

**FIRST NATIONAL
ACTION PLAN FOR
ENERGY EFFICIENCY**

(2007 – 2010)

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CHAPTER I

SUMMARY OF THE NATIONAL ACTION PLAN FOR ENERGY EFFICIENCY

The energy sector in Romania must face up to the main challenges that have appeared on both a national and global level, these being, amongst others, the security of energy supplies, increased economic competitiveness and a reduction of the sector's impact on the environment. These challenges are of great importance for Romania, given the country's need to catch up with more developed European nations in terms of economic performance. Increased energy efficiency is one of the key priorities of Romania's energy policy, and it would contribute greatly to the country's meeting of the objectives outlined above.

In this context, Romania has created an institutional and legal framework in conformity with the EU acquis in order to promote energy efficiency.

Legal framework

The main regulations in this field are as follows:

- Law No 199/2000 regarding the efficient use of energy, amended and updated by Law No 56/2006, which aims to create the necessary legal framework for the development and implementation of national policies for the efficient use of energy.
- Law No 3/2001 ratifying the Kyoto Protocol to the United Nations Framework Convention on Climate Change. According to the Kyoto Protocol, Romania is obliged to cut its emissions of greenhouse gases by 8% from 1989 levels between 2008 and 2012.
- Emergency Government Ordinance No 174/2002 regarding the taking of measures to thermally insulate multi-storey residential buildings, approved by Law No 211/2003.
- Government Decision No 163/2004 regarding the approval of the National Strategy for Energy Efficiency. The main objective of this strategy is the identification of possibilities and means to increase energy efficiency over the entire energy network through the implementation of suitable programmes.
- Government Decision No 1535/2003 regarding the "Strategy for the Promotion of Renewable Sources of Energy" and Government Decision No 443/10.04.2003 concerning the promotion of the production of electrical energy from renewable energy sources. This latter Government Decision was amended by Government Decision 958/2005 (transposing

Directive 2001/77/EC) and forms a legal framework for the promotion of renewable sources of energy. This will have a direct impact on the reduction of energy consumption. The abovementioned legislation has been supplemented by national legislation that transposes, in its entirety, the EU acquis dealing with energy efficiency, including timeframes for implementation.

Institutional Framework

The institutional framework for the promotion of measures to encourage the efficient use of energy was created in 1990 with the founding of the Romanian Agency for Energy Conservation (ARCE). The powers of this agency were strengthened in 2000 with the adoption of Law 199/2000 regarding the efficient use of energy, this law being amended and supplemented by Law 56/2006. Legally, the Romanian Agency for Energy Conservation is considered to be the main specialised body, at national level, in the field of energy efficiency. It is subordinate to the Ministry of Finance.

Other institutions/ministries involved in the field of energy efficiency are as follows:

- ***The Ministry of Finance*** implements government policy in the energy sector, including in the areas of energy efficiency and renewable resources.
- ***The Ministry of Development, Public Works and Housing***, for the housing sector,
- ***The Ministry of the Environment and Sustainable Development*** (MMDD),
- ***The Ministry of the Interior and Administrative Reform*** (MIRA), for local government,
- ***The Ministry of Transport*** (MT), for the transport sector.

Furthermore, the National Energy Observer (OEN) was founded in 2003, its mission being to compile data and to determine the main indicators of energy efficiency in Romania.

Also in 2003, the Romanian Fund for Energy Efficiency was established and began providing financial assistance, in commercial conditions, to companies in the industrial sector and other energy consumers in order to enable them to implement projects for the efficient use of energy.

National targets for saving energy

Directive No 2006/32/EC regarding energy efficiency amongst end users and energy suppliers, which will be adopted into national legislation in 2008, stipulates, in conformity with the provisions of Article 14(2), that EU Member States must undertake to reduce the consumption of energy by at least 9% over a period of nine years (2008-2016) as compared

to the average consumption of energy for the previous five years for which data are available.

The interim target set for Romania for 2010 was 940,000 toe, which corresponds to a percentage of 4.5% of the average for the years 2001-2005.

This target was established with a view to the existing potential in Romania for the saving of energy in sectors of the economy that come under the auspices of Directive No 2006/32/EC. These sectors are: Industry, other than sectors included in the National Allocation Plan, the residential sector, the tertiary sector and transport.

The economic potential (from the point of view of cost efficiency) of energy savings in the year 2001 was:

Sector	Average potential energy savings, estimated as a percentage of consumption.	Maximum value of the potential energy savings
	[%]	[ktoe/year]
Industry	13.0	1590
Residential	41.5	3600
Transport communications	31.5	1390
Tertiary (service) sector	14.0	243
TOTAL	100	6823

Source: National Strategy for Energy Efficiency

Through the Sectoral Plan for Research and Development in Industry, a study is being carried out in order to update the potential for energy savings in industry, transport, the residential, tertiary (service) and agricultural sectors and co-generation.

The reduction of the final consumption of energy counterbalances a tendency displayed by the Romanian economy towards an increase in the consumption of primary raw materials and energy. In these conditions, it is estimated that the consumption of electrical energy will increase by a constant 3% per annum until 2020.

Measures to improve energy efficiency contained in the First National Action Plan for Energy Efficiency

Measures for the improvement of energy efficiency as contained in the First National Action Plan for Energy Efficiency fall into the following categories:

- **Regulations**
- **Information and legislative measures** (Information campaigns, Energy Audit)
- **Voluntary agreements and instruments for co-operation** (Industrial companies, Long-Term Agreements)
- **Services to encourage energy savings** (One-third financing, Contracts of energy performance)
- **Financial instruments** (Subsidies, Tax breaks on construction permits for heat insulation work on buildings, Co-financing of renovation work)
- **Mechanisms to encourage energy efficiency and other combinations of the abovementioned sub-categories** (Energy efficiency funds)

Furthermore, the plan contains a number of measures that are targeted at various different sectors of the economy, at all levels. These include regulations (the transposition into the national legislation of the provisions of Directives 2006/32/EC and 2005/32/EC), information campaigns and financing schemes designed to be undertaken in partnership with the European Bank for Reconstruction and Development.

In order for these measures to be effective, a change must occur in people's mentalities and behaviour. In this context, one of the most important aspects of the plan is the fact that it envisages information campaigns targeted at all economic sectors.

The industrial sector is a sector in which great potential for energy savings exists. A recent SAVE study ("Schemes and measures for the implementation of industry-specific Long-Term Agreements in Romania) carried out in 2000-2001 concluded that long-term agreements are one of the most effective means of gaining the support of industry in the drive for increased energy efficiency.

Results can also be obtained through activities designed to better manage energy use accompanied by investments in equipment to measure and oversee the consumption of energy.

In the transport sector, measures to improve energy efficiency are focused on the promotion of biofuels and the modernisation of passenger and freight trains as well as the Bucharest metro.

In the residential sector, programmes for the heat insulation of multi-storey residential buildings will continue and will result in significant energy savings and the reduction of heating costs amongst the population. Furthermore, starting from 2007, an energy-efficiency certificate will be issued for all newly built buildings and, beginning in 2010, an energy efficiency certificate will be issued for single-family dwellings and for apartments in existing residential structures that are sold or rented.

Once heat loss is reduced in buildings and energy efficiency is thus improved, a legislative initiative designed to encourage energy efficiency through the use of renewable fuels will be pursued. This will promote the generation of electricity and heat using locally available sources of renewable energy for end users.

Significant energy savings will also be achieved through the activities of ESCo-style energy companies. In this context, the plan advises the drawing-up of legislation to encourage the development of ESCo companies in Romania.

With a view to improving public lighting systems on a regional basis, old lighting devices will be replaced by modern, energy-efficient ones. Furthermore, inefficient equipment will be replaced and devices will be introduced to reduce the luminous flux on main streets during periods of reduced traffic.

Until now, financial and fiscal measures supporting energy efficiency projects were limited to the promotion of biofuels, the use of renewable resources for the production of electricity and audits of buildings. Over the period covered by the new plan, these will be extended to cover the replacement of refrigerators, washing machines and air conditioners in domestic use, the co-financing of energy balance books for operators in the industrial sector, the financing of programmes to increase energy efficiency in the industrial sector, and the promotion of investment programmes for the use of renewable energy in the generation of electricity and heat, this being with a view to increasing energy efficiency.

As a Member State of the EU, Romania will also benefit from co-financing through the Operational Sectoral Plan for Boosting Economic Competitiveness, the various points of which will also stimulate an increase in energy efficiency. In this vein, Point 4 of the plan refers specifically to an increase in energy efficiency and stability of supply, these being elements in the fight against climate change.

Furthermore, through Point 1 of the Operational Sectoral Plan for Boosting Economic Competitiveness, a point focused on SMEs, companies will be able to receive up to 65% financing over a period of three years in order to obtain environmental certificates for appliances and office equipment.

Abbreviations

MEF – Ministry of Finance

MMGA – Ministry of the Environment and Sustainable Development

MDLPL – Ministry of Development, Public Works and Housing

MIRA – Ministry of the Interior and Administrative Reform

MT – Ministry of Transport

ARCE – Romanian Agency for Energy Conservation

PNAEE – National Action Plan for Energy Efficiency

EE – Energy efficiency

FREE – Romanian Fund for Energy Efficiency

OEN – National Energy Observer

CHAPTER II

TOTAL NATIONAL TARGETS

II.1 Calculating the national target

According to Directive 2006/32/EC, the national target is calculated on the basis of the average final consumption of energy for the last five years for which data is available. In the case of Romania, this period is 2001-2005. The final consumption of energy for every year of this period, as well as average yearly consumption, is presented below in Table 1. The same table also presents levels of energy consumption by industrial units carrying out activities in areas covered by the Emissions Trading Directive.

Table 1 – End-use consumption of energy in the 2001 – 2005 period

	Thousands of toe					
	2001	2002	2003	2004	2005	Yearly average
End-use consumption of energy	22,438	23,370	25,153	27,332	25,102	24,679
End-use consumption of energy in industrial units carrying out activities covered by the Emissions Trading Directive	3,364	3,695	3,815	4,151	4,168	3,839
End-use consumption of energy in the area of ESD	19,074	19,675	21,338	23,181	20,934	20,840
Of which:						
Population	7,197	7,284	7,879	7,910	8,055	7,665
Services	1,629	887	1,826	2,001	2,095	1,688
Industry in the area of ESD	5,987	6,921	7,077	7,134	6,337	6,691
Transport	3,975	4,305	4,319	5,195	4,244	4,551
Agriculture	286	278	236	220	203	245

The consumption of electrical energy in each of the years in question, as well as the average yearly consumption of electrical energy, is presented in Table 2.

Table 2 – Consumption of electrical energy, 2001 – 2005

Thousands of toe

	2001	2002	2003	2004	2005	Yearly average
End-use consumption of electrical energy	3,124	3,062	3,228	3,337	3,336	3,217
End-use consumption of energy in industrial units carrying out activities covered by the Emissions Trading Directive	684	663	637	801	788	715
End-use consumption of energy in the area of ESD	2,440	2,399	2,591	2,536	2,548	2,502
Of which:						
Household	665	669	709	692	795	706
Services	478	233	409	309	344	354
Industry in the ESD field	1,102	1,291	1,286	1,373	1,251	1,260
Transport	154	170	157	139	139	152
Agriculture	41	36	29	23	20	30

Target levels for energy savings are presented in table 3.

Table 3 Targets for energy savings

Average for period 2001-2005 [thousands toe]	20,840
Target of 9% energy savings by 2016 [thousands toe]	1,876*
Target of energy savings adopted by Romania by 2016 [thousands toe]	2800**
Intermediate target for 2010 [thousands toe]	940***

* minimum figure in conformity with Directive 2006/32/EC

** 13.5% of average consumption for 2001 – 2005, namely 1.5% per year

*** 4.5% of average consumption for 2001 – 2005, namely 1.5% per year

II.2 Specific aspects of the calculation of national targets

II.2.1 Specific aspects in the generation of data pertaining to the final consumption of energy

The collection of statistics in Romania is carried out by official statistics services coordinated by the National Statistics Institute, a specialised body subordinate to the central government.

It is the responsibility of the National Statistics Institute to transmit official data to EUROSTAT.

Data concerning the end-use consumption of energy in the period 2001-2005 were obtained from the official publications of the National Statistics Institute.

One particular issue arose with regard to these data, this being the issue of heating as an end-use form of energy. In working documents regarding structures proposed by the First National Action Plan for Energy Efficiency, which was presented at a meeting in Brussels on 12 April, heating was not mentioned as an end-use form of energy. According to IEA data (Energy Balances of OECD Countries), heating, as a form of energy, makes up about 2% of total consumption of end-use energy in the Member States of the EU. The omission of this form of energy may explain reduced levels in the working documents.

Large district heating systems were built in Romania during the communist period, and many of these are still in operation. They are supplied with heat by large thermal electric power plants using co-generation. Legally, public heating systems and their heat sources (thermal electric power plants) can be owned either by the same company or by two separate companies. Large numbers of consumers from all sectors (domestic, services, industry) are served by the power plants and public heating systems. According to data supplied by the National Statistics Institute, thermal energy (heating) delivered to consumers via public systems represents about 10% of the total consumption of end-use energy. If one takes into consideration the consumption of end-use energy as interpreted by ESD, this form of energy represented, on average, 13.3% of the consumption of end-use energy.

Under these conditions, the consumption of energy by public district heating systems was not included in the figures for end-use consumption.

Energy activities are not activities that involve end-use consumption, and thus do not come under the auspices of Directive 2006/32/EC. Therefore, energy consumption as a result of these activities was not included in the total for end-use consumption. For example, many industrial complexes involved in the production of steel, chemicals, sugar, etc, are equipped with their own co-generation plants for the production of heat and electrical energy for their own use. The energy consumption of these plants was not included in figures for end-use consumption. However, electrical or heat energy supplied by these plants for use in industrial activities was included as end-use consumption.

II.2.2 Relationship with other sectors covered by the Directive

In order to establish a basis for interaction with sectors covered by Directive 2003/87/EC, the following factors were taken into consideration:

- According to its title and content, Directive 2006/32/EC makes reference to the end use of energy. The directive, however, does not provide explicit definitions for the terms “end-use consumption” or “end use”. Therefore, the definitions used were provided by the Romanian National Statistics Institute and correlate with definitions used by the International Energy Agency and EUROSTAT;

The directive does not apply to firms which have been included in the National Allocation Plan.

The National Allocation Plan contains:

- 19 private companies involved in the production and processing of ferrous metals;
- 15 industrial units involved in the production of cement and lime;
- 8 industrial units involved in glass production;
- 29 private companies involved in the production of ceramics;
- 11 private companies involved in the production of cellulose by-products and paper.

In conformity with the provisions of the Directive, end-use energy consumption related to these activities was subtracted from national end-use consumption.

II.2.3 Conversion factors

When calculating targets for energy savings, the factors for the conversion of physical units into conventional units presented in Annex II were used. The exception to this was wood, for which a coefficient of 0.243 (in place of 0.330) was used, as this corresponds more accurately to the quality of Romanian wood.

II.2.4 National target for energy savings

The average annual consumption of energy in the area covered by Directive 2006/32/EC was, according to available data, 20,840 toe for the period 2001-2005. The minimum for energy savings by 2016 is to be 9% of this figure, namely 1,876 toe.

When establishing energy saving targets for Romania, the country's high levels of energy intensity were taken into account. In 2004, energy intensity in Romania was 0.358 toe/1000 EUR, compared to an average of 0.109 toe/1000 EUR for the 25 Member States of the EU.

Given these conditions, a target for energy savings of 2.8 million toe was set for the year 2016. This represents 13.5% of average consumption for the years 2001-2005. The annual drop in the end-use consumption of energy in the 2008-2016 period will be 1.5%, which is 50% higher than the minimum imposed by Directive 2006/32/EC.

II.3 Intermediate target

The intermediate target established for the year 2010 was 940,000 toe, which is equivalent to 4.5% of the average for the years 2001-2005.

CHAPTER III

Sectoral measures for the improvement of energy efficiency

III.1 Measures for the improvement of energy efficiency in the industrial sector

Title of EE measures	<i>Improvement of Energy Efficiency amongst industrial operators through the signing of long-term agreements (LTAs)</i>
Category	4. Voluntary agreements and instruments for co-operation 4.1. Industrial companies
Regional application	National level
Target group	Representatives of industry (industrial operators and/or professional and employers' associations)
End-use EE action targeted	The replacement of equipment with a view to reducing the consumption of energy through investments designed to modernise the following systems: <ul style="list-style-type: none"> - production and supply of steam/hot water - heat recovery; - electric motors; - compressed air; - automatic control of energy demand, by cost centres; - drying; - water cooling; - industrial furnaces. - others.
Effectiveness	Through these LTAs, industry must undertake to adopt measures for the saving of energy with a view to reducing demand for energy and to reaching its full potential for energy savings. This will be achieved through the modernisation of technological processes and equipment as well as the efficient use of energy. According to estimates provided by EU states that have implemented LTAs, energy savings were 10-20%.
Status of implementation and exact timeframe	New measures: <ul style="list-style-type: none"> • in place: The signing of preliminary agreements and the opening of negotiations between government authorities and representatives of industry for the 2007 LTAs. • 2008-2010 period: The signing of voluntary agreements between government and industry in order to reach targeted energy savings in industry on the basis of the LTA model.
Authority responsible for implementation of EE measures	Responsible authority: Ministry of Finance, ARCE, MMDD
Title of EE measures	<i>The improvement of energy efficiency in industrial operators through the management of demand for energy and the drawing up of energy balance sheets</i>
Category	2. Information and legislative measures 2.1. Information campaigns 2.4. Energy balance sheets
Regional application	National level
Target group	Energy consumers in the industrial sector

<p>End-use EE action targeted</p>	<ul style="list-style-type: none"> - To ensure that energy consumers respect the obligation to possess their own system for the measuring, proof and monitoring of energy consumption in accordance with the provisions of Law No 199/2000. - The introduction of modern systems of measurement and inspection, including computer-assisted systems, for the monitoring and continued evaluation of energy efficiency. <p>The drawing up of energy balance sheets in the following manner:</p> <ul style="list-style-type: none"> • Consumers using a quantity of energy of between 200 and 1,000 toe must obtain, every two years, an energy balance sheet to be drawn up by persons authorised by ARCE. • Consumers using a quantity greater than 1,000 toe of energy per year must obtain an energy balance sheet on a yearly basis to be drawn up by persons authorised by ARCE. <ul style="list-style-type: none"> - The submitting of energy efficiency programmes which must include the following: <ul style="list-style-type: none"> a) Short term programmes involving little or no cost and which do not involve major investment b) Long-term programmes of 3-6 years involving investments for which feasibility studies will be carried out - The implementation of energy efficiency measures recommended by the energy balance sheet and the inclusion of these in energy efficiency programmes.
<p>Effectiveness of EE measures</p>	<p>The reduction of demand for energy through the monitoring of energy consumption by cost centre and the efficient use of energy.</p> <p>The informing of industrial operators of the potential for energy savings through the identification of inefficient processes and the elimination/reduction of these inefficiencies.</p> <p>Energy balance sheets are instruments which allow for detailed and exhaustive studies of production processes and of the equipment responsible for energy consumption. These balance sheets include recommendations for measures to be applied in order to reduce energy consumption</p>

<p>Current status of implementation and exact timeframe</p>	<p>Current state of implementation:</p> <ul style="list-style-type: none"> - Law No 199/2000 regarding the efficient use of energy, republished, energy consumers' obligations: energy balance sheets, responsibility for energy management, energy efficiency programmes. - Information campaigns encouraging the application of energy efficiency legislation. - Authorisation by ARCE of personnel to draw up energy balance sheets. - ARCE designation of personnel responsible for the management of energy in companies with energy consumption exceeding 1,000 toe per year. - Inspections carried out by ARCE personnel on industrial operators in order to ensure the application of energy efficiency legislation <p>New measures:</p> <ul style="list-style-type: none"> • In place: <ul style="list-style-type: none"> - The continuing of ARCE designation of personnel responsible for the management of energy in companies with energy consumption exceeding 1,000 toe per year and authorisation by ARCE of personnel to draw up energy balance sheets. - The continuing of inspections carried out by ARCE personnel on industrial operators in order to ensure the application of energy efficiency legislation. • In the 2008-2010 period: <ul style="list-style-type: none"> - The proposal of a Government Decision which will approve the co-financing, from the national budget, of up to 50% of the costs of drawing up energy balance sheets. This will apply to industrial operators, SMEs using between 200 and 1,000 toe worth of energy and to public buildings with a surface area greater than 1000 m². This funding is dependent on the implementation of measures resulting from the energy balance sheet. Term for implementation: 2009 - The proposal of a government decision that will include a scheme for state aid, in accordance with community legislation on environmental protection, in order to finance energy efficiency programmes. Term: 2009
<p>Authorities responsible for the implementation of EE</p>	<p>Responsible authorities: Ministry of Finance and ARCE</p>

Title of EE measures	<i>The improvement of energy efficiency through financial support for investment projects designed to reduce energy demand</i>
Category	3. Financial instruments 3.1. Subsidies 6. EE measures and other combinations of sub-categories 6.3 Energy efficiency funds and trusts
Area of application of EE measures	National level
Target group	Industrial and public sectors
End-use EE action targeted	Financing of energy efficiency projects through access to FREE – the Romanian Fund for Energy Efficiency Ensuring subsidies from the national budget for projects designed to increase energy efficiency
Effectiveness of EE measures	FREE offers financing, under commercial conditions, for private companies in the industrial sector and for other energy consumers in order to permit them to adopt and use energy-efficient technology. FREE is designed to have a demonstrative effect. It will achieve this through the implementation of the GEF/BIRD programme for energy efficiency and will increase the banking sector's interest in investment in the field of energy efficiency in Romania. Investments will bring financial benefit, at least 50% of these being the result of savings of energy or of primary energy resources.
Status of implementation and exact timeframe	Current state of affairs: FREE has been in operation in Romania since 2003. So far, FREE has concluded 18 financing contracts. Annual energy savings have been estimated at 28,106 toe, this being the equivalent of 70,438 tonnes of CO ₂ . In 2006, energy savings were estimated to be 9,884 toe, this being the equivalent of 38,427 tonnes of CO ₂ . New measures: • in place: - In 2007, the objective of FREE is to conclude 8 contracts. FREE is drawing up its first contract to finance an ESCo. - PHARE project regarding the development of financial stimuli to encourage energy efficiency, beginning in 2007, to be completed in 2008.
Authority responsible for implementation of EE measures	Responsible authorities: Ministry of Finance, ARCE and FREE

Title of EE measures	<i>Improvement of energy efficiency in industrial operators through the implementation of investment projects co-financed by community funds</i>
Category	6. Measures to support energy efficiency funds 6.3 Community funds 3. Financial Instruments 3.3 Loans
Regional application	National level
Target group	Industrial operators with high potential for energy savings
End-use EE action targeted	<ul style="list-style-type: none"> - Approval of Operational Sectoral Programme by the government, 20/04/2006. In the process of being approved by the European Commission; - Official call for proposals for possible projects eligible for co-financing through Structural Funds. Details will be publicly announced; - The sending of projects to the OIE (Intermediate Energy Agency), the analysis and evaluation of projects; - The selection of projects to be co-financed by Structural Funds (selection carried out by the Selection Committee of the Monitoring Committee); - The signing of co-financing contracts; - The implementation of projects.
Effectiveness of EE measures	<p>The financing of projects under the auspices of Point 4 of the Operational Sectoral Programme using community funds and other resources is to be carried out by end-use industrial consumers for the purposes of reducing energy consumption. These funds may be used in order to invest in the modernisation of equipment and facilities.</p> <p>The carrying out of these investments will have the following effects:</p> <ul style="list-style-type: none"> • the reduction of energy consumption through the replacement of inefficient equipment with equipment designed with reduced energy consumption in mind. • the promotion of highly efficient co-generation for industrial consumers • the reduction of the impact on the environment.
Status of implementation and exact timeframe	<p>New measures:</p> <ul style="list-style-type: none"> • in place: <ul style="list-style-type: none"> - Information campaigns - The dissemination of information by means of seminars and the publication of brochures and pamphlets: <p>The publication of useful information regarding EU Structural Funds on the Ministry of Finance website. Info day</p> <ul style="list-style-type: none"> • In the 2008-2010 period: Access to Structural Funds for the co-financing of programmes for investment in energy-efficient equipment by industrial operators
Authority responsible for implementation of EE measures	Responsible authorities: Ministry of Finance, OIE

III.2. Measures for the improvement of energy efficiency in the residential and tertiary sectors

Title of EE measures	<i>Heat insulation and ventilation of multi-storey residential buildings constructed in the period 1950-1990</i>
Category	<p>1. Regulations:</p> <p>1.1. Methodology Mc 001/2007 for the calculation of buildings' energy performance</p> <p>1.2. Minimum energy efficiency standards in buildings</p> <p>2. Information and legislative measures</p> <p>2.1 Specialised information campaigns</p> <p>2.2 City Hall Information Centres</p> <p>2.3 Energy Audits</p> <p>2.4 The carrying out of pilot projects</p> <p>3. Financial instruments</p> <p>3.1 Subsidies – The carrying out of the energy audit and the planning of works</p> <p>3.2 Tax breaks on the granting of construction permits for the carrying out of heat insulation work.</p> <p>3.3 Cofinancing of work – see “Effectiveness of EE measures”</p>
Area of application of EE measures	National level (urban areas)
Target group	Residents of multi-storey residential buildings
End-use EE action targeted	<p>- Heat insulation of exterior walls;</p> <p>- Heat insulation of roofs;</p> <p>- Insulation of pipes from the basement/heating pipes</p> <p>- Replacement of windows.</p> <p>In order to promote thermal renovation, the financing of the energy audit and the planning of the renovation works will be financed by allocations from the national budget in accordance with the provisions of Government Special Ordinance No 174/2002, approved by Law No 211/2003 as amended and supplemented.</p> <p>Furthermore, on the basis of Government Special Ordinance No 174/2002, approved by Law No 211/2003 as amended and supplemented, funds for the carrying out of thermal renovation work will come from the following sources:</p> <p>a) 34% from allocations from the national budget. These allocations are approved, and limits set, on a yearly basis, and funds are provided out of the budget of the Ministry of Development, Public Works and Housing.</p> <p>b) 33% from funds approved for this use on a yearly basis by local authorities.</p> <p>c) 33% from residents' associations' maintenance funds.</p>
Effectiveness of EE measures	It is estimated that, through the implementation of thermal renovation measures set out in the multi-year plan, energy savings of up to 25% can be achieved in comparison with the situation prior to renovation.

	<p>The heat insulation of buildings can be carried out in phases, thus its effects, from the point of view of the reduction of the consumption of energy, will be seen on a cumulative basis. A complete return on the investment will be achieved in approx. 6-8 years, depending on the type of work carried out.</p>
<p>If available: expected annual energy savings in 2010 and 2016</p>	<p>Working from figures gathered from energy audits on buildings included in annual heat-insulation schemes for 2005 and 2006, the following is estimated for the period covered by the plan (2007-2010):</p> <ul style="list-style-type: none"> - approx 250 multi-storey buildings upon which only insulation work will be carried out. - approx. 36,000 MWh/year (cca. 3,000 toe) worth of energy savings
<p>Status of implementation and exact timeframe</p>	<p>Current state of affairs:</p> <p>In the annual heat insulation programme set out in Government Special Ordinance 174/2002, 23 buildings were subject to an energy audit in 2005. Planning for heat insulation work on these buildings was carried out.</p> <p>In the 2006 programme, an energy audit was carried out on 614 buildings. This year, planning for insulation work will be undertaken.</p> <p>New measures:</p> <ul style="list-style-type: none"> • in place - Starting from January 2007, work to thermally insulate buildings commenced. - Law No 372/2005 regarding the energy efficiency of buildings provides for the following: <ul style="list-style-type: none"> o the drawing up of energy efficiency certificates for newly built buildings, starting from 2007; o the drawing up, starting from 2007, of energy efficiency certificates for single-family residences and apartments in existing buildings which are sold or rented. The certificate is to be accompanied by recommendations for the improvement of energy efficiency.
<p>Authority responsible for implementation of EE measures</p>	<p>Ministry for Development, Public Works and Housing</p> <p>During the period in which the plan is in effect, INCERC (The National Institute for Research and Development in Construction and Construction Economics), which is subordinate to the Ministry of Development, Public Works and Housing, will gather and process data regarding buildings included in annual heat insulation programmes co-ordinated by the ministry.</p>

Title of EE measures	<i>The improvement of energy efficiency in heating/cooling systems in individual homes</i>
Category	1. Regulations 1.2. Minimum performance standards for boilers designed for heating and the supply of hot water and for household air conditioning devices. 2. Information and legislative measures 2.1 Information campaigns
Area of application of EE measures	National level
Target group	Individual residences in the residential sector
End-use EE action targeted	- Inspections before the introduction onto the national market of air conditioning equipment and hot water boilers. - The measurement of consumption in individual homes. - Campaigns promoting the use, amongst householders, of alternative sources of energy and energy-efficient appliances and equipment.
Effectiveness of EE measures	The reduction of energy consumption in individual dwellings through the use of renewable energy resources and of appliances and equipment that respect minimum energy efficiency standards.
Status of implementation and exact timeframe	Current state of affairs: - Government Decision No 574/2005 regarding the establishment of efficiency criteria for new liquid-fuel or gas boilers. - Government Decision No 1871/22.12.2005 regarding the establishment of criteria concerning energy labelling upon the introduction on the market of new household air conditioning equipment. New measures: • In place: - The continuation of inspections by ARCE and ISCIR (State Inspectorate for the Inspection of Boilers, Pressurised Containers and Lifting Equipment) of air-conditioning equipment and boilers, respectively, upon their launch on the national market. These inspection activities are carried out on the basis of Government decisions Nos 574/2005 and 1871/2005. - REMODECE project to be undertaken by ARCE, starting from 2007, within the framework of the 'Intelligent Energy Programme for Europe'. This programme is designed to determine the levels of energy consumption in individual homes through the selection of 100 homes. Electricity consumption in these homes will then be measured. To be completed by 2008.
Authority responsible for implementation of EE measures	Responsible authorities: ARCE, ISCIR

Title of EE measures	<i>The promotion of highly efficient co-generation</i>
Category	1. Legislative measures 3. Financial instruments
Area of application of EE measures	National level
Target group	Central and local authorities
End-use EE action targeted	The adoption and implementation of bonus-style support schemes with a view to promoting highly efficient co-generation.
Effectiveness of EE measures	<p>There exists great potential for co-generation in Romania, and this can be exploited through the promotion of highly-efficient co-generation based on the demand for thermal energy. The promotion of highly efficient co-generation will lead to the following benefits:</p> <ul style="list-style-type: none"> • savings of primary sources of energy when compared to the separate generation of electrical energy; • reduction of greenhouse gas emissions, especially emissions of CO₂. <p>The effectiveness of these measures will be greater if renewable resources, especially biomass, are used as fuel in the co-generation process.</p>
Status of implementation and exact timeframe	<p>Current state of affairs: The provisions of Directive 2004/8/EC (which modifies Directive 92/42/EEC) regarding the promotion of co-generation on the basis of demand for useable heat energy in internal energy markets were transposed into national legislation by Government Decision No 219/2007.</p> <p>New measures:</p> <ul style="list-style-type: none"> - The adoption of harmonised reference values to be applied at national level. Term for implementation: 2007 - The development of bonus-type support schemes for highly efficient co-generation. These will be implemented by means of a government decision. Term for implementation: 2008
Authority responsible for implementation of EE measures	Responsible authorities: Ministry of Finance, MIRA, ANRE

Title of EE measures	<i>Improvement of public lighting systems</i>
Category	2. Information campaign and legislative measures 2.7. Exemplary role of the public sector
Area of application of EE measures	To be applied on a regional level: Cluj-Napoca, Brasov
Target group	Residential sector
End-use EE action targeted	<ul style="list-style-type: none"> - Replacement of old lighting devices with new, energy-efficient devices. -The continuation of the process of replacing old, inefficient equipment. - Introduction of devices to reduce the luminous flux on the main arteries of the cities in periods of reduced traffic
Effectiveness of EE measures	<p>In the Cluj-Napoca municipal area, the active and reactive consumption of energy will drop by about 40% as a result of the replacement of old lighting devices.</p> <p>In Brasov it is estimated that specific electrical energy consumption can be reduced by 10% per year with the installation of devices to reduce the luminous flux on the city's main arteries during periods of reduced traffic.</p>
Status of implementation and exact timeframe	<p>Current state of affairs:</p> <ul style="list-style-type: none"> - The city of Cluj-Napoca intends to replace old lighting equipment with newer, more energy-efficient equipment in order to reduce the consumption of electricity. <p>In 2007, city authorities began to replace public lanterns (70W) and street lights (100W and 150W). This programme is due for completion in 2009.</p> <p>Braşov – The implementation of the Strategy for the Modernisation and Expansion of Public Lighting, 2007-2009:</p> <ul style="list-style-type: none"> - The continuation of the programme to replace inefficient equipment; - the installation of devices to reduce the luminous flux on the city's main arteries during periods of reduced traffic, to be completed by 2009
Authority responsible for implementation of EE measures	Responsible authorities: Local public authorities in Cluj – Napoca and Braşov.

Title of EE measures	<i>The promotion of the use of energy-efficient light bulbs and household electrical appliances</i>
Category	<ol style="list-style-type: none"> 1. Regulations <ol style="list-style-type: none"> 1.2. Minimum performance standards for electric appliances and household lighting devices. 2. Information and legislative measures <ol style="list-style-type: none"> 2.1. Information campaigns 2.2. Energy-efficiency labelling scheme
Area of application of EE measures	National level
Target group	Domestic consumers
End-use EE action targeted	The promotion of – and support for – the replacement of incandescent light bulbs with energy-efficient light bulbs, as well as the replacement of older household appliances (refrigerators, washing machines, etc) with more efficient models designed with reduced energy consumption in mind.
Effectiveness of EE measures	Energy-efficiency labels have a positive effect on consumer behaviour as they supply information that allows consumers to purchase appliances on the basis of the product's energy efficiency.
Status of implementation and exact timeframe	<p>Current state of affairs:</p> <ul style="list-style-type: none"> - National legislation which adopts the community acquis dealing with requirements for energy efficiency labelling of household appliances (refrigerators, washing machines, dishwashers, ovens, household air conditioners, lighting devices, etc) introduced for sale on the national market. - Inspections carried out by ARCE and ANPC (the National Agency for Consumer Protection) upon the introduction of household appliances for sale on the national market - Information campaigns targeted at domestic consumers. - Regional UNDP-GEF project carried out in 2006 entitled: “Training programme to develop capabilities for the elimination of barriers and the reduction of implementation costs for energy efficiency standards and labelling in EU candidate countries” - It is estimated that, in 2004, savings of approx. 14,000 toe/year were achieved through the sale of 543,000 refrigerators and 495,714 washing machines – source: GfK study. <p>New measures:</p> <ul style="list-style-type: none"> • in place: Project carried out by ARCE within the framework of the Intelligent Energy Programme for Europe: “CEECAP – Implementation of EU policy with regard to domestic appliances in Central and Eastern Europe” (EU project in operation in the 2007-2008 period). • 2008-2010 period: Promotion of a government decision supporting the replacement of refrigerators, washing machines and air conditioners with funds from the national budget. Consumers would receive a 50-euro bonus upon the purchase of an appliance with an A/A+ label. Term for implementation: 2009
Authority responsible for implementation of EE measures	Responsible authorities: Ministry of Finance, ARCE

Title of EE measures	<i>The promotion of the development of Energy Service Companies (ESCO)</i>
Category	5. Energy services designed to produce energy savings 5.2. One-third financing 5.3. Energy efficiency contracts
Area of application of EE measures	National level
Target group	Central and local public authorities Industrial sector
End-use EE action targeted	Energy Efficiency Contract to be issued by the ESCo. This would ensure the putting in place of measures to ensure energy efficiency and provide guarantees of energy savings.
Effectiveness of EE measures	ESCO-style companies draw up and implement energy-efficiency projects for a wide variety of clients. They ensure the reduction of energy costs, with the end result being that savings will cover the entire cost of financing the project. ESCo-style services offer numerous advantages to their clients, such as guarantees as to the success of energy-efficiency projects, the implementation of these projects while respecting the annual operating budget set by the beneficiary, and flexible methods of financing.
Status of implementation and exact timeframe	<p>Current state of affairs: ARCE campaigns for the promotion of the development of ESCOs in Romania (seminars for the implementation of legislation pertaining to the efficient use of electrical energy amongst municipal authorities and industrial companies in the 2003-2006 period)</p> <p>New measures:</p> <ul style="list-style-type: none"> • In place: <ul style="list-style-type: none"> - The drawing up of a study by the Ministry of Finance under the auspices of the research and development programme in relation to means for the implementation of measures set out in Directive 32/2006/EC. These include: <ul style="list-style-type: none"> ○ Analysing means to support programmes designed to increase energy efficiency: (white certificates, ESCOs, Energy Efficiency Contracts) ○ The drawing up of Energy Efficiency Contracts as a means of supporting the activities of ESCOs. ○ Identifying the barriers preventing ESCOs from functioning to their full potential in Romania and the implementation of measures to remove these barriers. <p>Term for implementation: 2007</p> <ul style="list-style-type: none"> • In the 2008-2010 period: <ul style="list-style-type: none"> - The development of a legislative framework in the context of the development of ESCo energy service companies. Term for implementation: 2008 - In 2007: the beginning of a PHARE study regarding the development of financial stimuli designed to increase energy efficiency. To be completed by 2008.
Authority responsible for implementation of EE measures	Responsible authorities: Ministry of Finance, ARCE

Title of EE measures	<i>Use of renewable resources</i>
Category	2. Information and legislative measures 2.1. Information campaigns 3. Financing instruments 3.1. Subsidies
Area of application of EE measures	National level
Target group	Individual households, public buildings, centralised heating systems, the industrial sector
End-use EE action targeted	Promotion of the use of renewable resources for the generation of heat and electricity. The use of biomass: <ul style="list-style-type: none"> ▪ Heating systems using sawdust equipped with their own distribution systems. ▪ The converting of district heating systems into sawdust-fuelled Central Heaters (CH) ▪ The use of solar energy: <ul style="list-style-type: none"> ▪ The production of hot water at the district CH through the installation of solar panels ▪ The production of domestic hot water through the use of solar panels. The use of hot water pumps The use of biogas in purification stations
Effectiveness of EE measures	Renewable resources have great energy potential and there are ample opportunities for their use on both the local and regional levels. They are advantageous not only from the economic point of view, but also with regard to the environment and society.
Status of implementation and exact timeframe	Current status: <ul style="list-style-type: none"> - Information campaigns in the 2003-2006 period (ARCE) - Expo of Renewable Technology, 2006 - 2006 national programme aimed at the reduction of energy costs for the population through energy efficiency and the use of renewable resources. New measures: <ul style="list-style-type: none"> • In progress: <ul style="list-style-type: none"> - 2007 national programme aimed at the reduction of energy costs for the population through energy efficiency and the use of renewable resources - Expo of Renewable Technology, 2007 • 2008-2010 period: <ul style="list-style-type: none"> - A Government Decision will be drawn up aimed at the promotion of investment in the use of renewable energy sources for the production of electrical energy and heat. This will lead to an increase in energy efficiency and is to be implemented in 2008. - The use of structural funds to support projects involving the use of renewable sources of energy.
Authority responsible for implementation of EE measures	Responsible authorities: Ministry of Finance – the drawing up of legislation, ARCE – the implementation of legislation

III.3. Measures for the improvement of energy efficiency in the transport sector

Title of EE measures	<i>Modernisation of rail transport</i>
Category	
Area of application of EE measures	National level
Target group	Passenger/freight rail transport sector
End-use EE action targeted	<p>Passenger rail transport</p> <ul style="list-style-type: none"> - Acquisition of electric rail cars - Acquisition of electric multiple units - The acquisition of diesel locomotives equipped with train heating systems <p>Rail freight</p> <ul style="list-style-type: none"> - The acquisition of single-phase CEL 02-100V electric meters to be placed on electric locomotives in order to measure the consumption of electricity and allow the payment of the equivalent amount used. - The permanent monitoring and management of electricity consumed for train traction, both in terms of locomotive power and in-train devices. This will be carried in the licensed area of each electricity provider, and each substation used to provide power for train traction will be regularly inspected. - The monitoring and regulation of electricity consumption at the place of consumption in order to obtain a precise view of real energy consumption and the amount of time energy is used by end-use consumers. - The reduction of the amount of electrical energy consumed for the traction of freight trains and, thus, an increase in energy efficiency.
Effectiveness of EE measures	Reduction of demand through the efficient use of electricity, and reduction of greenhouse gas emissions.
If available: estimated annual energy savings in 2010 and 2016	The estimated savings of energy through the projects implemented in the period 2004-2015 in the passenger/freight rail transport sector will be: 10,083.500 toe/year
Status of implementation and exact time period	<p>Measures implemented 2004-2006:</p> <p>Passenger rail transport</p> <ul style="list-style-type: none"> - The acquisition of electric multiple units for medium-distance services. - The acquisition of modernised diesel locomotives equipped with electric train heating systems. - The acquisition of DESIRO railcars. <p>Measures to be implemented 2007-2010:</p> <ul style="list-style-type: none"> - The continued acquisition of railcars. - The continued acquisition of electric multiple units. - The continued acquisition of modernised diesel locomotives equipped with electric train heating systems <p>Measures to be implemented 2005-2015:</p> <p>Rail freight transport</p> <ul style="list-style-type: none"> - Modernisation of electric locomotives. - Development and adapting of the SIT computerised traction system in use by SNTFM CFR Marfă SA (Rail Freight Division of national rail corporation) and by depots within its structure. - The acquisition of meters with line graphs and communication interfaces. - Programme to modernise the fleet of 1250hp diesel-hydraulic locomotives. This will be done through the replacement of their current engine with one that combines greater power output coupled with reduced fuel consumption and emissions.

**Authority
responsible for
implementation of
EE measures**

Authority responsible: MT

Title of EE measures	<i>Modernisation of the metro system</i>
Category	
Area of application of EE measures	Bucharest metropolitan area
Target group	METROREX
End-use EE action targeted	Modernisation of equipment and facilities
Effectiveness of EE measures	Reduction of the energy requirements of the metro system
If available: estimated annual energy savings in 2010 and 2016	Energy savings achieved by METROREX in 2004-2006: approx. 5,153 toe per annum
Status of implementation and exact timeframe	<p>Current state of affairs (period 2004 – 2006):</p> <ul style="list-style-type: none"> - The acquisition of new generation sets - The installation of frequency converters in the electrical circuits in escalators. - The optimisation of the frequency of services provided by electric trainsets given that the number of passengers fluctuates according to the various periods of each day. - The equipping of lighting devices with 36W and 18W bulbs, replacing the 40W and 20W bulbs previously installed. - The modernisation of lighting systems in public spaces through the use of lighting devices with reflectors, replacing those with diffusers. <p>New measures:</p> <ul style="list-style-type: none"> - The acquisition of 26 new generation trainsets to be used on Lines 1 and 3 of the metro. Estimated quantity of energy saved: 5,700 toe. - The completion of the modernisation of lighting systems in public spaces through the use of lighting devices with reflectors, replacing those with diffusers. Estimated quantity of energy saved: 130 toe. - Modernisation of general and technological ventilation equipment on lines 1, 2 and 3. Work to be completed by 31/12/2011. Estimated quantity of energy saved: 32 toe <p>Total energy savings in period 2007 – 2010: cca. 5,862 toe.</p>
Authority responsible for implementation of EE measures	Responsible authority: Ministry of Transport, METROREX

Title of EE measures	<i>Promotion of the use of biofuels for transport</i>
Category	1. Rules 3. Financing 3.1. Subsidies
Area of application of EE measures	National level
Target group	Producers and importers of biofuels
End-use EE action targeted	<p>- According to Government Decision No 1844/2005 (which fully transposes the provisions of Directive 2003/30/EC) regarding the promotion of biofuels and other renewable fuels for use in transport, a minimum of 5.75% of biofuels or other renewable fuels should be in use by 2010. This will be calculated on the basis of the energy content of all types of petrol and diesel used in transport.</p> <p>Government Decision No 456/2007, which amends and updates Government Decision No 1844/2005, foresees the gradual introduction of a minimum percentage of biofuel content in conventional fuels.</p> <p>- Exemption from excise of energy products (article 201 paragraph 1 – Fiscal Code).</p> <p>- Special Government Ordinance No 125/2006 for the approval of direct and indirect national complimentary subsidies to agriculture starting from 2007. Approved with modifications and extensions through Law No 139/2007.</p>
Effectiveness of EE measures	Estimated quantity of biofuels from the total of fuels: 2007: 35,000 t 2008: 120,000 t 2009: 280,000 t
If available: annual energy savings in 2010 and 2016	Approximately: 2007: 105,000 toe/year 2008: 360,000 toe/year 2009: 840,000 toe/year
Status of implementation and exact timeframe	<p>Current state of measures:</p> <p>- Ordinance No 44/2006 regarding the modification of Special Government Ordinance No 25/2006 for the approval of the level of support to be accorded to agricultural producers for the acquisition of diesel for the purposes of mechanised agricultural activities aimed at creating and maintaining cultures for the spring of 2006. According to this, agricultural producers were accorded 1 leu for every litre of diesel acquired / biodiesel produced.</p> <p>New measures:</p> <ul style="list-style-type: none"> • In place: Government Decision No 456/2007, modifying and updating Government Decision No 1844/2006, sets down a calendar for the phased introduction on the market of a minimum percentage of biofuel content in conventional fuels:

	<p>a) from 1 June 2007, diesel will contain a minimum of 2% in volume of biofuel;</p> <p>b) from 1 January 2008, diesel will contain a minimum of 3% in volume of biofuel;</p> <p>c) from the 1 June 2008, diesel will contain a minimum of 4% in volume of biofuel;</p> <p>d) from the 1 July 2009, petrol will contain a minimum 4% in volume of biofuel.</p> <p>- On the basis of Government Special Ordinance No 125/2006, the following will be adopted:</p> <ul style="list-style-type: none"> • Order of the minister of agriculture and rural development regarding financial support of 50 lei/ha accorded to agricultural producers for the cultivation of sunflower, rapeseed, soy and corn under the Surface Area Payment Scheme (SAPS), and support amounting to 30 lei/ha under the Complimentary National Direct Payment (CNDP) scheme. • Order of the minister of agriculture and rural development regarding direct payments for crops destined for energy use – (financial support of 45 euros/ha for energy-use crops within the framework of the 2 million ha approved at EU level). <p>Term for implementation: 2007</p>
Authority responsible for implementation	Ministry of Finance and Ministry of Agriculture and Rural Development

CHAPTER IV

Horizontal and cross-sectoral measures for improving energy efficiency

In the 2007-2010 period horizontal and cross-sectoral measures in the area of energy efficiency will be adopted with regard to the following categories:

IV.1. Measures of a legislative nature

IV.1.1. In accordance with the timeframe set out in Article 25 of Directive 2005/32/EC, the provisions of *Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products and amending Council Directive 92/42/EEC and Directives 96/57/EC and 2000/55/EC of the European Parliament and of the Council* will be transposed into national legislation in 2007. In this context, the Ministry of Finance has drawn up a plan for a Government Decision through which this Directive would be transposed. This has been published on the ministry's official website for public debate and is also available on the inter-ministerial advisory circuit.

IV.1.2. In accordance with the timeframe set out in Article 18 of Directive 2006/32/EC, the provisions of *Directive 2006/32/EC of the European Parliament and of the Council of 5 April on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC* will be transposed into national legislation in 2008. The Ministry of Finance is the institution responsible for drawing up the bill that will transpose the directive's provisions. The ministry will co-operate with institutions and agencies active in the area of energy efficiency for the regulation of various sectoral aspects.

According to the provisions of Article 5 of Directive 2006/32/EC, Member States must ensure the adoption by the public sector of measures designed to increase energy efficiency. Efforts will be concentrated on measures that generate the greatest savings of energy in the shortest period of time. In the area of public acquisitions, at least two

of the measures presented in points (a), (b) and (e) of Annex VI of Directive 2006/32/EC will be applied, these being:

- The obligation to use financial instruments which aim to achieve energy savings, especially energy efficiency contracts which stipulate energy savings that can be measured and predetermined. (This also applies to administrations which have outsourced public services);
- The obligation to purchase equipment on the basis of lists which make reference to the specific energy efficiency performance of various categories of equipment. In order to comply with this obligation, the Ministry of the Environment and Sustainable Development will draw up a National Action Plan for Green Public Acquisitions. Under this plan, each public institution will be required to purchase a certain percentage of energy-efficient light bulbs. Furthermore, the Action Plan will include targets for other products and services, including computers, printers and motor vehicles;
- The obligation to carry out energy audits and to apply recommendations in the area of cost-effectiveness.

The measures above will become mandatory over the course of **2008**.

IV. 2. Information Campaigns

IV.2.1. The Romanian Agency for Energy Conservation (ARCE) will continue its information campaigns in the following areas: the improvement of the energy-efficiency of domestic heating/cooling equipment, the promotion of ESCOs, the improvement of public lighting systems, the promotion of the use of energy-efficient household appliances (refrigerators, washing machines, dishwashers, ovens, household air conditioners, etc) and energy-saving light bulbs, and the use of renewable energy resources in the public and residential sectors.

IV.2.2. The Ministry for Development, Public Works and Housing will co-ordinate campaigns aimed at improving energy efficiency and draw up measures to be applied in the area of multi-storey residential buildings.

IV.2.3. The Ministry of the Environment and Sustainable Development will co-ordinate a campaign to inform all relevant authorities in the area of environmental protection, professional and employers' associations as well as industrial operators of the recommendations contained in Reference Documents for Energy Efficiency

Techniques and Reference Documents with regard to the Economy and the Environment (in the process of being drawn up by the European IPPC Bureau in Seville), with a view to considering these in the modernisation process of facilities that come under the auspices of Directive 96/61/EC – IPPC.

IV.3. Financial instruments

The European Bank for Reconstruction and Development recently signed an agreement with the European Commission for 24 million euros of non-reimbursable funds destined for the creation of credit lines for energy efficiency projects in Romania and Bulgaria. The bank intends to use the majority of these funds in order to initiate energy efficiency projects in Romania, given the significant potential for energy savings in this country.

In order to establish a framework for co-operation between the EBRD and Romania, representatives of the bank have proposed a partnership with the Romanian authorities.

A co-operation document between the bank and the Romanian authorities is due to be signed in order to put this partnership into practice.

CHAPTER V

Institutional Aspects

According to the provisions of Article 4, paragraph (4) of Directive 2006/32/EC, Member States must entrust to one or more new or existing agencies control over, and responsibility for, the supervision of the framework established with regard to national objectives for the saving of energy. These agencies will check energy savings resulting from energy services and other measures designed to increase energy efficiency on a national level, and then report the results obtained.

Given the need for Romania to meet its obligations in this field, two responsible bodies have been designated to monitor and co-ordinate energy efficiency policy on a national level. These are the **Ministry for Development, Public Works and Housing** in the case of energy efficiency in buildings, and the **Romanian Agency for Energy Conservation (ARCE)** in the case of energy efficiency in other fields.