STANDARD SUMMARY PROJECT FICHE

1. Basic Information

1.1 Désirée Number: CZ2003/004-338.02.02
1.1.1 Twinning Number: CZ03/IB/EY/01

1.2 Title: Implementation of EC Directives on Energy Efficiency

1.3 Sector: Internal Market and Economic Criteria

1.4 Location: Czech Republic

2. Objectives

2.1 Overall objective

Ability to take on the obligations of EU membership, including the adherence to the aims of political, economic and monetary union.

2.2 Project purpose

To improve the quality of the statistics of renewable energy sources and to ensure full compliance with EU legislation, Directive 2001/77/EC and Council Recommendation 88/349/EEC in particular, to facilitate and accelerate the introduction of energy conservation and use of environmentally sustainable technologies in buildings and to analyse compatibility of the Czech legislation on energy efficiency with EU legislation.

2.3 Accession Partnership/Action Plan/ and NPAA priority

AP priority (Accession Partnership 2001): This project addresses an AP priority in the energy field to improve energy efficiency, enhance the use of renewable energy sources and strengthen the relevant institutions in this area.

It also refers to the priority of the “Action Plan 2002” for reinforcement of administrative and judicial capacity of the CR. The project aims to ensure full compliance with the key EU legislation in the fields of Renewable energy Sources (RES) and Rational Use of Energy (RUE), namely with the Directive 2001/77/EC, the Council Recommendation 88/349/EEC, and the proposal for a Directive on the Energy Performance in Buildings, and to strengthen the administrative capacity of the Ministry of Industry and Trade (MoIT) and capacity building of the Czech Energy Agency (CEA).

The Regular Report 2002 stated that in order to complete preparations for membership the Czech Republic’s efforts now need to focus on full and timely implementation of legislation, in particular with regard on further efforts in the field of energy efficiency and renewable energy, as well as on further strengthening of administrative capacity of the newly established bodies, in particular the energy efficiency agency.

NPAA 2001:

priority chapter 14 Energy (May 2001)

- Short – term:
  Publishing of relevant decrees to the Act no. 406/2000 Coll. on Energy Management, in accordance with EU acquis;
  Elaboration of the National Programme for Economical Energy Management and Use of Renewable and Secondary Energy Sources for the four-year term, in accordance with the Energy Management Act;
  Supporting energy efficiency increase on the basis of the Energy Management Act and relevant decrees;

- Medium – term:
  Supporting energy efficiency increase on the basis of the Energy Management Act and relevant decrees and in connection with National Programme for Economical Energy Management and Use of Renewable and Secondary Energy Sources.

2.4 Contribution to National Development Plan

This project is in line with the Sectoral Operational Programme 2002-2006 (SOP) Industry. One of its main priorities is developing and increasing the efficiency of the energy industry and energy savings trends.

2.5 Cross Border Impact

n.a.
3. Description

3.1 Background and justification

The Czech Republic shall harmonize its legislation with the legislative standards of the EU as well as with the principles of the International Energy Agency, of the Energy Charter Treaty and its Protocol on Energy Efficiency and Related Environmental Aspects. The project aims to improve the quality of the statistics of renewable energy sources in the Czech Republic, which is necessary for the implementation of the Directive 2001/77/EC and Council Recommendation 88/349/EEC. Furthermore, it aims to facilitate and accelerate the introduction of energy conservation and use of environmentally sustainable technologies in sustainable housing and to analyse compatibility of Czech legislation on energy efficiency with the new Directive on Energy Performance of Buildings and thereby to support the energy efficiency in buildings in the Czech Republic.

Part A Strengthening of RES statistics in the Czech Republic

Renewable energy sources are renewable non-fossil energy sources - wind, solar, geothermal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases. Renewable Energy Sources data collection in the Czech Republic is under the responsibility of the Energy Statistics Unit at the Ministry of Industry and Trade (MoIT). The data collection system is based on MoIT’s Annual Questionnaire of Renewable Energy Sources, on special parts of CSO’s annual questionnaires and partly on information from other governmental and non-governmental organisations (Czech Energy Agency, Energy Regulatory Office, etc.). The questionnaires and data processing is based on principles and methodology of Joint Annual Questionnaires of IEA/EU/UN and works well.

The main problem, which is necessary to be solved concerns the improvement of the data collection system from existing producing. It also is necessary to create a flexible RES Statistical Register, which should contain data about reporting units (private companies, public services, households, etc.) producing electricity and heat from RES. This register has to be continually updated, because many reporting units change their energy sources in process of the year.

This project should provide recommendations on the optimal range and the optimal structure of this Register on the basis of experiences in EU Member States with flexible Renewable Energy Sources Statistical Registers, and how to register small reporting units producing electricity and heat from Renewable Energy Sources (small Autoproducers, Households etc.). Primary targets of this project are: development of strategy of finding these small reporting units and improvement of the statistical data processing by these small reporting units (sources consumption; electricity and heat production).

This part of the project should contribute to improve the quality of data collection of Renewable Energy Sources in the Czech Republic. The quality of RES statistics depends on quality of register of RES data collections respondents and methodology of optimalisation of register range.

The project is very important for energy statistics in the Czech Republic and will help to fulfil requirements of the EC Directives and Recommendations, Directive 2001/77/EC (on the promotion of electricity produced from Renewable Energy Sources in the internal electricity market) and Council Recommendation 88/349/EEC (on developing the exploitation of Renewable Energy Sources in the Community), Regulation 696/93 on the statistical units for the observation and analysis of the product system in the Community, and Regulation 2186/93 on Community co-ordination in drawing up business registers for statistical purposes. The register to be drawn up in the Czech Republic should respect these European standards for businesses.) Functional RES data collection system should provide basic information for energy savings and energy efficiency supporting programme.

Part A of the project „Strengthening the EC Directives implementation on Energy Efficiency” is a priority for the MoIT, that is responsible for implementation and disposition of the Directive 2001/77/EC (on the promotion of electricity produced from Renewable Energy Sources in the internal electricity market; reference values for national indicative targets for the contribution of electricity produced from RES to gross electricity consumption – Article 3 and Annex of the Directive). High-quality statistical RES data are necessary for proper functioning of operating mechanisms of support for RES at the national level (the aim of the Directive 2001/77/EC). Both beneficiaries of this project – the Ministry of Industry and Trade and the Czech Energy Agency – are responsible for supporting of the development of RES in the Czech Republic.

The Ministry of Industry and Trade will coordinate results from this project with Czech Statistical Office. This office is the official body for international questionnaires.

Part B - Strengthening the implementation of the acquis on energy efficiency

The Czech Energy Agency (CEA) is focused on reduction of energy consumption and on developing the use of renewable and secondary energy sources. In order to achieve the goals fixed in the National Energy Policy in the field of energy use, CEA initiates projects addressed to accomplishing high efficiency of energy consumption. Consequently, CEA disseminates the results achieved and make the public aware of the
procedures, technologies and materials used. The results of these activities depend on introduction of the latest legislation and technical standards.

The key Czech legislation in the field of energy use is the Energy Management Act No. 406/2000 Coll. This act determines which thermo-technical parameters of buildings and constructions must be evaluated in order to accomplish the corresponding effective energy use. The Decree No. 291/2001 Coll., issued pursuant to this act, determines the particular criteria to be met. However, this principle is valid for construction and modernisation of buildings with consumption of heat higher than 1500 GJ per year if they are financed by public financial means. The whole construction and modernisation of household apartment houses and public buildings must then only observe the National Technical Standard. In all cases however, only the thermal input for heating is being evaluated.

The main purpose of this project is reinforcement of Energy Management Act in the sphere of relevant regulations and technical standards to achieve higher quality of new buildings and improve quality of existing buildings through higher thermal insulation and using of the potential of energy savings.

Enforcement of professional knowledge and skills of local experts, technicians and investors brings higher effectiveness in the utilisation of renewable and non-traditional sources of energy and minimise negative environmental impacts of energy use. Identification of the European principles of higher effectiveness of energy utilisation in buildings will be a basement of success of this project.


• improving thermal performance of building envelopes to minimize cooling and heating loads
• improving thermal performance and energy-efficiency of ventilation and lighting systems
• introducing cost effective retrofit concepts for building with the newest energy saving technologies.

In order to achieve these goals in the EU countries, the Commission presented the amended proposal for a Directive of the European Parliament and the Council on the energy performance of buildings in April 2002. The objective of this Directive is to promote the improvement of the energy performance of buildings, taking into account climatic and local conditions, as well as indoor climate requirements and cost-effectiveness. This Directive lays down requirements as regards:

• the general framework for a methodology of calculation of the integrated energy performance of buildings
• the application of minimum requirements on the energy performance of new buildings
• the application of minimum requirements on the energy performance of large existing buildings that are subject to major renovation
• energy certification of buildings
• regular inspection of boilers and air-conditioning systems in buildings and in addition and assessment of the heating installation in which the boilers are older than 15 years.

By reason of the Czech Republic’s accession to the EU, there is a need of legislation on energy efficiency harmonised with that of the EU countries. Within the framework of the proposed project, a compatibility of the Czech legislation on energy efficiency with the new Directive on Energy Performance of Buildings shall be analysed. Output of this analysis will indicate what necessary legislation amendments shall be done.

3.2 Linked activities:

Multi-country Phare projects:

  The main objectives of this project were energy statistics and reporting systems in manufacturing and production enterprises, methodology of survey and data analysis. According to the project results, Ministry of Industry and Trade elaborated new versions of questionnaires and adapted methodology of data processing and data analysis.
• “Networking/Twinning, Multi-country Programme - Energy Sector, Energy Efficiency in Central Europe”, contract 276910/0004; PHARE project by the help of E.V.A. Austria, 1997,1998

National Programme Phare project:

• The Twinning Project (CZ 00.04.04) „Strengthening Regulation and Enforcement of Energy Acquis” of the Phare 2000 Programme;
• The Twinning Project (CZ 01.04.06) „Electricity Market Operator” of the Phare 2001 Programme;
• The Technical Assistance Project (2002/000-282.04.11) „Strengthening of the State Energy Inspectorate” of the Phare 2002 Programme;
• Energy Policy and Structure of the CEA – PHARE project by the help of ADEME, 1996;
SAVE - PILOT PROJECT Monitoring and Targeting in the Czech and Slovak Republics;
Seminar in the framework of SAVE II, EC "Extension of ESCO/TPF Involvement in Public Sectors in the Czech Republic;
SAVE 1999 - Audits for the Czech and Slovak Republics;
SAVE PILOT PROJECTS 98: Guides for Local Authorities in the Czech and Slovak Republic and Romania;
SAVE II: Information Campaign For the Supporting Energy Efficiency Activities and Dissemination of Benefits
SAVE II - Programme in the Czech Republic and the Slovak Republic (Monitoring and Targeting; Analysis of legal, administrative and regulatory obstacles; Good practice guides for local authorities)
Dutch Low Energy Houses in Svitavy” in co-operation with BOWCENTRUM International.

Linkage / overlapping
Part B of this project is complementary to project “Strengthening of the State Energy Inspectorate”, which main purpose is: To increase energy efficiency through correctly performed energy audits and more efficient regional energy plans. In order to avoid overlapping this project will continue on experiences obtained for the State Energy Inspectorate.

Part A of this project partly depends on correct functioning of the Energy Regulatory Office (ERO), consequently also on results of the 2000 project, since the Energy Statistics Unit of Ministry of Industry and Trade should get from ERO statistical information about electricity balance.

For Part B: Some projects carried at the European Commission (at DG RTD and DG JRC) have as their aim to draw up inventories of technologies linked to RES. CEA should be aware of their activities in order to avoid duplication of work

3.3 Results:
The following guaranteed results should be achieved by this project:

Part A
- Study about the Renewable Energy Sources (RES) statistics in EU including calculation of electricity and heat production from RES in hybrid energy plants, which use both RES and conventional energy sources (coal etc.)
- Developed statistical methods (based on above mentioned study) of RES data collection system in the Czech Republic based on the experiences of EU member countries (draft procedural guidelines) including method of flexible statistical register of reporting units
- Functional data collection system and created flexible statistical register of reporting units producing electricity and heat from RES and the methodology for its continually updating - practical realization of the methods above mentioned through the annual statistical data collection and data processing (+ monitoring of the monthly and annual data collection on electricity, which affects also renewable energy sources)
- MoIT’s staff trained in the methodology of the RES data collection and in the requirements of the Directive 2001/77/EC on the RES statistics

Particular focus will be put on skills development of relevant staff, in order to ensure that MoIT experts understand the methodology of the RES statistics, the creating the flexible Statistical Register of Reporting Units producing electricity and heat from RES and should be able to perform requirements of the Directive 2001/77/EC on the RES statistics.

Part B
- Comparative study on the EC Directive COM/2002/192) and the Czech (Energy Management Act No. 406/2000 Coll.) legislation in the field of energy efficiency
- Draft amendment of the Energy Management Act (No. 406/2000 Coll) and related decrees on energy audits and energy certification of buildings
- Market segment analysis on energy performance in buildings. This analysis should contain a study about actual energy efficiency in the selected public buildings, selected tools for improvement of energy efficiency to the required level and system of financing from public and private funds. This analysis should be directed on the European principles of higher effectiveness of energy utilisation in buildings.
- Trained CEA’s and MoIT’s staff and local experts
- Procedural guidelines in the following areas:
  - Thermo-technical and energy characteristics of buildings;
  - Energy certification of buildings
  - Systems of economic assessment of energy savings;
• Methods of financing of energy savings;
• These guidelines should be in the form of a manual for investors, architects and designers for dissemination of information about the rules of low energy consumption in buildings.

In particular, this includes:
• Accomplished draft amendment of Energy Management Act and accomplished Market segment analysis on energy performance in public buildings in selected area.
• Accomplished procedural guidelines for investors, architects, designers and inhabitants
• Harmonisation of the national legislation in the field of energy performance in buildings with the EU requirements
• Approx. of 40 top experts of CEA and MoIT, authorized engineers and energy auditors will be directly trained in the modern approaches to propose measures for a high efficiency of energy performance in buildings
• About of 20 experts from CEA and MoIT, selected chief building physicists and energy engineers will be trained in the elaboration of legislative and incentive tools to increase the energy efficiency in buildings that are comparable with EU standards

3.4 Activities

Part A: Twinning
• Elaborating of study about the Renewable Energy Sources statistics in EU including calculation of electricity and heat production from RES in hybrid energy plants, which use both RES and conventional energy sources (coal etc.) (Directive 2001/77/EC purpose)
• Developing of statistical methods of collection and statistics on renewable energy sources, including amendment of the statistical methods and data compilation, aimed to get them up to EU/EIA standards
• Affording assistance, advice and guidance in preparation and realisation of one annual statistical data collection and data processing of the RES in the Czech Republic
• Advising, preparing and training, of MoIT staff in a field of creation and using the RES data collection and in creation of flexible Statistical Register of Reporting Units producing electricity and heat from RES in the Czech Republic (seminars in CR, study visits to EU counterpart)

The Twinning Covenant will include:
• A Pre-Accession adviser (PAA), for 12 months, to coordinate project realization, to coordinate elaboration of study, draft procedural guidelines, to coordinate assistance in annual data collection and to organise and coordinate training of the MoIT staff in methodology of RES data collection (approx. 0,16-0,18 M€)
• Approximately 3-4 Short-term Experts (STEs), to stay for 2-3 months, to provide training through seminars; to elaborate a training manual and draft procedural guidelines in the methodology of creating reporting units register, data collection and data processing; to afford assistance, advice and guidance in preparation and realisation of one annual statistical data collection and data processing of the RES in the Czech Republic. The experts have to bring to the Czech Republic the practical experiences (study visits, seminars) about the Renewable Energy Sources data collection and procession in EU countries. (approx. 0,150 M€ and translation costs 0,030 M€)
• Study visit to EU counterpart for Czech experts. (approx. 10 experts for one week apx 0.016 €)

Short-term experts input:
STE No. 1
Preparing of study about the Renewable Energy Sources statistics in EU.

STE No. 2
Affording assistance in preparation and realisation of one annual statistical data collection and data processing of the RES in the Czech Republic.

STE No. 3
Preparing of draft procedural guidelines for Czech Republic in the methodology of creating reporting units register, data collection and data processing.

STE No. 4
Preparing of training materials, seminars in the Czech Republic and study visits to EU counterpart for Czech Experts.

Part B: Technical Assistance
• Elaboration of comparative study about the Czech and EU energy efficiency legislation
• Training workshops and seminars for advising, preparing and training of experts (MoIT, CEA and local experts) on energy efficiency in building
• Providing (through the seminars, trainings, analyses) the Directive on energy performance in buildings on selected segment of market (public sector) in the specific region with high-energy consumption. Elaboration of market segment analysis on energy performance in some selected public buildings. This analysis should contain a study about actual energy efficiency in the selected public buildings, selected tools for improvement of energy efficiency to the required level and system of financing from public and private funds.
• Elaboration of procedural guidelines on technical design for investors, architects, designers and inhabitants how to design, judge and operate buildings with effective energy utilisation; in particular in areas:
  ➢ Thermo-technical and energy characteristics of buildings;
  ➢ Energy certification of buildings
  ➢ Systems of economic assessment of energy savings;
Methods of financing of energy savings;
• Implementation of the new Directive on Energy Performance of Buildings into Czech legislation
  It will include appx 6 months Short-term Expert (STE) input in order to provide analysis how the EU directive (Energy Performance in Buildings) is implemented and included in the national legislation of individual EU countries in its framework;
• STE input in order to provide training through seminars, elaborate a training manual and draft procedural guidelines
• The experts have to bring to the Czech Republic deep expertise in the given field, modern methods of work and schemes as they are provided in the EU countries
• They could be from different countries (with respect to heterogeneity of problems). The training should proceed 6 months

3.5 Lessons learned
This project is the fourth Project within the Phare Programme concerning the new institutional framework in the Czech energy sector. It can be used the experiences of preparing seminars for Czech energy experts, of analysis of the Czech energy legislation and energy market.

4. Institutional Framework

The Ministry of Industry and Trade (MoIT) provides short term (monthly, quarterly, etc.) and special statistics (renewable, oil products – filling stations, etc.). The data collection system is based on MoIT’s Annual Questionnaire of Renewable Energy Sources “ENG (MPO 4-01)”, on special parts of CSO’s annual questionnaires “EP- 10-01” and partly on information from other governmental organisations (Energy Regulatory Office, Czech Energy Agency). Renewable energy sources statistics is also provided by the Czech Statistical Office, therefore Part A activities of this project will be co-ordinated with the CSO. The Ministry of Industry and Trade is responsible for the implementation of the Directive 2001/77/EC (on the promotion of electricity produced from Renewable Energy Sources in the internal electricity market) and Council Recommendation 88/349/EEC (on developing the exploitation of Renewable Energy Sources in the Community).

The Czech Energy Agency (CEA) is responsible for the promotion of activities leading to a sustainable and constant increase of effective energy utilisation, advertising the energy effective steps and approaches. To fulfill these goals, it utilises Energy Management Act (Act No. 406/2000 Coll.), the MoIT Decree No. 291/2001 Coll. determining the details of the efficiency of energy utilisation by heat consumption in buildings, and the technical standards – CSN 730540. For the purpose of this, it utilises the Government Programme for the Support for Energy Conservation and the Utilisation of Renewable and Secondary Sources of Energy. The MoIT is preparing this programme. This programme provides a framework for the formulation of conditions for providing the State Subsidies from the State budget so that the subsidised projects could reach as high effectiveness of energy utilisation as it is possible. These examples influence the investor’s decision and contribute to the development of sustainable energy building.
5. Detailed Budget (mil. €)

<table>
<thead>
<tr>
<th>Project Component(s)</th>
<th>Phare Support M€</th>
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<tbody>
<tr>
<td></td>
<td>Investment Support</td>
</tr>
<tr>
<td>(1) Twinning Covenant</td>
<td>0.4</td>
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<tr>
<td>(2) Technical Assistance</td>
<td>0.6</td>
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<tr>
<td>Total</td>
<td>1.0</td>
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6. Implementation Arrangements

6.1 Implementing Agency

The CFCU is the Implementing Agency responsible for tendering, contracting and accounting. Responsibility for technical preparation and control will remain with the beneficiary Ministry of Industry and Trade, Czech Energy Agency.

The Technical Assistance contact person:

Mr. Josef Bubeník, Director of the Czech Energy Agency, U Sovových mlýnu 9, 118 00, Prague 1, Tel.: (+420) 257 099 021, Fax: (+420) 257 530 478, e-mail: bubenik@ceacr.cz.

Project Manager:
Mrs. Irena Plocková, Czech Energy Agency, U Sovových mlýnu 9, 118 00, Prague 1, Tel.: (+420) 257 099 034, Fax: (+420) 257 530 478, e-mail: plockova@ceacr.cz.

6.2 Twinning

The Twinning contact person:

Mr. Richard Nouza, Director of the Raw Material Policy Department, Ministry of Industry and Trade of the Czech Republic, Na Františku 32, 110 15, Prague 1, Tel.: (+420-2) 2485 2361, Fax: (+420-2) 24852544, e-mail: nouza@mpo.cz.

Project Manager:
Mr. Antonín Beran, Energy Statistics Unit, Ministry of Industry and Trade of the Czech Republic, Na Františku 32, 110 15, Prague 1, Tel.: (+420) 22485 2335, Fax: (+420) 224852544, e-mail: beran@mpo.cz.

6.3 Non-standard aspects: N/A

6.4 Two Contracts:
(1) Twinning Covenant: 0.4 mil. €
(2) Technical Assistance: 0.6 mil. €

7. Implementation Schedule

Twinning
7.1 Call for proposals: 1Q/2003
7.2 Start of project activity: 4Q/2003
7.3 Project Completion: 4Q/2004

Technical Assistance
7.1 Start of tendering: 3Q/2003
7.2 Start of project activity: 1Q/2004
7.3 Project Completion: 2Q/2004

8. Equal Opportunity

Equal opportunity principles and practices in ensuring equitable gender participation in the Project will be guaranteed.

9. Environment

n.a.

10. Rates of Return
11. Investment Criteria
n.a.

12. Conditionality and Sequencing
All Czech Acts and Decrees, relevant for this project, are already in force.
The Act No. 89/1995 Coll., on The State Statistical Service, as last amended by Act No. 202/2002 Coll., and
Act No. 320/2002 Coll.
The Act No. 406/2000 Coll. on energy management.
The project is partly conditional to the continuation of the implementation of the Directive 2001/77/EC (on the
promotion of electricity produced from Renewable Energy Sources in the internal electricity market) into the

ANNEXES TO PROJECT FICHE

1. Logframe planning matrix
2. Detailed implementation chart
3. Contracting and disbursement schedule
**LOGFRAME PLANNING MATRIX**

<table>
<thead>
<tr>
<th>Project title: Implementation of EC Directives on Energy Efficiency</th>
<th>Programme number: CZ2003/004-338.02.02</th>
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<tbody>
<tr>
<td><strong>Beneficiary institutions:</strong></td>
<td></td>
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<tr>
<td>Ministry of Industry and Trade (MoIT), Czech Energy Agency (CEA)</td>
<td>Contracting period expires: 31/10/2005</td>
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<td></td>
<td>Disbursement period expires: 31/10/2006</td>
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<tr>
<td>Total budget: <strong>1.0 M €</strong></td>
<td>Phare budget: <strong>1.0 M €</strong></td>
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<tr>
<th>Overall objective</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
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<tr>
<td>Ability to take on the obligations of membership, including the adherence to the aims of political and economic union in the line with the Directive 2001/77/EC and Council Recommendation 88/349/EEC; and Draft Directive COM/2002/192 on Energy Performance of Buildings</td>
<td>• Acknowledgement by the European Commission</td>
<td>• EU Regular Report</td>
</tr>
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</table>

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<tr>
<th>Project purpose</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
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</table>
To harmonize the Czech legislation with the EU legislation and to implement experiences of EU member countries in the field of RES (renewable energy sources) and support of energy efficiency. It is necessary for the implementation of the Directive 2001/77/EC, Council Recommendation 88/349/EEC, and Draft Directive COM/2002/192 on Energy Performance of Buildings

**Part A**: in the field of renewable energy sources

- Functional data collection system of Renewable Energy Sources in the Czech Republic, which covered renewable energy producers with installed capacity above 500 kW.


- 20–30% reduction of energy consumption in new and modernized buildings by the strengthening of energy performance between 2004 – 2008

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### Results

<table>
<thead>
<tr>
<th>Part A:</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
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<tbody>
<tr>
<td>- Study about the Renewable Energy Sources statistics in EU including calculation of electricity and heat production from RES in hybrid energy plants also using conventional energy sources (coal etc.)</td>
<td>- Accomplished study about the Renewable Energy Sources statistics in EU</td>
<td>Project Final Evaluation Report</td>
<td>The co-operation between governmental statistical offices and non-governmental or private organisation</td>
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<td></td>
<td>- Accomplished draft procedural guidelines of the methodology of RES data collection</td>
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</table>
- **Developed methodology** (based on above mentioned study) of RES data collection system in the Czech Republic based on the experiences of EU member countries (draft procedural guidelines) including **Method of flexible system** on statistical register of reporting units.

- **Functional data collection system** and created flexible Statistical Register of Reporting Units producing electricity and heat from RES and the methodology for its continually updating - **practical realization** of the methodology above mentioned through the **annual statistical data collection** and data processing. This register will comply with Council Regulations 2186/93 and 696/93.

- **MoIT’s staff trained** in the methodology of the RES data collection, and in the requirements of the Directive 2001/77/EC on the RES statistics.

**Part B**

**Comparative study** on the EC Directive COM/2002/192) and the Czech (Energy Management Act No. 406/2000 Coll.) legislation in the field of energy efficiency

**Draft amendment of Energy Management Act** (No. 406/2000 Coll) and related Directives on energy audits and energy certification of buildings

**Market segment analysis** on energy performance in public buildings. This analysis should contain a study about actual energy efficiency in the selected public buildings, selected tools for improvement of energy efficiency to the required level and system of financing from public and private funds.

**Trained** CEA’s and MoIT’s staff and local experts.

**Prepared procedural guidelines (in the form of a manual) for investors, architects and designers** (for dissemination of information about the rules of low energy consumption in buildings) in the following areas:

- Thermo-technical and energy characteristics of buildings;

**Part B**

- **Accomplished draft amendment of Energy Management Act** and accomplished Market segment analysis on energy performance in public buildings in selected area.
- **Accomplished procedural guidelines for investors, architects, designers and inhabitants**
- **Harmonisation of the national legislation in the field of energy performance in buildings with the EU requirements**
- **Approx. of 40 top experts of the Czech Energy Agency (CEA) and MoIT, authorized engineers and energy auditors will be directly trained in the modern approaches to propose measures for a high Efficiency of Energy Performance in buildings**
- **About of 20 experts from CEA and MoIT,** (experiences and principles used in EU countries)

- **Creation of finance tools for a low-energy and low-cost**
- **Development of encouragement tools for higher energy efficiency in buildings, as e.g. tax abatement. Higher price in the real estates market**
- **Higher supervision on the implementation of**
- Energy certification of buildings
- Systems of economic assessment of energy savings;
- Methods of financing of energy savings;

selected chief building physicists and energy engineers will be trained in the elaboration of legislative and incentive tools to increase the energy efficiency in buildings that are comparable with EU standards

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Assumptions</th>
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<tbody>
<tr>
<td><strong>Part A</strong></td>
<td><strong>Part A – Twinning Covenant 0,4 MEUR</strong></td>
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<tr>
<td>• Elaborating of study about the Renewable Energy Sources statistics in EU including calculation of electricity and heat production from RES in hybrid energy plants also using conventional energy sources (coal etc.) (Directive 2001/77/EC purpose)</td>
<td>• A Pre-Accession adviser (PAA12 MM)- to coordinate project realization, to coordinate elaboration of study, draft procedural guidelines, to coordinate assistance in annual data collection and to organise and coordinate training of the MoIT staff in methodology of RES data collection apx cost 0.180 M €</td>
<td>• All beneficiary institutions recruit and retain adequate staff</td>
</tr>
<tr>
<td>• Developing of methodology of collection and statistics on renewable energy sources, including amendment of the statistical methods and data compilation, aimed to get them up to EU/EIA standards</td>
<td>• Short-term Experts (STEs) input in order to provide training through seminars; to elaborate a training manual and draft procedural guidelines in the methodology of creating reporting units register, data collection and data processing; to afford assistance, advice and guidance in preparation and realisation of one annual statistical data collection and data processing of the RES in the Czech Republic</td>
<td>• Co-operation with the Czech Technical University and the Building Information Centre</td>
</tr>
<tr>
<td>• Affording assistance, advice and guidance in preparation and realisation of one annual statistical data collection and data processing of the RES in the Czech Republic</td>
<td></td>
<td>• Co-operation with the Czech Normalization Institution</td>
</tr>
<tr>
<td>• Advising, preparing and training, of MoIT staff in a field of creation and using the RES data collection and in creation of flexible Statistical Register of Reporting Units producing electricity and heat from RESs in the Czech Republic (seminars in CR, study visits to EU counterpart)</td>
<td></td>
<td>• Co-ordination with the Czech statistical office.</td>
</tr>
<tr>
<td><strong>Part B</strong></td>
<td><strong>Part B – Twinning Covenant 0,4 MEUR</strong></td>
<td></td>
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<tr>
<td>• Elaboration of comparative study about the Czech and EU energy efficiency legislation</td>
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</table>

The experts have to bring to the Czech Republic the practical experiences (study visits, seminars) about the Renewable Energy Sources data collection and procession in EU countries.
- Training workshops and seminars for advising, preparing and training of experts (MoIT, CEA and local experts) on energy efficiency in building
- Providing (through the seminars, trainings, analyses) the Directive on Energy performance in buildings on selected segment of market (public sector) in the specific region including elaboration of market segment analysis on energy performance in some selected public buildings
- Elaboration of procedural guidelines for investors, architects, designers and inhabitants (in above mentioned areas) how to design, judge and operate buildings with effective energy utilisation
- Transposition of the new Directive on Energy performance in buildings into Czech legislation

**Part B – TA contract; 0, 6 MEUR**

Approx 6 months Short-term Expert (STE) input in order to provide analysis how the EU directive (Energy Performance in Buildings) is implemented and included in the national legislation of individual EU countries in its framework:
- STE input in order to provide training through seminars, elaborate a training manual and draft procedural guidelines
- The experts have to bring to the Czech Republic deep expertise in the given field, modern methods of work and schemes as they are provided in the EU countries
- They could be from different countries (with respect to heterogeneity of problems). The training should proceed 6 months

<table>
<thead>
<tr>
<th>Preconditions</th>
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<tbody>
<tr>
<td>The Ministry of Industry and Trade provides short term (monthly, quarterly, etc.) and special statistics (renewable, oil products – filling stations, etc.).</td>
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<td>The activities of the project will be co-ordinated together with the CSO.</td>
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<tr>
<td>Data collection system based on MoIT’s Annual Questionnaire of Renewable Energy Sources (ENG-MPO 4-01), on special parts of CSO’s annual questionnaires (EP 10-01) and partly on information from other governmental organisations (Energy Regulatory Office, Czech Energy Agency).</td>
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<tr>
<td>The CEA is responsible for the promotion of activities leading to a sustainable and constant increasing the effectiveness of energy utilisation, advertising the energy effective steps and approaches. To fulfil these goals, it utilises Energy Management Act (Act No. 406/2000 Coll.), the MoIT Decree No. 291/2001 Coll. determining the details of the efficiency of energy utilisation by heat consumption in buildings, and the technical standards – CSN 730540.</td>
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<tr>
<td>The Part B of this project is conditional to the final approval of the Directive on Energy Performance of Buildings.</td>
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<tr>
<td>For the purpose of this, it utilises the Government Programme for the Support for Energy Conservation and the Utilisation of Renewable and Secondary Sources of Energy. The MoIT is preparing this programme. This programme provides a framework for the formulation of conditions for providing the State Subsidies from the State budget so that the subsidised projects could reach as high effectiveness of energy utilisation as it is possible. These examples influence the investor’s decision and contribute to the development of sustainable energy building.</td>
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## DETAILED IMPLEMENTATION CHART

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
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<td>Start of tendering</td>
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<tr>
<td>Start of project activity</td>
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<tr>
<td>Project Completion</td>
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<td>X</td>
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<tr>
<td>Twinning</td>
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<td>Call for proposal</td>
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<td>Start of project activity</td>
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<tr>
<td>Project Completion</td>
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ANNEX 3

CONTRACTING AND DISBURSEMENT SCHEDULE BY QUARTER FOR FULL DURATION OF PROGRAMME

### Cumulative Quarterly Contracting Schedule (mil. €)

<table>
<thead>
<tr>
<th>Project</th>
<th>1Q/02</th>
<th>1Q/02</th>
<th>3Q/02</th>
<th>4Q/02</th>
<th>1Q/03</th>
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<th>3Q/05</th>
<th>4Q/05</th>
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<tbody>
<tr>
<td>Twinning / TA Implementation of EC Directives on Energy Efficiency</td>
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### Cumulative Quarterly Disbursement Schedule (mil. €)

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<tr>
<th>Project</th>
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<th>1Q/02</th>
<th>3Q/02</th>
<th>4Q/02</th>
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