

**ANNUAL REPORT ON THE PROGRESS ACHIEVED
TOWARDS NATIONAL ENERGY
EFFICIENCY TARGETS**

In compliance with Article 3, Article 24(1) and Part 1 of Annex XIV
to Directive 2012/27/EU on energy efficiency

Ministry of Commerce, Industry and Tourism

Energy Service

April 2013

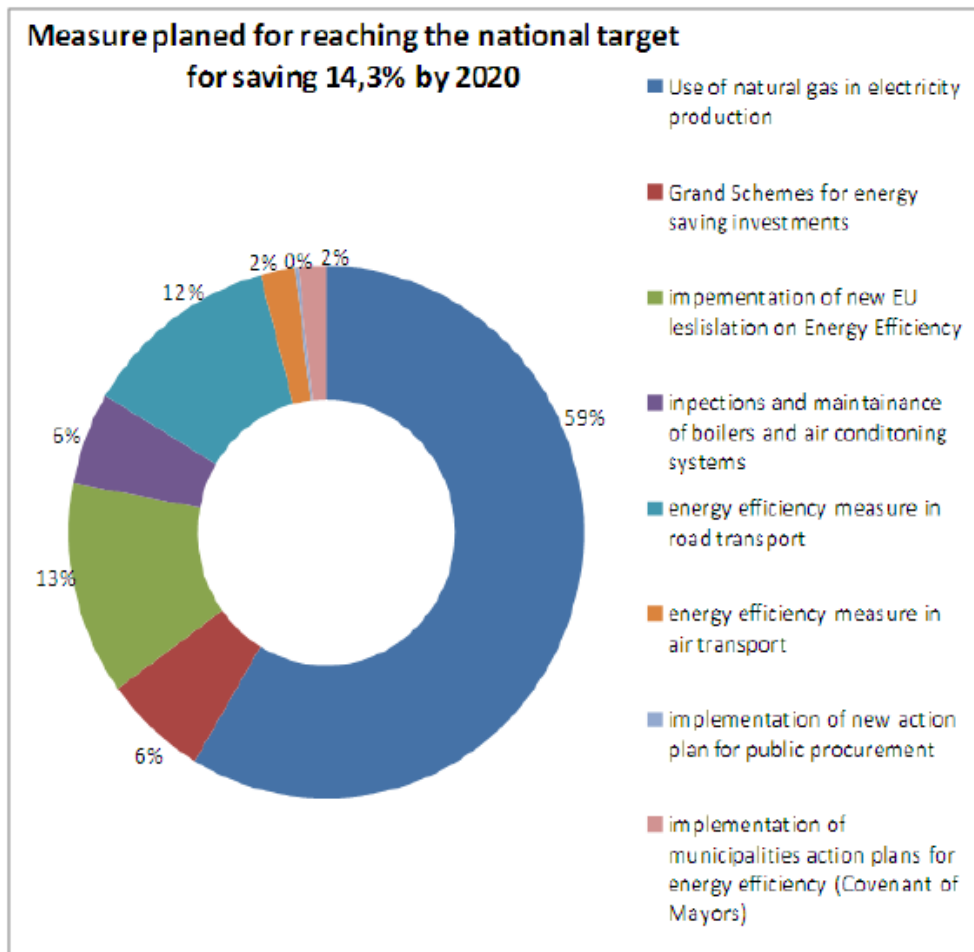
1. Introduction

The information contained in this report and especially issues relating to the data used for the calculation of the indicative national energy efficiency target for 2020 is being notified to the European Commission with caution. The indicative national energy efficiency target will be revised in the 3rd National Energy Efficiency Action Plan which will be submitted to the European Commission in April 2014. It is expected that, at that time, projections on future trends in relation to the national financial and energy data for 2020 will be safer. Such data include, *inter alia*, projections on the Gross Domestic Product, changes relating to the penetration of natural gas, changes in the provisions on the use of electricity, transport and heating fuels, the penetration of Renewable Energy Sources etc.)

This report constitutes a notification to the European Commission on the national indicative energy savings target. The report was drawn up in accordance with Article 3, Article 24(1) and Part 1 of Annex XIV to Directive 2012/27/EU on energy efficiency and forms part of the 2013 National Reform Programme.

Aiming to turn the 2nd National Energy Efficiency Action Plan (2nd NEEAP) into a document including all measures and policies of the country on energy savings (in addition to the scope of Directive 2006/32/EC), Cyprus submitted to the European Commission in July 2011 the National Action Plan for primary energy savings by 2020, as part of its 2nd NEEAP, providing a specific timetable and implementation measures for the national indicative primary energy savings target for 2020. The Council of Ministers, by means of its Decision (Ref. 72.280) on 14/07/2011, approved the National Action Plan for primary energy savings by 2020 as part of the 2nd NEEAP.

The national primary energy savings potential was estimated by means of a study carried out in cooperation with the Cyprus University of Technology. This target is indicative and concerns primary energy savings equal to 463.000 tonnes of oil equivalent (i.e. 14.3%) by 2020 and may be implemented through the adoption of additional measures/policies in addition to the ones implemented/adopted by 2010. Improving the efficiency of energy generation with the use of natural gas from 2015 onwards, combined with the scheduled grants schemes for investments in energy savings and the use of RES for heating and cooling purposes along with the implementation of additional EU policies in the field of energy savings, other than the ones applicable by the end of 2010, are expected to significantly contribute towards meeting the target. Furthermore, additional efforts are expected to be made with the view to improve energy efficiency in road transport. Annex IV to the 2nd NEEAP (attached hereto – **Annex 1**) contains a detailed analysis of the mode of calculation of the national indicative primary energy savings target.



Measures adopted to reach the national energy saving target of 14.3% by 2020

- Use of natural gas in electricity production
- Grant Schemes for energy savings investments
- implementation of new EU legislation on Energy Efficiency
- inspections and maintenance of boilers and air conditioning systems
- energy efficiency measures in road transport
- energy efficiency measures in road transport
- implementation of the new action plan for public procurement
- implementation of municipal action plans for energy efficiency (Covenant of Mayors)

2. Calculation of the national indicative energy savings target for 2020

The 2020 target was calculated through the development of an energy model for Cyprus (**Annex 1**). Projections on energy consumption in Cyprus were based on an energy model developed in cooperation with Dr. Theodoros Zachariadis, assistant professor at the Cyprus University of Technology. Note that the same model was already used for the National Renewable Energy Action Plan for 2020, which was submitted to the European Commission under Directive 2009/28/EC, as well as for other energy forecasts made by the Cyprus Energy Regulatory Authority. The model calculates energy consumption in key fields of activity (agriculture, industry, residential sector, tertiary sector, transport) taking into account official forecasts on macroeconomic indices and fuel prices. It then calculates the share of energy consumption (per sector and per fuel) taking into account the technology cost, the penetration of various new technologies and technical and other factors reducing the level of penetration in Cyprus.

Note that this energy model has been partly revised in relation to the model used in the National Renewable Energy Action Plan, since (a) it uses official data on the energy balance for the years 2005-2009 which means that it takes into account the impact of the economic crisis on the energy sector and (b) it takes into account the calculated savings achieved through measures adopted by the Government until 2010 without, however, altering the total savings potential between the two scenarios, i.e. the scenario calculating the contribution of measures and policies in place until 2010 (reference scenario) and the scenario for the adoption of new measures (energy efficiency scenario) for the period 2010-2020.

In particular, the reference scenario assumes that no additional (both primary and final consumption) energy savings measures will be implemented after 2010 (both at national and European level) other than those implemented and/or adopted by law by 2010. That is, this scenario takes into account the continued implementation of the Directives transposed into national legislation by 2010 and calculates the savings resulting from the energy savings grants schemes in effect until 2010, etc. It should be noted that energy savings resulting from the Grants Schemes for residential RES, which reduce the amount of purchased energy, are not taken into account as the model has already included projections for the penetration of RES by 2020; however, the investments implemented through the Grants Scheme by undertakings engaging in activities falling within the scope of the emissions trading scheme are taken into account. Neither does the reference scenario take into account the use of natural gas in power generation until 2020 and it assumes that the fuels already used in the sector will continue to be used.

The energy efficiency scenario makes projections on each energy sector by implementing additional measures other than those in effect by 2010. That is, it assumes that the energy savings grants schemes will be continued for the next ten years, that public transport will be further developed and used, that stricter revised European Directives on energy savings will be transposed in the national legislation after 2010 (e.g. the Directive on energy efficiency adopting the Communication from the Commission on an Energy Efficiency Plan 2011). It should be noted that, as far as primary consumption is concerned, this scenario has predicted the use of natural gas instead of HFO for power generation from 2015 onwards, in accordance with recent projections and estimations.

The following is a summary of the results of the two scenarios and a comparison thereof:

Table 13: Reference Scenario Without NG in 2015

<i>Reference Scenario Without NG in 2015</i>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gross inland consumption	2799	2821	2880	2935	2992	3051	3107	3156	3202	3243	3280
Fuel inputs for Power generation	1257	1278	1321	1342	1364	1389	1413	1430	1443	1451	1455
RES input for power generation	20	21	22	31	39	46	53	63	74	87	101
Non-energy uses	61	61	61	61	61	61	61	61	61	61	61
Final non-electricity consumption	1461	1460	1475	1501	1528	1555	1579	1602	1624	1644	1663
Residential	179	170	164	158	153	147	141	135	129	124	118
Cement Industry	143	145	148	153	157	162	166	171	175	179	183
Other Industry + Tertiary	133	133	134	137	139	141	143	145	147	148	150
Agriculture	26	26	26	27	27	28	28	29	29	29	30
Road Transport	723	728	739	755	772	789	805	820	834	847	860
Air Transport	257	259	264	272	280	288	296	303	310	317	323
National energy consumption	2738	2760	2819	2874	2931	2990	3046	3095	3141	3182	3219

Table 14: Energy efficiency Scenario

<i>Energy efficiency Scenario</i>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gross inland consumption	2792	2796	2835	2870	2908	2765	2736	2761	2783	2801	2817
Fuel inputs for Power generation	1254	1264	1293	1299	1310	1140	1088	1089	1089	1085	1082
RES input for power generation	20	21	22	31	39	46	53	63	74	87	101
Non-energy uses	61	61	61	61	61	61	61	61	61	61	61
Final non-electricity consumption	1457	1451	1460	1478	1498	1518	1534	1548	1559	1568	1573
Residential	179	169	162	156	150	144	138	131	125	117	109
Cement Industry	143	145	148	152	157	161	166	170	175	179	183
Other Industry + Tertiary	133	132	133	134	135	136	137	138	138	137	136
Agriculture	26	26	26	27	27	28	28	29	29	29	30
Road Transport	720	721	728	740	752	764	774	783	791	798	803
Air Transport	256	258	262	269	277	284	291	297	303	308	313
National energy consumption	2731	2735	2774	2809	2847	2704	2675	2700	2722	2740	2756

Table 15: Savings-Efficiency (Reference without NG)

Savings-Efficiency (Reference without NG)

(ktoe)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Savings in final non-electricity consumption	4	10	16	23	30	37	46	54	64	76	90
Residential	0	1	1	2	3	3	3	4	5	6	8
Total Industry	0	0	0	0	0	0	0	0	1	1	1
Tertiary	0	1	2	3	4	5	6	7	9	11	14
Agriculture	0	0	0	0	0	0	0	0	0	0	0
Road Transport	3	7	11	15	20	25	31	37	43	50	57
Air Transport	1	1	2	2	3	4	5	6	7	8	10
Savings in final electricity consumption	1	5	11	16	21	26	31	37	42	47	50
Savings in primary electricity production because of savings in final electricity	3	15	29	42	55	58	66	77	87	96	102
Savings in primary electricity due to introduction of natural gas*	0	0	0	0	0	190	259	264	267	270	271
Total savings in primary electricity	3	15	29	42	55	249	325	340	354	365	373
Savings in national energy consumption	7	24	45	65	84	286	371	394	418	442	463
	0.2%	0.9%	1.6%	2.3%	2.9%	9.6%	12.2%	12.7%	13.3%	13.9%	14.4%

* including energy savings in primary energy from additional measures in transmission/distribution system

3. List of primary energy savings measures by 2020

The key strategic measure for realising the national energy savings potential is the use of natural gas in power generation after 2015 (see paragraph 2.3). Moreover, the continuation of the grants schemes for energy savings and the implementation of stricter laws for the reduction of energy consumption in all fields of activity are considered important. The energy savings potential in the sector of road transport is quite significant. In accordance with the World Statistics 2009 of the International Road Federation 2009, Cyprus holds the highest percentage of private vehicles per resident, with 742 vehicles per 1000 residents. An effort started in mid 2010 towards a further development of Public Transport. In accordance with the Plans drawn-up by the Ministry of Communications and Works, a target has been set for increasing the contribution of Public Transport from 2% in 2009 to 10% by 2015.

In accordance with the above tables, the primary energy savings potential for 2020 amounts to 463 000 toe, representing indicative savings of 14.3% as compared to the anticipated energy consumption according to the reference scenario. The largest part of the indicative target is expected to be achieved thanks to the penetration of natural gas in power generation from 2015 onwards (predicted savings of 271 000 toe due to the use of a different fuel in power generation). Total primary energy savings, in addition to the contribution made by the use of natural gas, are expected to amount to 192 000 toe, including 57 000 toe in road transport and 10 000 toe in air transport. Savings amounting to 192 000 toe are expected to be achieved through the continuation of the Grants Scheme for energy savings and the adoption of additional measures for promoting the cogeneration of electricity and heat and energy audits, implementation of additional legislative measures for primary energy savings at a national scale as laid down in the Communication from the Commission on an Energy Efficiency Plan 2011 (taking into account the adoption of additional legislative measures from 2013 onwards, following the amendments to Directives on energy savings, such as the new Directive on energy efficiency 2012/27/EU), additional implementation of legal provisions on the energy performance of buildings relating to the inspection of boilers and air-conditioning systems, implementation of the commitments by Municipalities and communities which have prepared, and/or will prepare, Energy Action Plans and implementation of the new Action Plan for Green Public Procurement, as well as implementation of measures in the transport sector.

It should be noted that in setting the compulsory penetration target for RES in the energy balance of Cyprus at 13% of final energy consumption by 2020 the same scenarios have been prepared as those providing for savings of 90 000 toe in the final consumption in all sectors, except for electricity (residential, tertiary sector, industry, agriculture, road transport, air transport) and savings of 50 ktoe in the end use of electricity. That is, savings amounting to 140 000 toe in final energy consumption (i.e. 192 000 toe of primary energy) have already been taken into account and must be achieved with a view to achieving the compulsory target for RES. This means that the measures presented and proposed (in addition to the ones related to natural gas) also contribute to the achievement of the target for RES (13% by 2020).

In addition to the foregoing, note that if it is not possible to include natural gas in the national energy system from 2015 onwards, the national primary energy savings target will be restricted to 192.000 toe of primary energy by 2020 (instead of 463.000 toe). This means that primary energy savings by 2020 will amount to 6% (instead of 14.3%).

To save 90 000 toe of primary energy (i.e. savings of 90 000 toe in final, non-electricity consumption in all sectors), the measures expected to be implemented and the relevant implementation timetable are presented below:

Table 1: Savings in final, non-electricity consumption

SAVINGS IN NON-ELECTRICITY											
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		toe	toe	toe	toe	toe	toe	toe	toe	toe	toe
	RESIDENTIAL SECTOR										
1	CONTRIBUTION OF ENERGY SAVING PLANS	816.9	1633.9	2450.8	3267.7	4084.7	4901.6	5718.5	6535.4	7352.4	8169.3
1.1	LOWLAND AREAS	619.7	1239.4	1859.1	2478.9	3098.6	3718.3	4338.0	4957.7	5577.4	6197.1
1.1.1	Thermal insulation - Windows	175.8	351.6	527.4	703.2	879.0	1054.8	1230.6	1406.3	1582.1	1757.9
1.1.2	Thermal insulation - Roofs	398.1	796.2	1194.3	1592.4	1990.5	2388.6	2786.6	3184.7	3582.8	3980.9
1.1.3	Thermal insulation - Walls	45.8	91.7	137.5	183.3	229.1	275.0	320.8	366.6	412.5	458.3
1.2	MOUNTAINOUS AREAS	197.2	394.4	591.6	788.9	986.1	1183.3	1380.5	1577.7	1774.9	1972.2
1.2.1	Thermal insulation - Windows	59.6	119.2	178.8	238.4	298.0	357.6	417.2	476.8	536.3	595.9
1.2.2	Thermal insulation - Roofs	121.9	243.7	365.6	487.4	609.3	731.1	853.0	974.9	1096.7	1218.6
1.2.3	Thermal insulation - Walls	15.8	31.5	47.3	63.1	78.8	94.6	110.4	126.1	141.9	157.6
2	Maintenance and inspection of boilers and heating installations.	300.0	1500.0	3000.0	5000.0	7000.0	9000.0	11000.0	12500.0	13500.0	15000.0
	RESIDENTIAL SECTOR TOTAL	1116.9	3133.9	5450.8	8267.7	11084.7	13901.6	16718.5	19035.4	20852.4	23169.3
	RESIDENTIAL SECTOR TARGET	705.9	1354.1	1960.6	2518.4	3026.5	3480.2	3883.0	4904.3	6439.1	8376.6
	TERTIARY SECTOR										
3	CONTRIBUTION OF ENERGY SAVING PLANS	69.4	138.8	208.2	277.6	347.0	416.4	485.8	555.2	624.6	694.0
4	Maintenance and inspection of boilers and heating installations.	200.0	500.0	900.0	1100.0	1400.0	1700.0	2000.0	2300.0	2750.0	3000.0
5	Directive on energy efficiency in application of the Communication from the Commission on an Energy Efficiency Plan 2011	0.0	0.0	150.0	300.0	500.0	800.0	2000.0	5000.0	8000.0	10000.0
6	High Efficiency Cogeneration (Grants Schemes)	500.0	1000.0	1500.0	2000.0	2500.0	3000.0	3500.0	4000.0	4500.0	5079.0
	TERTIARY SECTOR TOTAL	269.4	638.8	1258.2	1677.6	2247.0	2916.4	4485.8	7855.2	11374.6	18773.0
	TERTIARY SECTOR TARGET	919.7	1852.4	2813.6	3800.8	4812.6	5834.6	6870.9	8618.9	11076.9	14228.9
	INDUSTRY SECTOR										
7	CONTRIBUTION OF ENERGY SAVING PLANS	6.2	12.3	18.5	24.7	30.9	37.0	43.2	49.4	55.5	61.7
8	High Efficiency Cogeneration (Grants Schemes)	800.0	2000.0	3500.0	6000.0	9000.0	12000.0	14500.0	17500.0	20000.0	22227.0
	INDUSTRIAL SECTOR TOTAL	806.2	2012.3	3518.5	6024.7	9030.9	12037.0	14543.2	17549.4	20055.5	22288.7
	INDUSTRIAL SECTOR TARGET	58.0	118.5	183.0	251.3	323.4	398.8	477.6	559.5	644.3	731.8
	AGRICULTURAL SECTOR										
9	CONTRIBUTION OF ENERGY SAVING PLANS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	AGRICULTURAL SECTOR TARGET	2.6	5.3	8.0	10.9	13.9	16.9	20.0	23.1	26.3	29.5
	TRANSPORT SECTOR TARGET	6913.2	10857.6	15232.1	20022.5	25233.0	30810.1	36775.0	43119.9	49834.3	56904.7
	AIR TRANSPORT TARGET	1074.0	1701.7	2413.6	3208.3	4088.2	5040.8	6073.3	7185.3	8375.5	9642.2
	TOTAL/TARGET	9671.4	16885.1	22610.8	29812.2	37497.8	46481.1	54999.8	64411.8	76296.4	89011.7
	TOTAL CONTRIBUTION OF ALL MEASURES (ON CONDITION THAT TARGETS ARE ACHIEVED IN THE TRANSPORT AND AIR TRANSPORT SECTORS)	9379.7	16344.3	24373.2	33200.8	42683.7	52706.0	64095.8	77245.2	90492.3	130777.9

To save 102 000 toe of primary energy (i.e. saving 50,000 toe in final energy consumption) because of savings in end-use electricity , the measures to be implemented and the relevant implementation timetable are presented below:

Table 2: Savings in final electricity because of savings in end-use electricity

SAVINGS IN ELECTRICITY											
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		toe	toe	toe	toe	toe	toe	toe	toe	toe	toe
RESIDENTIAL SECTOR											
1	CONTRIBUTION OF ENERGY SAVING PLANS	332	658	976	1287	1373	1542	1779	2010	2236	2457
1.1	LOWLAND AREAS	271	536	795	1049	1119	1257	1450	1638	1822	2002
1.1.1	Thermal insulation - Windows	77	152	226	297	317	357	411	465	517	568
1.1.2	Thermal insulation - Roofs	174	344	511	674	719	807	931	1052	1171	1286
1.1.3	Thermal insulation - Walls	20	40	59	78	83	93	107	121	135	148
1.2	MOUNTAINOUS AREAS	62	122	180	238	254	285	329	372	414	455
1.2.1	Thermal insulation - Windows	19	37	55	72	77	86	99	112	125	137
1.2.2	Thermal insulation - Roofs	38	75	112	147	157	176	203	230	256	281
1.2.3	Thermal insulation - Walls	5	10	14	19	20	23	26	30	33	36
3	Maintenance and inspection of air conditioning systems of an effective rated output of more than 12 kW.	177.5	702.2	1302.3	1975	2272.7	2745.3	3256.7	3756.5	4245.1	4591.7
	RESIDENTIAL SECTOR TOTAL	510.0	1359.8	2277.9	3261.9	3645.6	4287.7	5035.5	5766.4	6480.9	7048.4
TERTIARY SECTOR											
4	TERTIARY SECTOR – CONTRIBUTION - SCHEME	1517	2664	3952	5212	5561	6248	7205	8141	9057	9952
5	Maintenance and inspection of air conditioning systems of an effective rated output of more than 12 kW.	178	527	868	1288	1466	1716	2035	2482	2852	3280
6	Directive on energy efficiency in application of the Communication from the Commission on an Energy Efficiency Plan 2011	0	0	868	2577	5865	10295	13570	16770	19899	22959
7	Green Public Procurement	89	176	260	344	367	412	475	537	597	656
8	CONTRIBUTION – Municipalities’ Action Plans – Covenant of Mayors	0	1000	2000	2500	4000	5500	7000	8500	10500	12815
	TERTIARY SECTOR TOTAL	1783	4366	7949	11920	17259	24170	30285	36430	42905	49661
INDUSTRY SECTOR											
9	CONTRIBUTION - PLANS	734	1289	1912	2522	2691	3024	3487	3940	4383	4816
	TOTAL/TARGET	14697	28.688	42.373	54.616	58.443	65.779	76.869	86.814	95.653	101673.6
	TOTAL CONTRIBUTION OF ALL MEASURES	3028	7015	12139	17704	23596	31482	38808	46137	53769	61526
	TOTAL SAVINGS IN ELECTRICITY AND NON-ELECTRICITY	12407	23359	36512	50905	66280	84187	102904	123382	144261	192303

The expected contribution rate of all measures towards the achievement of the national indicative target for saving 463 000 toe of primary energy by 2020 is shown in the table below:

Table 3: Contribution of Measures towards the achievement of the Primary Energy Savings target

Measures for implementing the primary energy savings target (463 000 toe by 2020)	Energy savings (toe)	Contribution rate towards target achievement (%)
Energy savings from the use of natural gas in power generation from 2015 onwards and the implementation of energy savings measures in the distribution system	271,000	58.5
Energy savings from the continuation of the Grants Schemes for energy savings	53,500	11.5
Energy savings from the gradual implementation of new compulsory legislative measures promoted by the EU through the EU Energy Efficiency Action Plan 2011	33,000	7.1
Energy savings from interventions implemented through compulsory maintenance and inspection of boilers and air-conditioning systems of an effective rated output of more than 12 kW	25,900	5.6
Energy savings from additional measures for energy savings in transport	56,900	12.3
Energy savings from measures in air transport	9,600	2.1
Energy savings from the implementation of the new Action Plan for Green Public Procurement	700	0.1
Energy savings from the implementation of the Action Plans of municipalities and communities	12,800	2.8
	463,400	100
TOTAL		

4. Monitoring progress towards the national primary energy savings target by 2020

Final energy consumption per GDP is constantly decreasing in Cyprus, from 142.7 kgoe / million EUR in 2000 to 126.8 kgoe / million EUR in 2010. Table 1 (attached hereto – **Annex 2**) contains statistical data on the energy sector of Cyprus. **Annex 3** contains a table with data corresponding to Part 1 of Annex XIV to Directive 2012/27/EU on energy efficiency.

The Energy Service of the Ministry of Commerce, Industry and Tourism is monitoring on an annual basis the progress towards meeting the national indicative primary energy savings target for 2020. The real energy savings were assessed through a comparison between projections included in the national scenarios and the actual national energy data.

The assessment demonstrated that:

- In 2010, the annual primary energy savings target (0.2%) was outperformed by 1.58%. Savings in primary energy consumption in 2010 amounted to 50 ktoe (instead of 7 ktoe as forecasted). In 2011, the annual primary energy savings target (0.9%) was outperformed by 3.39%. Savings in primary energy consumption in 2011 amounted to 118 ktoe (instead of 24 ktoe as forecasted).
- Energy savings in 2010 are mainly attributable to the reduction of electricity consumption and the reduced use of fuels in electricity generation as compared to the forecasted amounts (reduction of 46 ktoe and 60 ktoe respectively). Energy savings in 2011 are mainly attributable to the reduction of electricity consumption and the reduced use of fuels in electricity generation as compared to the forecasted amounts (reduction of 84 ktoe and 117 ktoe respectively). This reduction is partly attributable to the destruction of the power-station in Vassilikos in July 2011.
- In 2010, the consumption of fuels not used for electricity generation purposes increased by 34 ktoe as compared to the forecasted amounts. This is mainly due to the fact that there was an increase in the consumption of the transport sector as opposed to the reduction forecasted by the scenario. In particular, energy consumption in road transport increased by 46 ktoe as compared to the forecasts of the energy efficiency scenario, whereas energy consumption in air transport increased by 21 ktoe. Note that there was a reduction in fuel consumption in other sectors (by 17 ktoe in the domestic sector, by 15 ktoe in the cement industry and by 5 ktoe in the remaining industries of the tertiary sector. In 2011, the consumption of fuels not used for electricity generation purposes increased by 29 ktoe as compared to the forecasted amount. This is mainly due to the fact that there was an increase in the consumption of the transport sector as opposed to the reduction forecasted by the scenario. In particular, energy consumption in road transport increased by 28 ktoe as compared to the forecasts of the energy efficiency scenario, whereas energy consumption in air transport increased by 39 ktoe. Note that there was a reduction in fuel consumption in the sectors of the cement industry (by 96 ktoe) and other industrial sectors and the tertiary sector (by 36 ktoe). There is also an increase by 2 ktoe in the residential sector.

- In 2010, the fuels not used for energy generation (non-energy uses-bitumen) increased by 22 ktoe, whereas the respective scenario projected zero increase. In 2011, the fuels not used for energy generation (non-energy uses-bitumen) increased by 3 ktoe, whereas the respective scenario projected zero increase.
- Despite the fact that for the years 2010 and 2011 there was a larger reduction in primary energy consumption as compared to the projections of the energy efficiency scenario (by 1.8% and 4.3% respectively instead of 0.2% and 0.9% respectively), the achievement of the primary energy savings target of 14.4% in 2020 mainly depends on the introduction and use of natural gas in energy generation from 2015 onwards.
- The energy intensity indicator expresses the rate of primary energy consumption to the GDP and reflects the annual energy efficiency of the entire national economy. The indicator appears to be on a downward path in the years under study which demonstrates the effectiveness of the measures adopted and, hence, the improvement of the energy efficiency of the country's economy.