and university buildings. The Fund is governed by Interministerial Decree No 66 of 14 April 2015, implementing Article 9 of Decree-Law No 91 of 24 June 2014 and enables public bodies to borrow up to EUR 2 million for a maximum of 20 years. The financing covers the replacement of systems and work on building envelopes, as well as drawing up energy diagnoses for

structures. One of the requirements of the call for applications is that the energy efficiency of the buildings concerned improve by at least two categories. This improvement is certified by comparing the building's previous energy certification, required at the time of participation in the call for applications, and its certification after the work, required upon completion of the work.

In addition to energy efficiency, it is also possible to request funding for work to make buildings safe and work necessary in order to comply with earthquake prevention rules. In such cases, a maximum of 49% of a project's total amount may be obtained.

The resources allocated come to a total of EUR 350 million and the procedure for establishing eligibility is based on a first come/first served system, i.e. resources are distributed based on the order in which applications are received, until funds are exhausted. The Ministry of the Environment is responsible for examining applications, verifying that the documentation is complete and has been correctly prepared, as well as compliance with the technical requirements set out in the call.

The Fund is managed by Cassa Depositi e Prestiti Spa, which deals with all economic and financial aspects of the loans, after eligibility for financing has been established (drawing up of the contract, payment of amounts, payment of the instalments).

An initial call for applications for the Kyoto Fund for Schools was launched between June and September 2015. 120 energy efficiency projects were considered eligible, involving a total value of approximately EUR 66 million. In most cases, work is due to commence in the second half of 2017. Residual resources have been made available by means of a second call, which was launched in April 2016 and is still ongoing (deadline: 30 June 2017). To date, 85 energy efficiency projects have been funded, involving a total value of approximately EUR 36 million.

4.9 Fund for the purchase and/or restructuring of buildings (Plafond casa)

In order to support housing policies, Article 6(1)(a) of the Decree-Law of 31 August 2013 (converted into Law No 124 of 28 October 2013) provides for EUR 2 billion intended to facilitate access to credit in the residential sector. This amount was increased to 3 billion in April 2016.

The Fund is intended to finance home purchases through mortgage-backed loans. Priority is given to properties that are the main residence, preferably within energy categories A, B or C, and/or renovations and energy efficiency improvements, with priority given to young couples, households with at least one disabled person and large families.

The practical arrangements for the scheme are defined in a specific agreement between Cassa Depositi e Prestiti and the Italian Banking Association. For the banks, access to the credit line is set to on a first come/first served basis, provided that resources have not been exhausted. Recipients contact one of the participating banks, who use the funds made available by Cassa Depositi e Prestiti to grant mortgages for purchase and/or restructuring:

- up to EUR 100 000 for restructuring with a view to increasing energy efficiency;
- up to EUR 250 000 for the purchase of residential real estate;
- up to EUR 350 000 for measures involving both purchase and restructuring, involving an increase in the property's energy efficiency;

4.10 Green Public Procurement

The Ministerial Decree of 24 December 2015 introduced Minimum Environmental Criteria (MEC) for construction; these were then updated following the publication of the new Italian Procurement Code (Legislative Decree No 50 of 18 April 2016), by means of the Ministerial Decree of 11 January 2017. These MEC state, in particular, that in the case of projects involving the restructuring/maintenance of existing buildings, an energy diagnosis must be performed or acquired in order to identify the building's energy performance and measures to be taken to reduce the building's energy requirements. Specific energy performance must be guaranteed by means of new construction projects, including demolition and reconstruction work and the expansion of existing buildings with a gross air-conditioned volume in excess of 15% of the existing volume or more than 500 m², and major first-level renovations, notwithstanding any stricter rules and regulations (e.g. urban planning and municipal buildings, etc.).

In terms of energy supply, the design of a new building or that of a building which is subject to significant renovation must comply with the MEC for 'energy services' (Ministerial Decree of 7 March 2012, as amended). The building's total energy requirements must also be met by systems using renewable sources or by alternative high-efficiency systems (high-performance cogeneration/tri-generation, centralised heat pumps, low-enthalpy geothermal energy, etc.) producing energy within the site of the building with a value equal to 10% more than the values stated in Annex 3, point 1 of Legislative Decree No 28 of 2011, in accordance with the deadlines prescribed in that Decree. The design of the building should also include technical specifications for water saving and internal environmental quality¹⁰.

Lastly, the maintenance plan for the work and its parts must include the verification of (qualitative and quantitative) performance levels including environmental performance, in accordance with basic technical specifications and the technical specifications relating to the incentive. The general maintenance plan must include a programme for the monitoring and control of air quality inside the building, taking account of the fact that such a programme can only be clearly identified once the system is running, with the assistance of staff professionally qualified to carry it out.

As regards the technical specifications of building components, in order to reduce the environmental impact on natural resources, the MEC provide for greater use of recycled materials, and hence encourage the recovery of waste, particularly in terms of demolition and construction (consistent with the target of recovering and recycling at least 70% of non-hazardous waste from construction and demolition by 2020). To this end, when working on a building project a designer must make technical design choices, specify the environmental information relating to the products selected and provide the technical documentation meeting those criteria, and must also stipulate that during the procurement phase the contractor will ensure compliance with these common criteria by means of the documentation indicated when verifying each criterion. This documentation must be submitted to the contracting authority at the implementation stage of the works, in the manner specified in the specifications. Lastly, there exist specific criteria for the building components¹¹.

¹⁰ In particular, in terms of: natural lighting; natural ventilation and controlled mechanical ventilation; sun protection devices; indoor electromagnetic pollution; emissions of materials indoors; acoustic comfort; thermohygrometric comfort; radon.

¹¹ All of the following materials must be produced using a certain content of recycled material: concretes (and their component materials) packaged on site, prepackaged and prefabricated; clay tiles; wood products and products based on wood; cast iron, iron and steel; components of plastic materials; masonry in stone and mixed masonry; trampling and false ceilings; thermal and acoustic

4.11 Legislative trends in energy efficiency for the transport sector: transposition of Directive 2014/94/EU

Directive 2014/94/EU on the deployment of alternative fuels infrastructure was transposed into Italian law by Legislative Decree No 257 of 2016. In order to reduce dependency on oil and to mitigate the impact on the environment from the transport sector, the Legislative Decree sets out minimum requirements for the construction of infrastructure for alternative fuels, including charging points for electric vehicles and filling stations for liquefied and compressed natural gas, hydrogen and liquefied petroleum gas, as well as common technical specifications for charging points and filling stations, and requirements concerning information to be provided to users. In particular, the Decree adopts the National Strategic Reference Framework (NSRF), which contains the following sections:

- electricity supply for transport;
- hydrogen supply for road transport;
- natural gas supply for other uses;
- supply of liquefied petroleum gas - LPG for transport.

The Framework contains national targets for ensuring an infrastructure for alternative fuel:

- Electricity supply for transport: By 31 December 2020, an adequate number of charging points are to be available to the public to ensure interoperability between existing points and those to be installed, and depending on market requirements, electric vehicles are to circulate at least in urban and suburban agglomerations, in other densely populated areas, and in other networks and other areas identified over time.
- Hydrogen supply for road transport. By 31 December 2025, an adequate number of hydrogen supply points accessible to the public are to be made available, to be developed gradually, taking into account current demand and development in the short term in order to allow the circulation of hydrogen-powered vehicles, including fuel cell vehicles, in the networks identified by the National Strategic Framework, including possible cross-border links.
- Natural gas supply for transport: By 31 December 2025, an adequate number of LNG supply points are to be made available in seaports to allow the navigation of LNG-powered inland waterway vessels or sea-going vessels in the central TEN-T network. Co-operation with neighbouring Member States may be envisaged in order to ensure adequate coverage of the TEN-T core network. This measure will also apply to inland navigation ports, albeit by 31 December 2030. By 31 December 2025, an adequate number of supply points for LNG are to be made available, even if combined with CNG filling points, to the public at least along the Italian sections of the TEN-T central network to ensure circulation in connection with the EU network of heavy-duty LNG vehicles.

In cases of authorisations for the construction of new fuel distribution plants and complete restructuring of existing fuel distribution plants, the regions undertake to provide high-speed, high-power infrastructure for charging electric vehicles and to ensure the supply of CNG or LNG, even in an exclusively self-service mode.

insulators; floors and walls; paints and varnishes; indoor and outdoor lighting systems; heating and air conditioning systems; plumbing equipment.

Appendix A – Guiding template

Number	Data field	AR Indicator	Unit(s)	Eurostat Indicator(s)	Eurostat database table	Eurostat Code	field/product(s)	SWD(2013)180, Annex A	Definition of provided national statistics for data fields not available in Eurostat	Last update (date of the data)
A1	149,60	(i) primary energy consumption	Mtoe	Primary Energy Consumption	Energy saving - annual data [nrg_ind_334a]	B_100910	-			march 2017
A2	116.444	(ii) total final energy consumption	ktoe	Final Energy Consumption	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_101700	All products	No climate adjustment, see p. 39 SWD(2013)180, Annex A		march 2017
A3	26.023	(iii) final energy consumption - industry	ktoe	Final Energy Consumption - Industry	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_101800	All products			march 2017
A4	39.541	(iii) final energy consumption - transport	ktoe	Final Energy Consumption - Transport	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_101900	All products			march 2017
A5	221	final energy consumption in pipeline transport	ktoe	Consumption in Pipeline transport	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_101945	All products	Voluntary - See p. 39 SWD(2013)180, Annex A		march 2017
A6	32.495	(iii) final energy consumption - households	ktoe	Residential	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_102010	All products			march 2017
A7	15.392	(iii) final energy consumption - services	ktoe	Services	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_102035	All products			march 2017
A8	2.664	final energy consumption - agriculture	ktoe	Agriculture/Forestry	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_102030	All products	Voluntary		march 2017
A9	331	final energy consumption – other sectors	ktoe	Other sectors	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_102000	All products	Voluntary		march 2017
A10	298.717	(iv) gross value added - industry	Million euro, chain-linked volumes, reference year 2005 (at 2005 exchange rates)	- Industry (except construction) - Construction	Gross value added and income by A*10 industry breakdowns [nama_10_a10]	- B-E - F	Value added, gross			march 2017
A11	964.439	(iv) gross value added - services	Million euro, chain-linked volumes, reference year 2005 (at 2005 exchange rates)	- Wholesale and retail trade, transport, accommodation and food service activities - Information and communication - Financial and insurance activities - Real estate activities - Professional, scientific and technical activities; administrative and	Gross value added and income by A*10 industry breakdowns [nama_10_a10]	- G-I - J - K - L - M_N - O-Q - R-U	Value added, gross			march 2017

				support service activities - Public administration, defense, education, human health and social work activities - Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies						
A12	1.105.634	(v) disposable income for households	Million euro	Gross disposable income	Non-financial transactions [nasa_nf_tr]	Until 2017: S14 (if available) or S14_S15; From 2017 on: S14 only	"Households" (if available) or "Households; non-profit institutions serving households" (Until 2017)	Due to derogation for some MS granted by Eurostat	Eurostat database table: nasa_10_nf_tr	march 2017
A13	1.421.247	(vi) gross domestic product (GDP)	Million euro, chain-linked volumes, reference year 2005 (at 2005 exchange rates)	Gross domestic product at market prices	GDP and main components - volumes [nama_gdp_k]	B1GM	-		Eurostat database table: nama_10_gdp	march 2017
A14	17045,4	(vii) electricity generation from thermal power generation	ktoe	- Gross electricity generation Main activity electricity only - Nuclear - Gross electricity generation Main activity CHP plants - Nuclear - Gross electricity generation Autoproducer electricity only - Nuclear - Gross electricity generation Autoproducer CHP	Supply, transformation, consumption - electricity - annual data [nrg_105a]	- 15_107030 - 15_107031 - 15_107032 - 15_107033 - 15_107038 - 15_107048 - 15_107054 -	Electrical energy		march 2017	

			plants - Nuclear	15_107039			
			- Gross electricity generation Main activity electricity only - Geothermal	-			
			- Gross electricity generation Main activity electricity only - Combustible Fuels	15_107049			
			- Gross electricity generation Main activity electricity only - Other Sources	-			
			- Gross electricity generation Main activity CHP plants - Geothermal	15_107055			
			- Gross electricity generation Main activity CHP plants - Combustible Fuels	-			
			- Gross electricity generation Main activity CHP plants - Other Sources	14_1070422			
			- Gross electricity generation Main activity electricity only - Solar Thermal	-			
			- Gross electricity generation Autoproducer electricity only - Geothermal	15_107040			
			- Gross electricity generation Autoproducer electricity only - Combustible Fuels	-			
			- Gross electricity generation Autoproducer electricity only - Heat from Chemical Sources	15_107050			
			- Gross electricity generation	-			
				15_107052			
				-			
				15_107056			
				-			
				15_107041			
				-			
				15_107051			
				-			
				15_107053			
				-			
				15_107057			
				-			
				14_1070432			

				Autoproducer electricity only - Other Sources - Gross electricity generation Autoproducer CHP plants - Geothermal - Gross electricity generation Autoproducer CHP plants - Combustible Fuels - Gross electricity generation Autoproducer CHP plants - Heat from Chemical Sources - Gross electricity generation Autoproducer CHP plants - Other Sources - Gross electricity generation Autoproducer electricity only - Solar Thermal					
A15	8243,7	(viii) electricity generation from CHP	ktoe	- Gross electricity generation Main activity CHP plants - Nuclear - Gross electricity generation Autoproducer CHP plants - Nuclear - Gross electricity generation Main activity CHP plants - Geothermal - Gross electricity generation Main activity CHP plants - Combustible Fuels - Gross electricity generation Main activity CHP plants - Other Sources	Supply, transformation, consumption - electricity - annual data [nrg_105a]	- 15_107031 - 15_107033 - 15_107039 - 15_107049 - 15_107055 - 15_107041 - 15_107051 - 15_107053 - 15_107057	Electrical energy		march 2017

				<ul style="list-style-type: none"> - Gross electricity generation Autoproducer CHP plants - Geothermal - Gross electricity generation Autoproducer CHP plants - Combustible Fuels - Gross electricity generation Autoproducer CHP plants - Heat from Chemical Sources - Gross electricity generation Autoproducer CHP plants - Other Sources 					
A16	5181,5	(ix) heat generation from thermal power generation	ktoe	<ul style="list-style-type: none"> - Gross heat production Main activity CHP plants - Nuclear - Gross heat production Main activity heat only plants - Nuclear - Gross heat production Autoproducer CHP plants - Nuclear - Gross heat production Autoproducer heat only plants - Nuclear - Gross heat production Main activity CHP plants - Geothermal - Gross heat production Main activity CHP plants - Combustible Fuels - Gross heat production Main activity CHP plants - Heat Pumps - Gross heat production Main activity CHP plants - Electric Boilers - Gross heat production Main activity CHP plants - Other Sources - Gross heat production 	Supply, transformation, consumption - heat - annual data [nrg_106a]	<ul style="list-style-type: none"> - 15_107060 - 15_107061 - 15_107062 - 15_107063 - 15_107064 - 15_107072 - 15_107076 - 15_107080 - 15_107086 - 15_107068 - 15_107066 - 15_107074 - 15_107078 - 15_107082 	Derived heat		march 2017

				Main activity CHP plants	-				
				- Solar	15_107084				
				- Gross heat production	-				
				Autoproducer CHP	15_107088				
				plants - Geothermal	-				
				- Gross heat production	15_107070				
				Autoproducer CHP	-				
				plants - Combustible	15_107065				
				Fuels	-				
				- Gross heat production	15_107069				
				Autoproducer CHP	-				
				plants - Heat Pumps	15_107073				
				- Gross heat production	-				
				Autoproducer CHP	15_107077				
				plants - Electric Boilers	-				
				- Gross heat production	15_107081				
				Autoproducer CHP	-				
				plants - Heat from	15_107087				
				Chemical Sources	-				
				- Gross heat production	15_107067				
				Autoproducer CHP	-				
				plants - Other Sources	15_107071				
				- Gross heat production	-				
				Autoproducer CHP	15_107075				
				plants - Solar	-				
				- Gross heat production	15_107079				
				Main activity heat only	-				
				plants - Geothermal	15_107083				
				- Gross heat production	-				
				Main activity heat only	15_107085				
				plants - Solar	-				
				- Gross heat production	15_107089				
				Main activity heat only					
				plants - Combustible					
				Fuels					
				- Gross heat production					
				Main activity heat only					
				plants - Heat Pumps					
				- Gross heat production					
				Main activity heat only					
				plants - Electric Boilers					
				- Gross heat production					
				Main activity heat only					
				plants - Other Sources					
				- Gross heat production					
				Autoproducer heat only					

				plants - Geothermal - Gross heat production Autoproducer heat only plants - Solar - Gross heat production Autoproducer heat only plants - Combustible Fuels - Gross heat production Autoproducer heat only plants - Heat Pumps - Gross heat production Autoproducer heat only plants - Electric Boilers - Gross heat production Autoproducer heat only plants - Heat from Chemical Sources - Gross heat production Autoproducer heat only plants - Other Sources						
A17	not available	Waste heat produced in industrial installations	ktoe	Eurostat data not available. Please, provide national data with definitions/explanations in column J.				Voluntary - See p. 39 SWD(2013)180, Annex A		
A18	5092,2	(x) heat generation from CHP	ktoe	- Gross heat production Main activity CHP plants - Nuclear - Gross heat production Autoproducer CHP plants - Nuclear - Gross heat production Main activity CHP plants - Geothermal - Gross heat production Main activity CHP plants - Combustible Fuels - Gross heat production Main activity CHP plants - Heat Pumps - Gross heat production Main activity CHP plants - Electric Boilers - Gross heat production	Supply, transformation, consumption - heat - annual data [nrg_106a]	- 15_107060 - 15_107062 - 15_107064 - 15_107072 - 15_107076 - 15_107080 - 15_107086 - 15_107068 - 15_107066 -	Derived heat			march 2017

				Main activity CHP plants - Other Sources - Gross heat production Main activity CHP plants - Solar - Gross heat production Autoproducer CHP plants - Geothermal - Gross heat production Autoproducer CHP plants - Combustible Fuels - Gross heat production Autoproducer CHP plants - Heat Pumps - Gross heat production Autoproducer CHP plants - Electric Boilers - Gross heat production Autoproducer CHP plants - Heat from Chemical Sources - Gross heat production Autoproducer CHP plants - Other Sources - Gross heat production Autoproducer CHP plants - Solar		15_107074 - 15_107078 - 15_107082 - 15_107084 - 15_107088 - 15_107070				
A19	not available	Waste heat recovered from industrial installations	ktoe	Eurostat data not available. Please, provide national data with definitions/explanations in column J.				Voluntary - See p. 39 SWD(2013)180, Annex A		
A20	46905,7	(xi) fuel input for thermal power generation	ktoe	- Transformation input - Nuclear Power Stations - Transformation input - Conventional Thermal Power Stations - Transformation input - District Heating Plants	Supply, transformation, consumption - all products - annual data [nrg_100a]	- B_101002 - B_101001 - B_101009	All products			march 2017
A21	52.207	(xii) passenger kilometers	Millions of pkm	Railway TRA_COV: Total transport	Railway transport - Total annual passenger transport (1 000 pass., million pkm) [rail_pa_total]	- TOTAL	-			march 2017
	830.552		Millions of pkm	Road VEHICLE: Total	Passenger road transport on national territory, by type of vehicles registered	- TOTAL	-		Source: Ministry of Infrastructure and	

					in the reporting country [road_pa_mov]				Transport - Conto Nazionale dei Trasporti	
A22	3.601	domestic maritime passenger kilometres	Millions of pkm	Eurostat data not available. Please, provide national data with definitions/explanations in column J.					Source: Ministry of Infrastructure and Transport - Conto Nazionale dei Trasporti	march 2017
A23	17.127	total national aviation passenger kilometres	Millions of pkm	Eurostat data not available. Please, provide national data with definitions/explanations in column J.					Source: Ministry of Infrastructure and Transport - Conto Nazionale dei Trasporti	march 2017
A24	not available	total international aviation passenger kilometres	Millions of pkm	Eurostat data not available. Please, provide national data with definitions/explanations in column J.						
A25	20.781	(xiii) tonnes kilometres	Millions of tkm	Railway TRA_COV: Total transport	Railway transport - Goods transported, by type of transport (1 000 t, million tkm) [rail_go_typeall]	- TOTAL	-			march 2017
	116.820		Millions of tkm	Road TRA_OPER: Total - Total transport	Summary of annual road freight transport by type of operation and type of transport (1 000 t, Mio Tkm, Mio Veh-km) [road_go_ta_tot]	- TOTAL	CARRIAGE: Total			
	62		Millions of tkm	Waterway TRA_COV: Total transport	Transport by type of good (from 2007 onwards with NST2007) [iww_go_atygo]	- TOTAL	NSTO7: Total transported goods (TOTAL) TYPPACK: All types of packaging (TOTAL)			
A26	54.519	domestic maritime tonnes kilometres	Millions of tkm	Eurostat data not available. Please, provide national data with definitions/explanations in column J.					Source: Ministry of Infrastructure and Transport - Conto Nazionale dei Trasporti	march 2017
A27	1.097	total national aviation tonnes kilometres	Millions of tkm	Eurostat data not available. Please, provide national data with definitions/explanations					Source: Ministry of Infrastructure and Transport - Conto Nazionale dei Trasporti	march 2017

				in column J.						
A28	not available	total international aviation tonnes kilometres	Millions of tkm	Eurostat data not available. Please, provide national data with definitions/explanations in column J.						march 2017
A29	60.665.551	(xv) population	Persons	Population on 1 January - total	Demographic balance and crude rates [demo_gind]	JAN	-			march 2017
A30	25.853.547	Total number of households	Households	Eurostat data not available. Please, provide national data with definitions/explanations in column J.				Voluntary - see p. 39 SWD(2013)180, Annex A	Source: ISTAT - Italian National Institute of Statistics	march 2017
A31	1.980	Energy transmission and distribution losses (all fuels)	ktoe	Distribution Losses	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_101400	All products	Voluntary - see p. 39 SWD(2013)180, Annex A		march 2017
A32	89	Heat generation from district heating plants	ktoe	Transformation output - District Heating Plants	Supply, transformation, consumption - heat - annual data [nrg_106a]	B_101109	Derived heat	Voluntary - see p. 39 SWD(2013)180, Annex A		march 2017
A33	128	Fuel input in district heating plants	ktoe	Transformation input - District Heating Plants	Supply, transformation, consumption - all products - annual data [nrg_100a]	B_101009	All products	Voluntary - see p. 39 SWD(2013)180, Annex A		march 2017

36	Households	2015 winter colder than the previous years as measured by heating degree days: 1632,301 in 2014, 1809,649 in 2015
37	Services	2015 winter colder than the previous years as measured by heating degree days and economic growth

39-1	Major legislative in the previous year	Market-based instruments (e.g. EEOS)	Energy Efficiency Obligation Scheme Art. 7 EED	Amendments, implementation or design changes and extension of an on-going measure	The Ministerial Decree of 11 January 2017 (Ministry of Economic Development) updates the mechanism, by defining the national objectives for the period 2017-2020 and the criteria to apply for the incentives.
39-2		Funds, financial measures & fiscal incentives	Alternative measure Art. 7 EED	Amendments, implementation or design changes and extension of an on-going measure	Law n° 232 of 11 December 2016 extended the mechanism up to December 31th 2017, with some changes relative to beneficiaries and eligible measures; for interventions on common building parts, the mechanism is extended up to December 31th 2021.
39-3		Funds, financial measures & fiscal incentives	Alternative measure Art. 7 EED	Amendments, implementation or design changes and extension of an on-going measure	The Ministerial Decree of 16 February 2016 (Ministry of Economic Development) improves the mechanism by favoring a better access to financial resources to firms, households and Public Administration and by including a wider range of interventions
39-4		Plans & strategies	Public sector renovations Art. 5 EED	Adoption of a new measure, conclusion of agreement, publication of legislation, commencement/enforcement of a measure/programme	The Interministerial Decree of 16 September 2016 defined the implementation of the Programme for energy renovation of buildings owned by the central government (PREPAC), in particular concerning the identification and selection of intervention eligible for financing and the associated information and technical measures.

39-5	Regulations and legislative measures	Other	Adoption of a new measure, conclusion of agreement, publication of legislation, commencement/enforcement of a measure/programme	The Legislative Decree 257/2016 transposes the Directive 2014/94/UE and sets minimum requirements for infrastructures for alternative fuels, including recharging and refuelling points .
39-6	Regulations and legislative measures	Exemplary role and purchasing by public bodies Art. 5 and 6 EED	Adoption of a new measure, conclusion of agreement, publication of legislation, commencement/enforcement of a measure/programme	The Ministerial Decree of 24 December 2015 (Ministry of Environment) introduced Green Public Procurement requirements, and the Ministerial Decree of 11 January 2017 (Ministry of Environment) updates them.

41-1	Total building floor area [m2] of the buildings with a total useful floor area over 250 m2 owned and occupied by the Member States' central government on 1 January 2017	15.190.344
41-2	Total building floor area [m2] of the buildings which did not meet the energy performance requirements referred to in Article 5(1) on 1 January 2017	13.775.372
42-1	Total building floor area [m2] of buildings renovated and/or in the pipeline in 2016 as referred to in Article 5(1)	559.737
42-2	Amount of energy savings [ktoe] achieved in 2016 and/or in the pipeline in eligible buildings owned and occupied by their central government due to renovation of buildings as set out in Article 5(1), expressed in primary or final energy	3,90

Energy savings achieved in 2016 (savings achieved from measures and notified under Article 7(2)(c) and (d) shall not be part of this table)	Policy measure (Please, specify the policy measure)	Savings achieved in 2016 [ktoe] expressed in final energy		Total <u>expected</u> savings [ktoe] by 2020 expressed in final energy (voluntary)	
		Total annual end-use savings achieved [ktoe] in 2016 (amount of savings from new actions implemented in 2016 <u>and</u> from actions implemented in 2014 that continue delivering savings in 2016)	thereof savings achieved [ktoe] in 2016 from <u>new</u> actions that were implemented in 2016		
44-1	EEOS	White certificates	3081	1135	16000
44-2	Alternative measure 1	"Conto Termico"	3	2	5880
44-3	Alternative measure 2	Tax deductions	1481	731	3920
44-12	Total savings		4564	1868	25800

Energy savings achieved in 2016 from supply side measures accounted for under Art. 7 (2)(c)	Policy measure (Please, specify the policy measure)	Total annual savings generated in 2016 [ktoe] from <u>supply side measures</u> (amount of savings from new actions implemented in 2016 <u>and</u> actions implemented in 2014 that continue delivering savings in 2016) expressed in final energy
45-1	Measure 1	
45-2	Measure 2	
45-3	Measure 3	
45-4	Total savings	

Energy savings achieved in 2016 from early actions accounted for under Art. 7 (2)(d)	Policy measure (Please, specify the policy measure)	Total amount of savings generated in 2016 [ktoe] from <u>early actions</u> that took place between 31/12/2008 and 31/12/2013 expressed in final energy
46-1	Measure 1	Please see footnote on paragraph 3.3 of the report
46-2	Measure 2	

46-3	Measure 3		
46-4	Total savings		