1. Basic Information

1.1. CRIS Number: BG2004/006-070.02.01

1.2. Project Title: "Institutional Building at the Energy Efficiency Agency (EEA)"

1.3. Sector: Energy

1.4. Location: Bulgaria, Sofia

2. Objectives

2.1. Overall Objectives

- To enable the EEA to assume the responsibilities given to it by the New Energy Efficiency Act;
- Enhance the EEA's capacity to implement relevant legislation activities, assigned to it by the new Energy Act and Energy Efficiency Act, both to be adopted by the mid of 2003;
- Promote energy conservation in all sectors of the economy, aiming at reducing the energy intensity per unit of GDP and thereby increasing Bulgarian products competitiveness;
- Create favourable conditions for renewable energy sources (RES) utilisation;
- Building up a market for energy efficiency and renewables.

2.2. Project Purpose:
Enhancement of EEA overall administrative, operational and expert institutional capacity in order to meet the challenging task of the New Legislation in Energy Efficiency and Environment protection, in line with the *acquis*.

2.3. Accession Partnership (AP) and NPAA Priority:

*Relevant AP short-term priorities:*

Start to implement energy efficiency measures and step up the use of renewable energy.

*Relevant NPAA priorities:*

- Harmonisation of the Bulgarian energy legislation with the respective EU legislation;
- Enhance competition in Bulgarian energy markets via privatisation, foreign investments, activities of various energy service companies (ESCOs) and energy price liberalisation giving preference to renewable energy sources;
- Enhance the public awareness and motivation on EU matters, especially on energy saving and the wider use of renewable energy sources.
3. Description

3.1. Background and Justification:

Bulgaria imports around 70% of the needed primary fuels and energy, while the Bulgarian economy consumes times more energy per unit of GDP than is normal in EU countries. Aiming at the overall normalisation of the Bulgarian economy, in July 1999 the Energy and Energy Efficiency Act (EEEA) was passed, amended in 2000 and 2001. The New Energy Strategy for Bulgaria was adopted in 2002. Now the EEA is drafting the first ever Energy Efficiency Act for Bulgaria, to be adopted by the mid of 2003. The Strategy and the Act assign the EEA new responsibilities for very important and challenging tasks and objectives concerning energy efficiency (EE) and the use of renewable energy sources (RES). To meet these tasks and objectives, the EEA urgently needs to further develop its capabilities and to establish itself as a strong institution. This is particularly true in relation to its role as policy-maker and mostly to its operational activities, attributed by the Act. Through the three activities included in this project proposal, PHARE would respond to this immediate need. The project would provide a critical push forward for EE and RES much higher awareness, information, promotion, training and consequent large-scale implementation, which otherwise would remain in their actual fledgling state. The project would also provide the very much needed EEA framework conditions and capacity for real implementation of the different buildings & installations energy audits as first in priority precondition for buildings and goods certification and labelling procedures, with regard to EE and RES projects realisation, to the relevant EU Directives requirements and guidelines and the forthcoming accession of the Republic of Bulgaria to the European Union, planned within the first decade of this century.

3.2. Linked Activities

The following activities have been completed:

<table>
<thead>
<tr>
<th>Code</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG 9508-01-01</td>
<td>Harmonisation of Energy Norms with those of the European Union</td>
</tr>
<tr>
<td>BG 9411-01-02</td>
<td>Assistance to the National Energy Efficiency Fund</td>
</tr>
<tr>
<td>BG 9307-03-01</td>
<td>Technical and Economic Assessment of Bulgarian Renewable Energy Resources</td>
</tr>
<tr>
<td>BG 9107-01-16</td>
<td>Energy Auditing Equipment for the Regional Energy Centres, Supply of Four Lots</td>
</tr>
</tbody>
</table>

Activities outside the PHARE Programme included among others:

- EEA National energy saving Program and Action plan – joint project supported by the EU SAVE II program, prior to its final approval;
- EE indicators for Bulgaria - joint project supported by the EU SAVE II program – completed in 2001;
- ”Sustainable regional development at local level” project – jointly with the British DFID – completed in 2002.
The following activities are in a process of implementation:

- **EEA National RES Programme** initiated in 2000 and in its 3rd stage, to be adopted by the Council of Ministers in 2003;
- **Four Projects** under the EU SAVE Programme, where EEA is partner in European energy efficiency Agencies Project Consortia – all these projects are already in their first stage of implementation;
- "Third party financing for EE projects” project – jointly with the Berlin Energy Agency, under completion;
- **National Energy Efficiency Strategy and Action Plans** – Southern Europe Electrical System Technical Support Project (SEETEC) for the elaboration of energy efficiency Strategy Framework conditions and prospective for the Republic of Bulgaria – the 3-stage project is expected to be terminated in June 2003;

### 3.3. Results

- Enhanced EEA staff capacity to implement different policy and operational tasks under the New Energy Efficiency Act.
- Established National Energy Information Centre and increased public awareness of energy efficiency and clean and renewable energies issues.
- Provided mobile measuring laboratory equipped with portable measuring instruments and computer software and hardware for different EE and RES audits, assessments, studies, training and promotion of different EE and RES technologies, measures and behaviour.
- Enhanced EEA’s capacity to implement different energy audits on buildings and/or installations, with regard to EE and RES projects requirements and to forthcoming buildings & goods Certification under respective EU Directives;
- Based on detailed review on the existing European and Bulgarian financial schemes and techniques, the Twinner will elaborate a List of recommended and possible financial incentives to encourage the implementation of EE and RES projects and measures in the country – tax reductions and/or exemptions for energy efficiency end-users’ measures & components, soft & low interest loans for ESCOs and/or individuals in all economic sectors, special-purpose Funds, etc.

The training of EEA’s staff and experts shall be done on the following themes:
- national legislation, new EU energy efficiency and RES legislation;
- promotion of public campaigns and information services;
- energy audits and surveys.

- Establishment of an energy efficiency and renewable energy sources national information centre to address all strata of society through technical libraries which will also give floor to different promotional, training, informational and educational national, international and regional events, workshops, seminars and/or expositions without dead off seasons, promotion of various EE and RES technologies and equipment, free usage of EE and RES database, mass media materials, printed materials on specific EE and RES issues and matters and so on. The twinner will make recommendations and develop with the Bulgarian authorities pages related IT and Info-Centre on the website of the Energy Efficiency Agency. As a result of the above activities the project will increase the public awareness of energy efficiency and clean and renewable energies issues.
• Provision of mobile measuring laboratory equipped with portable measuring instruments and computer software and hardware for different EE and RES audits, assessments, studies, training and promotion of different EE and RES technologies, measures and behaviour;

• Standards, systems, methodology and software and printed training materials for different energy audits, assessments, studies, training and promotion will be developed and presented. Concerned are the main different types of designed and existing buildings, industries, technologies, installations, equipment and their components, as well as the main different types of advertising, promotion, training and media.

3.4. Activities

3.4.1. Activity No. 1: Strengthening EEA Policy-Making Capacity and Enhancing its Operational Activity

• EEA Policy actions implementation and enhancing its operational activity;
• Introducing a wide range of financial incentives to encourage the implementation of EE and RES projects and measures in the country;
• Training of the EEA’s experts;
• Review and approval of the technical specification under Activities 2 and 3;

The first component of this activity will support EEA with a methodology and training for review and update of the national energy efficiency strategy and for its future regular revision. The activity will include a critical review of the existing Energy Strategy for Bulgaria, of the Energy Act and the Energy Efficiency Act (both Acts will be enforced by the time of the project implementation), of the National General regulatory framework related to EE and RES, as well as gap analysis of the existing legislation with regard to the EU legislation in the energy efficiency area. The twinner will recommend the necessary legislative alignments, notably development of the secondary legislation.

The second component will be to assess, taking 2 to 3 examples from current Member States of the Union (EU-15) existing European and Bulgarian financial schemes and techniques and to elaborate a List of all recommended and possible financial incentives and instruments and relevant key players to encourage the development of active energy efficiency behaviour within the country and to facilitate the market penetration of EE equipment and use of RES. This will be conducted in accordance with EU legislation requirements and recommendations.

Basing itself, for example on the SAVE energy efficiency indicator project, the twinner will establish in co-ordination with the Bulgarian authorities a monitoring and reporting scheme.

The control task will require a lot of technical knowledge and the twinner will identify and propose means and procedure for up-to-date knowledge.

The twinner will check the existing situation and activities of other energy efficiency agencies in Bulgaria, such as the Sofia Energy Center, the Sofia Energy Agency, and by the Ministry of Economy and other possible establishments in the country and identify possibilities for common and co-ordinated action in the are, notably as regards the establishment of systems and procedures for cooperation with the regional and local energy agencies and other relevant actors. The twinner will moderate the establishment of such a structure.
The third component consists of training, provided by the Twinner, which includes:

*Training on the methodology of strategic and operational planning and related software:*

the twinner will assess – taking account of the resources allocated to this project - whether specialised further training, under the form of a limited number of internships at EU energy efficiency organisations in order to enhance its overall operational capacity should be organised so as EEA staff builds up capacity and passes on procedures learnt in other countries and to the benefit of the institution. In such case, the EEA will ensure, under recommendations of the twinner, that its staff assesses possibilities for implementation and replication of relevant procedures for Bulgaria. All trainings will result in operational recommendations.

### 3.4.2 Activity No. 2: Creation of National Energy Information Centre

It can be clearly stated that in Bulgaria at present the public awareness and knowledge about energy efficiency is extremely limited.

The twinner will check the existing situation and activities of other energy efficiency agencies in Bulgaria, such as the Sofia Energy Center, the Sofia Energy Agency, and by the Ministry of Economy and other possible establishments in the country and identify possibilities for common and co-ordinated action in the area, notably as regards promotional tasks. He will be helped in this task by the Energy Efficiency Agency, which will notably co-ordinate action with other ministries such as, *inter alia*, the Ministry of Education, the Ministry of Environment and Waters and the Ministry of Economy, in order to develop a co-ordinated approach on public awareness. This will be taken into account in the definition of needs and mission before the creation of an information Centre.

The Information Centre will be established in the premises of EAA and will address the whole society. It will provide information on technologies, methods, relevant contacts and similar, addressing all sectors of the economy. The Centre will maintain a technical library providing also access to EU databases and will organise workshops and seminars for targeted audiences, hold exhibitions of technology, display successful projects, disseminate promotional material etc.

The relevant promotional material will be developed and/or procured, together with selected computer, IT and software equipment for the Information Centre renovated and furnished premises. It is envisaged that one EEA’s IT expert and one EEA’s PR expert will work in the Centre in full-time basis.

### 3.4.3. Activity No. 3: Supply of Equipment and Mobile Measuring Laboratory for Energy Efficiency and Renewable Energy Sources Audits, Assessments, Studies, Training and Promotion.

In accordance with the draft Energy Efficiency Act, the EEA has responsibility for promoting energy audits nationwide. The energy audits are the most essential precondition for every one energy efficiency project and measure, they could even determine, precise or update different EE Programmes. The energy audits will become even much more important with the national (as future EU member) application of the EC directive on the Energy Performance of Buildings (EPB), where all the existing buildings Certification (and their updating every 10 years, according to the EPB) will need frequent different energy audit implementation.

These objectives within the project framework shall be achieved through the provision of a mobile energy measuring laboratory equipped with portable instruments, computer software and hardware as well as training and promotional means.
The twinner will check the existing situation and activities of other energy efficiency agencies in Bulgaria, such as the Sofia Energy Center, the Sofia Energy Agency, and by the Ministry of Economy and other possible establishments in the country and identify possibilities for common and co-ordinated action in the area, notably as regards the use of mobile tools. He will notably assess the participation of all agencies and comparable bodies to the establishment of needs and establish rules for their participation to the operational and maintenance costs.

The twinner will identify the existing equipment available to the Republic of Bulgaria, notably by other institutions such as the Ministry of Economy, and propose further equipment if necessary, taking account of the requirements set out under the EU acquis, notably Directive 2002/91/EC. Redundant equipment shall not be provided. Technical specifications attached in the annex are indicative only and do not constitute any commitment on the side of the Commission.

3.5 Inputs:

The twinning partner shall make available to the project long and short-term senior experts, working continuously on site for the following periods:

<table>
<thead>
<tr>
<th>Category</th>
<th>Position</th>
<th>No. of Experts</th>
<th>Duration of assignment (Man-month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Accession</td>
<td>Long term experts</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Advisor</td>
<td>Senior experts</td>
<td>Minimum of 3</td>
<td>Minimum of 2</td>
</tr>
</tbody>
</table>

The twinning partner is expected to provide a team of experts having accrued at least 5 years of experience in a relevant central administrative structure of a Member-State, preferably a public Agency, having main and relatively long-lasting activities in the EE and RES areas. The team should demonstrate good familiarity with EU Energy Efficiency *acquis*.

The Pre Accession Advisor should have experience in designating of legislation in the field of energy efficiency and renewable energy sources, and matured experience in implementing control and auditing tasks in the energy efficiency area. Considerable experience in project management, as well as ability to lead a process, communicates clearly and train staff. International practice and fluency in English, as well as proven ability to design training programmes and trainer skill are also required.

Three short-term experts are envisaged with track record and expertise in EE and RES legislation, financing, auditing and informational & promotional campaigns. International practice and fluency in English are also required.

3.6 Lessons Learned

This is a relatively straightforward IB project comprising mainly twinning. Lessons learned are mostly generic ones related to twinning which have been well documented elsewhere. Additional lessons have been learned from the implementation of previous Phare projects and other donor support detailed in 3.2. All lessons have been taken into account in project design.
4. Institutional Framework

The Energy and Energy Efficiency Act (EEEA) in force since July 1999 and amended in 2000 and in 2001, forms the legal basis for regulating the whole of the energy sector. The EEEA brought about significant changes in the institutional structure for administering and regulating the energy sector by establishing three state bodies under the Council of Ministers - the Ministry of Energy and Energy Resources (MEER), the State Energy Regulatory Commission (SERC) and the Energy Efficiency Agency (EEA).

The ENERGY EFFICIENCY AGENCY (EEA), managed and represented by its Executive Director, is an administrative entity with the status of an executive agency to the Minister of Energy and Energy Resources. The EEA is organized in two Directions – “EE and usage of RES” (21 positions, incl. Director) and “Administrative, legal, finance and information services” (8 positions, incl. Director). The first direction consists of one department “Programs, projects and International relations” with 12 expert plus the head of the department and one sector of five engineers executing and implementing activities on EE and RES. The total number of EEA staff is 31 permanent employees, including the Executive Director, the General Secretary, two Directors and one Head of department.

According to the current legislation the EAA has the following functions:

- Participates in the development of a national energy strategy,
- Proposes programs of energy efficiency and promotion of the utilisation of renewable sources of energy and be in charge of their implementation,
- Coordinates among state bodies the implementation of the state policy towards energy efficiency improvement and the promotion of the utilisation of renewable sources of energy,
- Grants and revokes licenses to experts for the performance of energy audits,
- Proposes and participates in the development of measures aiming to bring the Bulgarian legislation in harmony to the European one in the field of energy efficiency and
- Collects and analyses information on energy efficiency and utilisation of renewable sources of energy.

The responsibilities of the executive bodies in the energy sector are clearly defined in the EEEEA. However, the responsibilities and activities among them shall be further clarified based on the new Energy Act and Energy Efficiency Act, both to be adopted in 2003.
5. Detailed Budget in MEURO

<table>
<thead>
<tr>
<th>Contract 1 - Twinning</th>
<th>Investment Support¹</th>
<th>Institution Building</th>
<th>Total Phare (=I+IB)</th>
<th>National Co-financing</th>
<th>IFI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>0,750</td>
<td>0,750</td>
<td>*</td>
<td>-</td>
<td>0,750</td>
</tr>
</tbody>
</table>

**Contract 2:**

2.1. Supply of Technical equipment and Furniture

|                      | 0,15                 | -                    | 0,15                | 0,035                 | -   | 0,185 |

2.2. Works² +

| Supervision          | -                    | -                    | 0,060               | -                     | 0,060 |

| Contract 3 - Supply of mobile measuring laboratory | 0,100 | - | 0,100 | 0,033 | - | 0,133 |

| Total:               | 0,250 | 0,750 | 1,0 | 0,138 | - | 1,138 |

* The national co-financing will not exceed 10% and will be provided by the State budget through the National Fund.

The Project over-costs & expenditures will be covered by EEA.

6. Implementation Arrangements

6.1 Implementing Agency

The project will be implemented under the Decentralised Implementation System (DIS) and the new Practical Guide to Phare, ISPA and SAPARD contract procedures (PRAG).

The Central Finance and Contracting Unit (CFCU) at the Ministry of Finance manages the programme and is responsible for administrative and financial management of the projects, which cover the tendering, contracting, accounting, payments and reporting as well as submission of documents to be endorsed by the Commission.

The Commission transfers funds to National Fund in accordance with the Memorandum of Understanding (MoU) signed between EC and the Government of Bulgaria.

The institution-recipient of the project is the Ministry of Energy and Energy Resources (MEER).

The beneficiary institution of the project is the Energy Efficiency Agency:

The EEA will appoint a high official as Project Leader. The EEA will provide necessary office space, equipment and general administrative support for a successful implementation of the project.

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¹ All investment components will be reviewed and their eligibility assessed by the twinner against priorities for the energy efficiency policy of Bulgaria. Figures are indicative.

² Renovation / rehabilitation / construction of buildings and other civil works, non-eligible under Phare rules, will be covered by the Bulgarian authorities.
6.2 Twinning component

The responsible person for twinning arrangement at the EEA is:

Mr Kolio Kolev, Director
Energy Efficiency Agency
37, Ekzarh Josif Str., 3rd floor, 1000 Sofia, Bulgaria
Tel.: + 359 2 915 40 14 Fax: + 359 2 981 58 02
Kkolev@SEEA.government.bg

6.3 Contracting Authority:
The Central Finance and Contracts Unit (CFCU),
Ministry of Finance, 102 Rakovski Str., 1040 Sofia, Republic of Bulgaria

6.4 Non-Standard Aspects
Non-standard procedures and/or aspects are not expected.
PRAG will be followed.
One Twinning contract is expected for the Institutional Building part of the project with a value of 0,750 m Euro.

6.5 Contracts
There will be three contracts:
- 1 twinning covenant under PHARE rules;
- 1 contract for supply of office and information equipment for the Information center,
- 1 contract for supply of equipment for the mobile measuring laboratory,

7. Implementation Schedule

7.1 Start of Tendering / call for proposals
March 2004

7.2 Start of Project Activity
October 2004

7.3 Project Completion
Expected date of last payment under last contract February 2007

8. Equal Opportunity

Equal participation in all sub-projects by women, men and ethnic groups will be achieved in all phases of the respective projects, funded under 2004 PHARE National Programme.

9. Environment
Improvement of EE and an enhanced use of RES to be promoted by the project will contribute to reduce green house gas emissions and other harmful impacts on the environment and will create conditions for much better individual and group behaviour vis-à-vis the environment in the country.
10. Rates of Return

The rate of return of an information service or a public education or promotion campaign in general cannot be directly measured, but at the present situation in Bulgaria, enhanced awareness of energy efficiency is likely to have significant positive impact on the end energy use. The same apply for energy auditing. The Project results are in the numerous direct and indirect free of charge and low cost opportunities for improvement of EE and is represented in very high (above the average) rates of return for the implied investments.

11. Investment Criteria

11.1 Catalytic Effect
According to the 2003 Regular Report of the European Commission on Bulgaria, “energy efficiency and enhanced use of renewable energy sources remain a point of concern and remain very low. Legislation needs to be completed. The Energy Efficiency Agency should be strengthened and be mandated with clear tasks”. The EEA is a new government agency facing the formidable task to promote EE and RES throughout Bulgaria. The initial assistance from this project will enable EEA to be effective and make a noticeable impact at a much earlier stage.

11.2. Co-financing
The total Phare support is of 1,000 MEUR and the national co-financing should not exceed 10% of the twinning funding total amount.
The co-financing for the Investment component will be 25% minimum.
The national co-financing will be provided from the state budget through the Directorate “National Fund”.

11.3. Additionality
No other financial support is given for the envisaged activities. The relevant equipment and materials for the needed training will be made available to the EEA, on a competitive basis.

11.4. Project Readiness and Size
The two contracts for supply are ready to be contracted, but both depend on the Twinning Component that is to support them as an integral part.

11.5. Sustainability
The activities are sustainable in that they enable EEA to perform the duties given to it under the EEA. EEA will continue the activities using its own budgetary funds and the Phare support could be viewed as an initial start up assistance. The activities are intended to introduce EU standards in Bulgaria and therefore to continue to be in agreement with the EU acquis. Ongoing maintenance and operation costs will be borne on the Bulgarian side by the EEA.
12. Conditionality and Sequencing

**Conditionality:**
1. Enforced Energy Efficiency Act before start of the project activities.
2. EEA engagement to secure at its own account normal office conditions and communicational means for the Twinner – office space, telephone, fax and Internet computer connection;
3. The Info-Centre supply of equipment under Activity 2 will be conditional to the effective and completed renovation of Info-Centre premises beforehand by the Bulgarian authorities and to the appointment of proper staff, i.e. at least one information technology expert and one public relations expert.

**Sequencing**

The Project will be a logical continuation of previous assistance financed by Phare and other donors. What is more, the Project could assure additional public support even for previous, actual and future Phare and other donors activities. Linkages shall be established with other Phare-supported activities in the energy sector.

** Annexes to Project Fiche**

1. Logical framework matrix;
2. Detailed implementation chart;
3. Contracting and disbursement schedule;
4. Reference to feasibility / pre-feasibility studies (No local studies available, EU EE and RES information, education and promotion best practices show that economic and financial appraisal and environmental impact assessments are not quantitatively possible, nevertheless they are priceless and compulsory part in every one successful energy and environmental policy).
**LOGFRAME PLANNING MATRIX FOR**
"Institutional Building at the Energy Efficiency Agency (EEA)"

<table>
<thead>
<tr>
<th>Programme name and number:</th>
<th>5. 2004 Phare National Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracting period expires:</td>
<td>30 November 2006</td>
</tr>
<tr>
<td>Execution of contracts period expires:</td>
<td>30 November 2007</td>
</tr>
<tr>
<td>Total Budget: (MEUR)</td>
<td>1.083</td>
</tr>
<tr>
<td>Phare contribution: (MEUR)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Annex 1 to Project Fiche**

**Overall Objectives:**
- To enable the EEA to assume the responsibilities given to it by the New Energy Efficiency Act;
- Enhance the EEA’s capacity to implement relevant legislation activities, assigned to it by the new Energy Act and Energy Efficiency Act, both to be adopted by the mid of 2004;
- Promote energy conservation in all sectors of the economy, aiming at reducing the energy intensity per unit of GDP and thereby increasing Bulgarian products competitiveness;
- Create favourable conditions for renewable energy sources (RES) utilisation.

**Objectively verifiable indicators**
- Uncoupling of economic growth and energy use,
- Reduction of GDP energy intensity
- Reduction of greenhouse gas emissions

**Sources of Verification**
- Annually by National Statistical Office
- Annual national communication on climate change to UNFCCC
- MEER Annual Report
- Ministry of Industry Reports
- Accession reports published by Ministry of European Integration and Ministry of Foreign Affairs

**Project Purpose**
- Enhance the EEA staff capacity to implement different policy and operational tasks under the new Energy Efficiency Act.
- Enhance the public awareness, information and positive attitude on energy efficiency (EE), RES, clean technologies and products, through National Energy Information Centre various activities.

**Objectively verifiable indicators**
- Effective realization of EEA duties
- Gap analysis of the existing legislation in energy efficiency and renewable energy matters completed
- Draft relevant secondary legislation prepared
- Methodologies and procedures for auditing, control and fulfilment of EEA tasks in place
- Monitoring and reporting scheme in place
- Means and procedure for up-to-date knowledge in place

**Sources of Verification**
- Annual Report of EEA Executive director to MEER and to Council of Ministers
- Increased attention in EE and RES by the mass media
- List of organizations and persons with interest on energy Center activities;
- Increased interest from investors
- Increased number of contracts concluded in the area of EE and RES

**Assumptions**
- Bulgarian Government must ensure further support to EEA within national priorities
- Political risk at the local level in accepting the new EEA.
- Adverse influence on mass media might keep their attention away from EE and RES.
• Enhance EEA’s capacity to implement different energy audits on buildings and/or installations, with regard to EE and RES projects requirements and to forthcoming buildings & goods Certification under respective EU Directives, through energy audits mobile equipment operation and activities.

<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced EEA staff capacity to implement different policy and operational tasks under the New Energy Efficiency Act.</td>
<td>Improved or new EEA functional structure;</td>
<td>EEA will keep list of information services provided by the centre establishing a database of clients</td>
<td>Energy information centre must project a competent image from the beginning so that to avoid adverse publicity</td>
</tr>
<tr>
<td>Established National Energy Information Centre and increased public awareness of energy efficiency and clean and renewable energies issues.</td>
<td>EEA activities enhanced, 18 persons trained;</td>
<td>Number of audits, training sessions and promotional events executed</td>
<td>Companies and other units need to cooperate in the EE audit training</td>
</tr>
<tr>
<td>Provided mobile measuring laboratory equipped with portable measuring instruments and computer software and hardware for different EE and RES audits, assessments, studies, training and promotion of different EE and RES technologies, measures and behaviour.</td>
<td>List of financial incentives to encourage the implementation of EE and RES projects and measures in the country;</td>
<td>List of trained persons;</td>
<td>Cooperation of Regions and Municipalities needed</td>
</tr>
<tr>
<td>Enhanced EEA’s capacity to implement different energy audits on buildings and/or installations, with regard to EE and RES projects requirements and to forthcoming buildings &amp; goods Certification under respective EU Directives;</td>
<td>Functioning of Energy Information Centre in EEA premises;</td>
<td>List of financial incentives adopted from the Council of ministers.</td>
<td></td>
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<tr>
<td></td>
<td>One energy bus equipped and operating;</td>
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<tr>
<td></td>
<td>Developed Standards, systems, methodology and software for energy audits, assessments, studies, training and promotion.</td>
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</tbody>
</table>

- EEA will keep list of information services provided by the centre establishing a database of clients
- Number of audits, training sessions and promotional events executed
- List of trained persons;
- List of financial incentives adopted from the Council of ministers.
<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strengthening EEA Policy-Making Capacity and Enhancing its Operational</td>
<td></td>
<td>• Activities should be in relation with the day-to-day work of EEA</td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Creation of National Energy Information Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Supply of Equipment and Mobile Measuring Laboratory for Energy Efficiency</td>
<td></td>
<td></td>
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<tr>
<td>and Renewable Energy Sources Audits, Assessments, Studies, Training</td>
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<tr>
<td>and Promotion.</td>
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</tbody>
</table>

* Must be quantified and measurable

Pre-condition
Enforced Energy Efficiency Act before start of the project activities.
## Detailed Implementation Schedule

<table>
<thead>
<tr>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
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<tr>
<td>9</td>
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</tr>
<tr>
<td>1</td>
<td>2</td>
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<td></td>
</tr>
</tbody>
</table>

### 1. Twinning - Strengthening EEA Policy-Making Capacity and Enhancing its Operational Activity

- Approval of tender documents
- Publication of tender documents
- Tender period
- Tender evaluation
- Contract preparation
- Endorsement of contract
- Signature of contract
- Beginning of work
- Implementation of project

### 2. Contract 2 – Creation of National Energy Information Center

- Approval of tender documents
- Publication of tender documents
- Tender period
- Tender evaluation
- Contract preparation
- Endorsement of contract
- Signature of contract
- Beginning of work
- Implementation of project
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of tender documents</td>
</tr>
<tr>
<td>Publication of tender documents</td>
</tr>
<tr>
<td>Tender period</td>
</tr>
<tr>
<td>Tender evaluation</td>
</tr>
<tr>
<td>Procurement contract preparation</td>
</tr>
<tr>
<td>Endorsement of procurement contract</td>
</tr>
<tr>
<td>Signature of procurement contract</td>
</tr>
<tr>
<td>Delivery of the bus</td>
</tr>
<tr>
<td>4. Contract 4 – Works and Supervision</td>
</tr>
</tbody>
</table>
### Cumulative Quarterly Contracting Schedule in Euro (€)

<table>
<thead>
<tr>
<th>Expected Contractual Commitments (Quarters)</th>
<th>2005 I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>2006 I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>2007 I</th>
<th>Budget Allocation (Phare Funds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Twinning - Strengthening EEA Policy-Making Capacity and Enhancing its Operational Activity</td>
<td>740 000</td>
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<td></td>
<td></td>
<td>740 000</td>
</tr>
<tr>
<td>2. Supply - Creation of National Energy Information Center - supply</td>
<td></td>
<td>140 000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>140 000</td>
</tr>
<tr>
<td>3. Supply - Supply of Equipment for Mobile Measuring Laboratory for Energy Efficiency and Renewable Energy Sources Audits, Assessments, Studies, Training and Promotion</td>
<td></td>
<td>133 000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>133 000</td>
</tr>
<tr>
<td>7. Works and supervision</td>
<td></td>
<td></td>
<td>55000</td>
<td></td>
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<td></td>
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<tr>
<td>Total (Phare Funds)</td>
<td>740 000</td>
<td>740 000</td>
<td>740 000</td>
<td>1 000 000</td>
<td>1 000 000</td>
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<table>
<thead>
<tr>
<th>Expected Contractual Commitments (Quarters)</th>
<th>2005 I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>2006 I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>2007 I</th>
<th>Budget Allocation (National Co-financing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Twinning - Strengthening EEA Policy-Making Capacity and Enhancing its Operational Activity</td>
<td>*</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td>*</td>
</tr>
<tr>
<td>2. Supply - Creation of National Energy Information Centre</td>
<td></td>
<td>50 000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>50 000</td>
</tr>
<tr>
<td>3. Supply - Supply of Equipment for Mobile Measuring Laboratory for Energy Efficiency and Renewable Energy Sources Audits, Assessments, Studies, Training and Promotion</td>
<td></td>
<td>33 000</td>
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<td>33 000</td>
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<td>4 Works and supervision</td>
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<td>15000</td>
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<td></td>
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<tr>
<td>Total (National Co-financing)</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>83000+*</td>
<td></td>
<td></td>
<td></td>
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<td>83 000 + *</td>
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</tbody>
</table>

* The national co-financing will not exceed 10% of the twinning funding total amount.
### Cumulative Quarterly Disbursement Schedule in Euro (€)

<table>
<thead>
<tr>
<th>Activity No.</th>
<th>Activity Description</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Budget Allocation (Phare Funds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>1. Activity No. Twinning - Strengthening EEA Policy-Making Capacity and Enhancing its Operational Activity</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>162,000</td>
<td>272,000</td>
<td>382,000</td>
<td>492,000 602,000 712,000 801,000</td>
</tr>
<tr>
<td>2.</td>
<td>2. Activity No. 2 Creation of National Energy Information Centre</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>45,000</td>
<td>65,000</td>
<td>85,000</td>
<td>102,000 102,000</td>
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</tr>
<tr>
<td>3.</td>
<td>3. Activity No. 3: Supply of Equipment for Mobile Measuring Laboratory for Energy Efficiency and Renewable Energy Sources Audits, Assessment, Studies, Training and Promotion Works and supervision</td>
<td></td>
<td></td>
<td></td>
<td>50,000 97,000</td>
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<tr>
<td></td>
<td>Total (Phare Funds)</td>
<td>162,000</td>
<td>272,000</td>
<td>382,000</td>
<td>587,000 764,000 894,000 1,000,000</td>
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</table>

### Disbursement (Payment) Schedule (Quarters) Budget Allocation (National Co-financing)

<table>
<thead>
<tr>
<th>Activity No.</th>
<th>Activity Description</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Budget Allocation (National Co-financing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1. Activity No. Twinning - Strengthening EEA Policy-Making Capacity and Enhancing its Operational Activity</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2.</td>
<td>2. Activity No. 2 Creation of National Energy Information Center</td>
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<tr>
<td></td>
<td></td>
<td>30,000</td>
<td>50,000</td>
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<td>50,000</td>
</tr>
<tr>
<td>3.</td>
<td>3. Activity No. 3: Supply of Equipment for Mobile Measuring Laboratory for Energy Efficiency and Renewable Energy Sources Audits, Assessment, Studies, Training and Promotion</td>
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<td>20,000</td>
<td>33,000</td>
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<tr>
<td></td>
<td>Total (National Co-financing)</td>
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<td></td>
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<td></td>
<td></td>
<td>*</td>
<td>*</td>
<td>50000+*</td>
<td>83000+*</td>
</tr>
</tbody>
</table>

* The national co-financing will not exceed 10% of the twinning funding total amount.
PHARE 2004 NATIONAL PROGRAMME
PROJECT No. BGXXXX.XX
“INSTITUTION BUILDING AT THE ENERGY EFFICIENCY AGENCY (EEA)”

NEEDS ASSESSMENT

Beneficiary: ENERGY EFFICIENCY AGENCY (EEA)

Project components:

Activity 1 – Twinning assistance for:
- EEA Policy actions implementation and enhancing its operational activity,
- Introducing the whole range of financial incentives to encourage the implementation of energy efficiency (EE) and renewable energy sources (RES) projects and measures in the country.
- Training of the EEA’s experts;
- Review and approval of the technical specification under Activities 2 and 3;

Activity 2 – Creation of National Energy Information Centre and its regional branches and supply of equipment for the Centre and its branches.

Activity 3 – Supply of equipment for a mobile measuring laboratory for EE and RES audits, assessments, studies, training and promotion.

CURRENT SITUATION ANALYSIS

EEA is organized in two Directions:
- “Energy efficiency and usage of RES” (21 positions, incl. Director),
- “Administrative, legal, finance and information services” (8 positions, incl. Director).

The total number of EEA staff is 31 permanent employees, including Executive Director, General Secretary, and two Directors.

The EEA “Energy efficiency and usage of RES” Direction activities are to:
- elaborate and implement programmes and projects on EE and RES;
- create and maintain national database information on EE and RES;
- elaborate guidelines for EE and RES database information creation and maintenance at sectoral, regional and municipal levels;
- provide assistance to heads of Ministries, regional governments and municipalities in relation to their tasks and duties under Article 143 from the Energy and Energy Efficiency Act (EEEA);
- elaborate and propose projects for normative acts in relation to EE and RES;
- organize different seminars, workshops, forums and meetings on EE and RES;
- perform energy audits, studies and assessments;
- realize transfer of EE and RES technologies, knowledge and experience;
- participate with own staff in EE and RES programmes and projects;
- contribute for the education and training of experts on EE and RES;
- provide consultancy services on EE and RES;
- assist in different EE and RES national and international programmes and projects financing and co-financing.
The EEA Administrative services Direction performs supporting administrative, legal, finance and information services for the EE and RES specialized Direction.

EEA is located in a state owned building at 37, Ekzarh Jossif Str. in Sofia, according to a mutual real estate usage contract between the Ministry of Economy and the Agency. This contract stipulates that EEA manages:

- The 3\textsuperscript{rd} and 4\textsuperscript{th} floors of the building east wing, also its 2\textsuperscript{nd} floor, envisaged for the National Energy Information Centre (see enclosed respective scheme plan-distribution). The EEA local computer network is in operation, reliably connected to the Internet via the Council of Ministers. All Agency working places are fully equipped;
- Three parking places in the underground garage in the same building, which separation and security are envisaged for the mobile laboratory under Project Activity 3.

CONCRETE NEEDS

I. EE and RES Direction functional structuring

The following structural changes/complements are necessary precondition for Project Activities 2 and 3 successful accomplishments:

- Unit for energy audits and analyses after EE and RES data base;
- Unit for euro-integration and EE and RES international organisations, promotion and training;
- Unit for EE and RES policy and policy actions.

II. Equipment for the EEA’s National Energy Information Centre (summary TS enclosed herein)

EEA will open EE and RES information centre to offer information, possibilities and conditions for national and international contacts on all EE and RES issues and matters, for all economic spheres.

The Info-Centre will be established at EEA premises on the 2\textsuperscript{nd} floor as a shop with technical library, meeting & show room, work places and annexes. The Centre activities will mainly be performed in the multifunctional meeting room, the technical reference and research library providing also access to databases (CADDET, ISO, OPET, etc.) and in its 5 branches in the country.

Description of the EEA National Energy Info-Centre premises

The Info-Centre premises are envisaged in the EEA immediate vicinity, in a new administrative public building in the very Centre of the capital city Sofia. Apart from EEA, this building serves also the Bulgarian National Audit Office Administration and a number of NGOs. The herewith-enclosed layout plan shows the distribution of the premises, namely:

- Multifunctional room for 150 persons when utilized for different meetings and/or seminars. The respective specifications envisage furniture and technical equipment needed for widest range of different events, simultaneous translations and Internet connections inclusive;
• Technical, reference and research library with needed equipment of three up-
to-date working places for visitors, one – for the EEA IT expert and one – for
the EEA PR expert. Almost all possible activities in this library will be
facilitated with appropriate and modern hardware, software and devices;
• Additional working places, initially for the PHARE project activities;
• Reception foyer with one visitor’s servicing working place and three seating
corners for visitors;
• Ladies and Gents sanitary spaces – in separate and different specification;
The Info-Centre functioning will be secured via the existing EEA computer and
phone networks with enlarged capacity – the respective necessary equipment is
envisaged herewith.

Needed EEA staff for day-to-day servicing in the Info-Centre
• IT expert
• PR expert

The Info-Centre basic data base information:
• Different EE and RES technologies, techniques and measures;
• Ways and means for funding EE and RES projects;
• EE and RES state policy, incentives, preferences, programmes and projects;
• ESCOs and NGOs data base;
• EE and RES best practices – experience, dissemination, contacts, etc.

Ways to present this information:
• Creation and maintenance of a special-purpose Web-site with worldwide
interactive connections;
• EE and RES workshops and seminars for targeted audiences;
• Exhibitions on EE and RES and clean technologies and products;
• EE and RES promotional and training materials;
• EEA will accumulate special record for different institutions, organisations,
companies, NGOs and individuals with activity on EE and RES and for all
those with day-to-day interests and visits in the Centre.

EEA National Energy Info-Centre Activities and Perspectives
The Info-Centre itself and its 5 regional branches will be permanent two-ways
information and contact “living bridges” for different countries, organizations and
individuals aimed at one better human society with its cleaner environment, via
most rational usage of all types and kinds of energy.

III. Supply of Mobile Measuring Equipment - Laboratory for EE and RES
Audits, Studies, Assessments, Training and Promotion (TS enclosed herein)

This equipment supply is an integral part of the Project Activity 3, which
encompasses:
• Development of standards for different energy audits;
• Development of a system for energy audits promotion among investors,
energy managers, central and local governments and administrations.
• Development of system for energy audits quality control;
• Development of on site training system for energy audits;
• Development of a system for energy audits training courses for energy
auditors, including received audits data keeping, systematization, analysis and
assessment;
• Development of a methodology with guide and reference books for energy
audits, control and supervision over energy consumers, according to the new
EEA provisions;
• Development of a system for EE and RES promotion and advertisement via
the mobile prepare guidelines and rules how to perform different energy
audits, studies, assessments, training and promotion and shall train 7 experts
(to be nominated by EEA), together with set of standard model specifications,
standards and printed forms for all types of energy audits, training and
promotion, as well as guidelines and rules for licensing this activity to
companies and/or organisations licensed and/or authorised by the EEA; this
will include ways of data collecting, calculating, assessing, filing, presenting
and sending, as well as main conclusions and recommendations for every EE
and RES audit, training and/or promotion.

 **EEA Department in charge**

In order to be able to operate with the mobile laboratory equipment, 5 EEA’s staff
members will be trained and structured into “Energy audits and analyses” unit.

Main kinds of energy audits, assessments and analyses:
• Measurement of O$_2$ air ratio and combustion efficiency pressure and
temperature of flue gases;
• Measurement of CO/CO$_2$ of flue gases;
• Measurement of SO$_2$/ H$_2$S of flue gases;
• Measurement of NO / NO$_2$ of flue gases;
• Measurement of dust; of caloricity; of humidity;
• Measurement and analysis temperature of fluids;
• Measurement and analysis of fluid flow;
• Measurement and analysis temperature of solid;
• Measurement and analysis LV and MV grid operation;
• Measurement of electrical current, voltage and power;
• Measurement and analysis of building constructions, building and insulation
materials and thermal bridges;
• Measurement and analysis of different technology ranges, separate units and
pipelines.

 **Energy audits and analyses potential clients – all energy users and end-
users, namely:**
• Enterprises in the energy sector – power energy production, transportation
and distribution; heat energy production, transportation and distribution;
• Industrial enterprises;
• State and municipality owned buildings and sites;
• Municipalities and municipal companies, sites and buildings;
• SMSEs,
• Individuals (different means of transportation, household appliances,
habitations, installations, etc.)

 **Energy audits and analyses perspectives in the Republic of Bulgaria**

Especially in the forthcoming real market conditions in the country, and in
connection with different EE and RES projects requirements, and the
forthcoming national implementation of the EU 2002/91/EC Directive on energy
performance of buildings - considerable, numerous and cost-effective.

**Enclosure:**
1. TS for the Energy Info-Centre (Project Activity 2);
2. TS for the mobile laboratory (Project Activity 3);
### Phare 2003 National Programme
"Institution Building at the Energy Efficiency Agency (EEA)"

**Technical Specification for Equipment for a National Energy Information Centre**

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Designation</th>
<th>Quantity</th>
<th>Unit Price in EUR</th>
<th>Total Price in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Equipment for Information Centre</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Multimedia Projector + support + screen</td>
<td>1</td>
<td>5 800</td>
<td>5 800</td>
</tr>
<tr>
<td>1.2</td>
<td>Multifunctional digital copy system</td>
<td>1</td>
<td>6 500</td>
<td>6 500</td>
</tr>
<tr>
<td>1.3</td>
<td>Overhead Projector + support + screen</td>
<td>1</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>1.4</td>
<td>Documents destroying device</td>
<td>1</td>
<td>250</td>
<td>250</td>
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<tr>
<td>1.5</td>
<td>Laminator</td>
<td>1</td>
<td>200</td>
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</tr>
<tr>
<td>2</td>
<td><strong>IT Equipment</strong></td>
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<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Work Station (PC) - (10 PC for the Centre + 5 PC for the regional antennas)</td>
<td>15</td>
<td>1 600</td>
<td>24 000</td>
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<tr>
<td>2.2</td>
<td>Recording Device CD ROM</td>
<td>3</td>
<td>140</td>
<td>420</td>
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<tr>
<td>2.3</td>
<td>Printer</td>
<td>5</td>
<td>420</td>
<td>2 100</td>
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<td>2.4</td>
<td>Uninterruptible power supply device (UPS)</td>
<td>8</td>
<td>120</td>
<td>960</td>
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<td>2.5</td>
<td>Documents management integrated system</td>
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<td>Power stroke screen</td>
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<td>1 200</td>
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<tr>
<td>3</td>
<td><strong>Communication system</strong></td>
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<td>3.1</td>
<td>Video recorder</td>
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<td>580</td>
<td>580</td>
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<tr>
<td>3.2</td>
<td>TV set 32” with movable support for audio-video components, CDs, videotapes, etc.</td>
<td>1</td>
<td>1 500</td>
<td>1 500</td>
</tr>
<tr>
<td>4</td>
<td><strong>Interpretation and Information</strong></td>
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<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Simultaneous Interpretation System</td>
<td>1</td>
<td>9 000</td>
<td>9 000</td>
</tr>
<tr>
<td>4.2</td>
<td>Remote microphones + supports</td>
<td>8</td>
<td>40</td>
<td>320</td>
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<tr>
<td>4.3</td>
<td>Programmable luminous outdoor info panel</td>
<td>1</td>
<td>1 000</td>
<td>1 000</td>
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<tr>
<td>5</td>
<td><strong>Technical library with databases as per a list made by the twinner</strong></td>
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<tr>
<td>6</td>
<td>Supply of furniture for the info-centre</td>
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<td></td>
<td><strong>TOTAL:</strong></td>
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<td>105 000</td>
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<tr>
<th>Pos.</th>
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<th>Quantity</th>
<th>Unit Price in EUR</th>
<th>Total Price in EUR</th>
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<tr>
<td></td>
<td>Renovation of premises</td>
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<td><strong>TOTAL:</strong></td>
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<td>50 000</td>
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* National co-financing
**Phare 2003 National Programme**  
"Institution Building at the Energy Efficiency Agency (EEA)"

Technical Specification for **One Mobile Measuring Laboratory**  
for energy audits, evaluations, investigations, training and promotion

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Designation</th>
<th>Quantity</th>
<th>Total Price in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Equipment for Gas Content, Dust and Humidity Measurement</strong> (within a Special Light Cross-Country Vehicle, item 6)</td>
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<td>13 000</td>
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<tr>
<td></td>
<td>1.1 Portable Gas Analyser for O₂, CO, CO₂, SO₂, NOₓ, CₓHₓ, H₂S measurements</td>
<td>1 cpl</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2 Dust, Humidity and Caloricity Measuring Equipment</td>
<td>1 cpl</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>Equipment for Heat and Flow Measurements</strong></td>
<td></td>
<td>53 000</td>
</tr>
<tr>
<td></td>
<td>2.1 Portable Equipment for Heat Measurement and Analysis of the temperature of fluids</td>
<td>1 cpl</td>
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<tr>
<td></td>
<td>2.2 Ultrasonic Flow Meter for Measurement and Analysis of Fluid Flow</td>
<td>1 cpl</td>
<td></td>
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<tr>
<td></td>
<td>2.3 Infrared Thermovision System</td>
<td>1 cpl</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Personal Safety and Maintenance Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.1 Personal Safety Outfit</td>
<td>2 cpl</td>
<td>1 530</td>
</tr>
<tr>
<td></td>
<td>3.2 Maintenance equipment (Service Tools Set and other equip.)</td>
<td>1 cpl</td>
<td>1 180</td>
</tr>
<tr>
<td>4</td>
<td><strong>Electrical Measurement Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.1 Low Voltage Power Quality Analyser</td>
<td>1 cpl</td>
<td>7 200</td>
</tr>
<tr>
<td></td>
<td>4.2 Universal Power Tester (measurement of electrical current, voltage and power)</td>
<td>1 cpl</td>
<td>1 550</td>
</tr>
<tr>
<td></td>
<td>4.3 Electrical Clamp Meter</td>
<td>1 cpl</td>
<td>1 050</td>
</tr>
<tr>
<td></td>
<td>4.4 Digital Multimeter</td>
<td>1 cpl</td>
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<tr>
<td></td>
<td>4.5 Mini stroboscope</td>
<td>1 cpl</td>
<td>1 450</td>
</tr>
<tr>
<td></td>
<td>4.6 Lux Meter</td>
<td>1 cpl</td>
<td>1 080</td>
</tr>
<tr>
<td>5</td>
<td><strong>PC Hardware and Software</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.1 Printer</td>
<td>2 units</td>
<td>840</td>
</tr>
<tr>
<td></td>
<td>5.2 Software for calculation of qualitative and Quantitative Indices of Lighting Fixtures</td>
<td></td>
<td>1 530</td>
</tr>
<tr>
<td></td>
<td>5.3 Software for Audits and Technological Analyses for parts: constructional, electrical, heating and ventilation</td>
<td></td>
<td>3 270</td>
</tr>
<tr>
<td></td>
<td>5.4 Software for Drawing up Projects for parts: architectural, constructional, electric fittings, heating and ventilation</td>
<td></td>
<td>3 370</td>
</tr>
<tr>
<td>6</td>
<td><strong>Special Light Cross-Country Vehicle</strong></td>
<td>1 unit</td>
<td>33 260</td>
</tr>
<tr>
<td>7</td>
<td><strong>Mobile Wireless Telecommunication Device</strong> (approx. covering range 5 km)</td>
<td>2 cpl</td>
<td>2 040</td>
</tr>
<tr>
<td>8</td>
<td><strong>Apparatuses for visual investigations</strong> (video Cameras, Photo Camera, Scanners)</td>
<td></td>
<td>7 000</td>
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<tr>
<td></td>
<td><strong>TOTAL:</strong> 133 000</td>
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