

HELLENIC REPUBLIC
**MINISTRY OF
THE ENVIRONMENT AND ENERGY**
SECRETARIAT-GENERAL FOR ENERGY AND
RAW MATERIALS

DIRECTORATE-GENERAL FOR
ENERGY **DIRECTORATE FOR ENERGY POLICY
AND ENERGY EFFICIENCY**
Energy Efficiency Department

DEADLINE

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**To: The International and
European Affairs Directorate of the Ministry**

SUBJECT: Submission of Annual Report on the Achievement of National Energy Efficiency Targets, pursuant to Article 24(1) of Directive 2012/27/EU.

In accordance with Article 24(1) of Directive 2012/27/EU, please find attached our annual report on the progress achieved towards national energy efficiency targets for the year 2015; we kindly ask you to take the appropriate action.

ASSESSMENT OF INTERMEIDATE OBJECTIVE

Within the framework of the 3rd National Energy Efficiency Action Plan (NEEAP) which was presented in December 2014, two intermediate periods were defined for monitoring progress in achieving the overall energy efficiency target pursuant to Article 7 of Directive 2012/27/EU. More specifically, the year 2015 was defined as the first intermediate period with a cumulative energy savings target of 300.7 ktoe for the 2014-2015 period.

The annual allocation of the cumulative energy savings target which was initially foreseen in accordance with Article 7, is indicated in Table 1 while Table 2 shows the energy savings made as a result of the policy measures implemented in the period 2014-2015.

Table 1: Cumulative energy savings expected from the policy measures implemented up to 2020

Year	Energy savings per year (ktoe)						Total
2014	100.2						100.2
2015	100.2	100.2					200.5
2016	100.2	100.2	125.3				325.8
2017	100.2	100.2	125.3	125.3			451.0
2018	100.2	100.2	125.3	125.3	150.3		601.4
2019	100.2	100.2	125.3	125.3	150.3	150.3	751.7
2020	100.2	100.2	125.3	125.3	150.3	150.3	902.1
Total	3 332.7						

Table 2: Cumulative energy savings as a result of the policy measures implemented up to 2020

Year	Energy savings per year (ktoe)		Total
2014	74.2		74.2
2015	74.2	44.0	118.2
Total	192.3		

According to the results of Table 2, a deviation from the 2015 intermediate target is observed. In particular, the final cumulative energy saving made is 192.3 ktoe, leading to a deviation of 36 % (deviation of 108.4 ktoe since the intermediate target is 300.7 ktoe).

In order to cover this deviation, a procedure to revise policy measures has already been launched, taking account of the funds available for energy efficiency as part of the 2014-2020 Programming Period.

Furthermore, Article 9 on energy efficiency obligation schemes of 'Law No 4342/2015 on pensions, transposing into Greek Law Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC' as amended by Directive 2013/12/EU of the Council of 13 May 2013 on adapting Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency, by reason of the accession of the Republic of Croatia, and other provisions, provide for combining obligation schemes with alternative policy measures in order to achieve the objective of the same article.

More specifically, the article provides for an energy efficiency obligation scheme to be established as of 1 January 2017, ensuring that energy distributors and/or retail energy

sales companies that are designated as obligated parties achieve a cumulative end-use energy savings target by 31 December 2020. The planning of this scheme has already begun and is expected to be completed in the near future.

Table 3 shows the up-to-date cumulative energy savings as a result of the policy measures implemented up to 2020 required in order to achieve the target under Article 7 of Directive 2012/27/EU. However, the policy measures and obligations under the schemes will be finalised in the near future.

Table 3: Revised cumulative energy savings as a result of the policy measures implemented up to 2020

Year	Energy savings per year (ktoe)						Total
2014	74.2						74.2
2015	74.2	44.0					118.2
2016	74.2	4.0	81.0				199.2
2017	74.2	4.0	81.0	200.0			399.2
2018	74.2	4.0	81.0	200.0	220.0		619.2
2019	74.2	4.0	81.0	200.0	220.0	230.0	849.2
2020	74.2	4.0	81.0	200.0	220.0	230.0	1 073.7
Total	3 332.7						

Table 4 shows the cumulative energy savings resulting from each policy measures implemented in 2014 and 2015.

Table 4: Cumulative energy savings (ktoe) for each policy measure implemented in 2014 and 2015.

Measure	2014	2015
M1. 'Energy saving at home' programme	22.0	8.2
M12. Replacing old private passenger vehicles	22.8	35.7
M14. Operational Programme Environment and Sustainable Development (EPPERAA) actions	0.1	-
M16. Extension of Athens metro	29.3	-
M17. Offset of fines on illegal buildings	-	0.2
Total	74.15	44.02

ADDITIONALITY

As regards the additionality under Article 7 of Law No 4122/2013 on the energy performance of buildings - harmonisation with Directive 2010/31/EU of the European Parliament and of the Council and other provisions, it is stated that the energy performance of existing buildings or building units which undergo major renovation shall be upgraded where this is technically, functionally and economically feasible, in order to meet the minimum energy efficiency requirements set out in the Energy Performance of Buildings Regulation (KENAK). These requirements will apply to the entire renovated building or building unit as well as renovated building elements and technical systems. Similarly, in Article 8, technical systems which are installed in new buildings or buildings undergoing major renovation, must meet the minimum requirements set out in the KENAK as regards their overall energy performance, their installation and the appropriate dimensioning, adjustment and control. The minimum requirements also apply to new systems, upgrades and replacements of existing systems where this is technically, functionally and economically feasible.

Therefore, due to the fact that measures M1, M14 and M17 do not entail the major renovation of the buildings whose energy performance is upgraded, additionality does not apply.

As regards policy measures M12 and M16, there are no obligations arising from EU law on implementing the specific energy saving measures, with the result that the additionality criterion does not raise a problem.

MEASUREMENT, MONITORING AND VERIFICATION SYSTEMS

For policy measures M1, M14 and M17, the measuring and monitoring of the energy saved is carried out respectively through the energy performance certificates (EPCs) and the Energy Auditors Register and Energy Inspections Archive. Moreover, verification is carried out through sample checks by the Environment, Construction, Energy and Mining Inspectorate of the Ministry of the Environment and Energy as to whether the EPCs have been completed correctly and by the competent Special Management Services of the specific programmes as to whether the measures implemented have been correctly executed.

Finally, in order to measure energy savings resulting from the implementation of policy measures M12 and M16, the methodological approach for expected savings, as developed for each individual measure in the 3rd NEEAP, was implemented. As regards verifying the estimated energy savings under measure M12, a survey of a representative sample will be carried out following the completion of the measure (summer 2016). Finally, as regards measure M16, energy savings were measured on the basis of a study carried out by the company ATTIKO METRO A.E. in order to assess the feasibility of the specific measure.

RESIDENTIAL SECTOR

In 2014, a marginal increase of 0.6 % in final energy consumption was observed in the residential sector (3 786 ktoe in 2014 compared to 3 764 ktoe in 2013). This is mainly due to an increase in the use of petroleum products (6.4 % increase) while the use of solid fuels and heat has also increased, although this represents a very small percentage of final energy consumption (Table 5). The reasons for the increased use of petroleum products is the lower price of heating oil in 2014 compared to 2013.

Table 5: Final energy consumption in the residential sector per energy product

Energy products (ktoe)	2013	2014
Solid fuels	0.9	2.9
Petroleum products	988.4	1 051.4
Natural gas	232.4	231.6
Heat	41.5	49.5
Renewable energies (RE)	1 000.7	975.9
Electricity	1 500.1	1 474.7
Total	3 764.0	3 786.0

INDUSTRIAL SECTOR

Similarly, an increase of 8.9 % in final energy consumption was also observed in the industrial sector in 2014, compared to 2013 (3 088 ktoe in 2014 compared to 2 835 ktoe in 2013). All energy products saw an increase with the exception of natural gas (Table 6).

Table 6: Final energy consumption in the industrial sector per energy product

Energy products (ktoe)	2013	2014
Solid fuels	210.5	226.7
Petroleum products	981.7	1 127.6
Natural gas	537.0	463.8
Renewable energies (RE)	128.7	163.4
Electricity	977.3	1 106.5
Total	2 835.2	3 088.0

TRANSPORT SECTOR

In 2014, an increase of 2 % in final energy consumption was observed in the transport sector (6 467 ktoe in 2014 compared to 6 339 ktoe in 2013). As shown in Table 7, final energy consumption is up for all types of transport, excluding road transport for which it is down by 0.7 % (Table 8). Furthermore, according to Table 7 there has been an increase in final energy consumption for all energy products. The main reason for the increase in final energy consumption in the case of petroleum products in 2014 is the reduction in the price of these products compared to 2013. It should be noted that the increased penetration of natural gas, renewable energies and electricity into the transport sector is due to promotional policies for renewable energies and reducing climate change which have already been implemented.

Table 7: Final energy consumption in the transport sector per energy product

Energy products (ktoe)	2013	2014
Petroleum products	6 181.7	6 289.3
Natural gas	13.4	13.8
Renewable energies (RE)	121.3	134.5
Electricity	23.0	29.5
Total	6 339.3	6 467.1

Table 8: Final energy consumption in the transport sector by type of transport.

Type of transport (ktoe)	2013	2014	Change
Rail transport	27.2	57.9	112.9 %
Road transport	5 013.0	4 979.4	-0.7 %
International air transport	673.7	777.5	15.4 %
Domestic air transport	176.7	179.8	1.8 %
Domestic water transport	430.5	449.1	4.3 %
Non-specified	18.2	23.4	28.6 %
Total	6 339.3	6 467.1	2.0 %

Lastly, please find attached the completed EU template including the details of the 2015 Annual Report on the Achievement of National Energy Efficiency Targets.

The Head of the Directorate

Vasiliki Sita

Enclosures:

2015 Annual Report on the Achievement of National Energy Efficiency Targets. (Excel file - 4 pages)

Internal Distribution:

- Office of the Minister
- Office of the Alternate Minister
- Office of the Secretary-General for Energy and Raw Materials
- Directorate-General for Energy
- Directorate for Energy Policies and Energy Efficiency (2)