1. Basic information

1.1 CRIS Number: TR2010/0327.04
1.2 Title: Better Air Quality By Transposing The Large Combustion Plant Directive.
1.3 ELARG Statistical code: 27 - Environment
1.4 Location: Turkey

Implementing arrangements:

1.5 Implementing Agency:

The CFCU will be Implementing Agency and will be responsible for all procedural aspects of the tendering process, contracting matters and financial management, including payment of project activities. The director of the CFCU will act as Programme Authorizing Officer (PAO) of the project.

Mr. Muhsin ALTUN (PAO-CFCU Director)
Central Finance and Contracts Unit
Tel: +90 312 295 49 00
Fax: +90 312 286 70 72
E-mail: muhsin.altun@cfcu.gov.tr
Address: Eskişehir Yolu 4.Km. 2.Street. (Halkbank Kampüsü) No:63 C-Blok 06580 Söğütözü/Ankara Türkiye

1.6 Beneficiary (including details of SPO): Main beneficiary of the project is the Ministry of Environment and Forestry.

Co-beneficiaries are EUAS and State Privatisation Institute.

Details of the Senior Programme Officer (SPO) are as follows:

Official Contact Details of SPO:
Sedat KADIOĞLU
Deputy Undersecretary
Ministry of Environment and Forestry
Söğütözü Cad. No:14/E Beştepe/ANKARA /TURKEY
Tel:+ 90 312 207 62 83
Fax: + 90 312 207 65 35
e-mail:sedatkad@yahoo.com

Co- Beneficiary:

Mrs. Ayşegül KARAYAZGAN
Ministry of Energy and Natural Resources, Electricity Generation Co. Inc.
Tel: +90 312 212 78 61
E-mail: aysegul.karayazgan@euas.gov.tr
Address: İnönü Bulvarı No:27 06490 Bahçetievler/ANKARA
Financing:

1.7 Overall cost (VAT excluded)\(^1\): 1.000.000 €
1.8 EU contribution: 900.000 €
1.9 Final date for contracting: 2 years after the signature of the Financing Agreement
   1.10 Final date for execution of contracts: 2 years after the last date of the contracting deadline.
   1.11 Final date for disbursements: 3 years after the last date of the contracting deadline.

2. Overall Objective and Project Purpose

2.1 Overall Objective:
To improve the protection of human health and environment in Turkey by implementation and enforcement of the Large Combustion Directive.

2.2 Project purpose:
The project purpose is to establish the necessary capacity to implement Large Combustion Plant Directive (2001/80/EC) in Turkey.

2.3 Link with AP/NPAA / EP/ SAA

**The Accession Partnership (AP):**

*In, AP Document of 2008,*

*Chapter 27: Environment*

- Continue transposition, implementation and enforcement of the *acquis*, in particular horizontal and framework legislation, such as the environmental impact assessment, including transboundary aspects, as well as strengthening of administrative capacity.

- Continue to transpose and implement the *acquis* related to the framework legislation, international environmental conventions and legislation on nature protection, water quality, chemicals, industrial pollution and risk management and waste management, pursue integration of environmental requirements into other sectoral policies

**The National Programme for Adoption of Acquis (NPAA):**

\(^1\) The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated (see Section 7.6)
According to Chapter-27 (Environment) of National Programme of Turkey for the Adoption of the EU Acquis;

- Preparation of the inventory of Large Combustion Plants
- Preparation of cost analysis of the technological changes required to achieve the determined emission limits
- Inventory studies on issues such as the technology and treatment methods
- Preparation of emission inventory
- Performing the regulatory impact assessment
- Setting the quality system for the continuous measurement of pollutants.

It is clear that according to NPAA of Turkey 2008, LCP directive is one of the highest priority directives to transpose and implement. In this concept a by-law titled: “By-law on Large Combustion Plants” which transposes the LCP directive has been published at Official Journal with the date of 08.06.2010 and number 27605. However, further studies are required for full implementation of the directive.

2.4 Link with MIPD

In page 25 of MIPD, it’s expressed:

“Environmental investments of energy production facilities using solid fuels have a significant importance due to the emission limits set for the large combustion plants by the relevant EU directives regarding industrial pollution. In this context, environmental investments are considered as a part of the new plants, and upon the privatisation of energy sector, these measures are incumbent upon the private sector.”

Also, among the priorities mentioned for assistance under the Institution Building component:

“Environment: Adoption of a revised programme for transposition and implementation of the acquis; Transposition of framework legislation, international environmental conventions, and legislation on nature protection, water quality, air quality, Industrial Pollution Control and waste management, environmental impact and strategic impact assessment, chemicals and GMOs, climate change, strengthening of the relevant institutions;”

2.5 Link with National Development Plan (where applicable)

Ninth Development Plan (2007-2013) designed as the basic strategy document that would contribute to the EU accession process approved by Turkish Grand National Assembly on 28.06.2006 with Law No: 877:

10. Natural resources, cultural assets and the environment will be protected considering the future generations, as well.

52. The necessary administrative capacity will be set up for the effective implementation of the legal arrangements for harmonization and the problems arising from implementation will be identified and eliminated
54. Effective measures will be taken in order to educate the workforce required for new duties and responsibilities. In this context, the number of qualified public sector personnel will be increased and necessary steps will be taken for continuous training of the existing personnel.

454. Fulfillment of international obligations will be realized in the framework of the principle of sustainable development and the principle of common but differentiated responsibility.

463. More efficient production and less waste will be achieved by increasing the effectiveness in raw material use with the implementation of environment friendly techniques in industry.

2.6 Link with national/sectoral investment plans (where applicable)

EU Integrated Environmental Approximation Strategy (UCES) covering the period 2007-2023 contains the information on pertaining to the technical and institutional infrastructure, the environmental improvements that are required to be performed as well as the mandatory arrangements which are necessary to establish complete harmonization for compliance with EU Environmental Acquis Communautaire and the effective implementation of the legislation which are the two pre-conditions for Turkey to join European Union.

In the preparation of UCES, outputs from the following documents were made use of; “National Environmental Strategy and Action Plan” that was prepared as a basis beforehand and the “Integrated Approximation Strategy Project” that was realized with the EC funds and the “Environmental Heavy Cost Investment Planning Project”. Furthermore, care was taken to make sure that the strategy paper was prepared in line with the Development Plan, Annual Programs, and the strategies and policies of the National Program.

Industrial Pollution control sector title of UCES includes;

“The energy is utilized in an inefficient manner in the households and industry. Research indicates that industry can make energy savings between 2.7 and 4.8 million tons of petroleum equivalent (TEP) and ensuingly air quality can be improved. Industrial Air Pollution is the result of low grade fuel and insufficient management of manufacturing.”

In UCES it is mentioned the importance of LCP Directive and LCP Directive is given under the title of Legislative Compliance (Timetable for Approximation).

3. Description of project

3.1 Background and justification:
Following the recognition of Turkey as a candidate country at the Helsinki European Council
of December 1999, important progress has been achieved within the framework of the Accession Partnership (AP) and the National Program for Adoption of the Acquis (NPAA). The Brussels European Council of 16-17 December 2004 decided that Turkey sufficiently fulfils the Copenhagen political criteria to open accession negotiations. Finally, the Council approved a framework on 3 October 2005 for negotiations with Turkey on its accession to the EU as mandated by the European Council, thus enabling the negotiations to begin immediately after the meeting. Since the Helsinki Council decision, pre-accession assistance has been made available to Turkey since 2002 under the financial cooperation programme whose rules have been set out by the Council Regulation (EC) No 2500/2001 of 17 December 2001 concerning pre-accession financial assistance for Turkey.

The Directive on Large Combustion Plants (LCP-2001/80/EC) shall apply to combustion plants, the rated thermal input of which is equal to or greater than 50 MW, irrespective of the type of fuel used (solid, liquid or gaseous). Council Directive 2001/80/EC on Large Combustion Plants was studied in scope of Air Quality Twinning Project which is the first component of the “Project of Assistance to Turkey in the field of Air Quality, Chemicals, and Waste” (TR03-EN-01/TR03-02-03) carried out in scope of 2003 Financial Cooperation Programme.

In order to transpose the Directive into national legislation, the “By-law on Large Combustion Plants” was prepared with participation of relevant institutions and organizations and was published at Official Journal with the date of 08.06.2010 and number 27605. There are certain very old public owned lignite burning power plants which are in the scope of privatisation. The studies to ensure coordination with the Ministry of Energy and Natural Resources are underway, in order to clarify the compliance plan of these plants to the Directive requirements. Detailed impact assessment studies are needed for these plants. A project is proposed to EU IPA 2010 programme to carry out these studies. By the finalization of this project/study, dates of full compliance of these plants will be designated. The full implementation date of the Directive in Turkey then will be updated. Since environment chapter of the accession negotiations was opened, there is urgent need to clarify the status of the existing plants in Turkey.

According to data obtained as result of inventory studies in scope of the project (TR03-EN-01/TR03-02-03), in Turkey there are about 100 facilities that fall in the scope of LCP Directive.

A detailed impact assessment and financial analysis are needed because important part of LCP facilities in Turkey requires heavy-cost investments and significant number of facilities is in the scope of privatisation. Also some operational and financial difficulties and uncertainties are experienced in the environmental investments.

Moreover, this project is also important for Ministry of Energy and Natural Resources-MENR and State Privatisation Institute. It is a fact that all public owned LCP’s need investment and strategies to operate under compliance with LCP directive. This project will also help determine these strategies and required investments for public owned LCP’s.

During this project Ministry of Environment and Forestry, Ministry of Energy and Natural Resources-MENR and State Privatisation Institute will work coordinately.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

Project Impact
Based on the aim of efficient and full implementation of LCP Directive in Turkey, the project will have the following impacts:

- Implementation of LCP Directive into Turkish Air Quality Legislation. Determination of investment alternatives of energy production sector to operate according to directive.
- Estimation of investment cost for public owned LCP’s.
- Determination of a realistic transition period for LCP’s during the transposition period of LCP directive.
- Preparation a detailed inventory for all LCP’s in Turkey.
- Determination of effects of legislation during privatisation period of public owned LCP’s.
- Estimation of total emissions related with LCP’s in Turkey.

Catalytic Effect

- Establishment of coordination among related parties and hence, will facilitate the progress in other Acquis areas in which these stakeholders are involved (e.g. IPPC, …).
- Improvement of project experience of staff, leading to more efficient progress (through national funds or external funds or by more effectively using the project management methodology while performing their tasks) in the fields of responsibility of this staff that are relevant to the Environmental Acquis.
- Project outputs will guide IPPC studies in this sector.

Sustainability:

For purposes of sustainability, annual updating the data of facilities inventory is required to determine and monitor compliance situation of the Country to the Directive. The inventory will provide important information that is required to take the necessary measures (legal and other) for ensuring the full and efficient implementation of the directive -not only during this project but also, through these updates, in the future. For this purpose, MoEF will train Provincial Offices to ensure the sustainability of inventory.

The fact that this project will not be conducted by MoEF alone but they will be co-beneficiaries, will improve the quality and efficiency of the decisions to be taken based on this project. Hence; the fact that all major relevant institutions in the area will participate in the project is an important element of sustainability of the project results. For example; the wide participation (various stakeholders from industry, NGOs and other institutions, in addition to the beneficiary and co-beneficiaries) to be provided regarding the regulatory impact analysis (RIA) study will definitely add sustainability to the study, in terms of various stages of RIA (such as the completeness of the data gathered for RIA, the accuracy of the problem definition, etc..), and in relation to this, it will ensure the devotion of the participating institutions (at least the beneficiary and co-beneficiary institutions, at the technical and senior levels) to implementing the preferred option to be established at the end of the RIA study, including the appropriate investment alternative as well as the institutional and legal framework for full implementation of LCP Directive in Turkey.

Cross border effects are not applicable for the present project requirements.

3.3 Results and measurable indicators:
<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A detailed inventory of all large combustion plants in Turkey and a</td>
<td>1.1. An inventory on large combustion plants</td>
</tr>
<tr>
<td>web-site including information about large combustion plants is available to use.</td>
<td>1.2. A web-site about large combustion plants.</td>
</tr>
<tr>
<td>2. Regulatory Impact assessments for the implementation of Large Combustion Plant Directive. is available to use.</td>
<td>2.1. A document of Regulatory Impact assessment</td>
</tr>
<tr>
<td>3. Required institutional structure, technical capacity and procedural</td>
<td>2.2. A document of Cost-benefit analysis from implementation of LCP directive, prepared in sectoral basis by the end of 2013</td>
</tr>
<tr>
<td>arrangements defined and developed to implement LCP Directive.</td>
<td>2.3. 3 seminars together with related sectors.</td>
</tr>
<tr>
<td>3.4 Activities:</td>
<td>3.1. Related institutions and other stakeholders awareness of directive.</td>
</tr>
<tr>
<td>One Service Contract (Technical Assistance) will be deployed for all</td>
<td>3.2. Roles and responsibilities of related institutions are agreed and clearly defined at the end of the project.</td>
</tr>
<tr>
<td>below described three activity sets. Co-financing source for all these</td>
<td>3.3. 35 key Turkish experts at technical level, possessing the major information necessary for conducting their roles regarding implementing LCP Directive.</td>
</tr>
<tr>
<td>activities is budgets of Ministry of Environment and Forestry and Ministry of Energy and Natural Resources. This total budget will be available once it is nominated for the fiscal year, in which the activities are executed.</td>
<td></td>
</tr>
<tr>
<td>Activity 1.1</td>
<td></td>
</tr>
<tr>
<td>- Preparing inventory including the important characteristics such as</td>
<td></td>
</tr>
<tr>
<td>emission, technology, treatment methods, fuel type in Turkey. (TA)</td>
<td></td>
</tr>
<tr>
<td>- To determine emission values caused by each large combustion plants in Turkey.</td>
<td></td>
</tr>
<tr>
<td>- Preparing a comparison table between determined emission values and limit values</td>
<td></td>
</tr>
</tbody>
</table>
Activity 1.2. Workshop was organized and agreed document on required institutional and technical capacities of competent authorities has been prepared. (TA)

Activity 1.3 Preparation of Website.

Activity 2.1 Preparation of Regulatory Impact Assessment Report (TA), including social, environmental and economic analyses, covering the issues such as investment plan, feasibility studies for the plants, etc.

Activity 2.2 Workshop arrangements in order to develop coordination and cooperation among stakeholders for the preparation of impact assessment analysis for the implementation of LCP Directive. (TA)

Activity 3.1 Evaluation of the institutional and technical capacity for the implementation of LCP Directive in Turkey.

Activity 3.2 A comprehensive training programme implemented covering trainings both in Turkey and Member States.

Activity 3.3 Dissemination workshops on the implementation of LCP Directive in Turkey.

Activity 3.4. Two study tours were organized for 10 beneficiary staff.

3.5 Conditionality and sequencing:

Sequencing:

<table>
<thead>
<tr>
<th>Activity in Technical assistance Component</th>
<th>YEAR 1</th>
<th></th>
<th>YEAR 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1Q</td>
<td>2Q</td>
<td>3Q</td>
<td>4Q</td>
</tr>
<tr>
<td>Activity 1.1 Preparing inventory including the important characteristics such as emission, technology, treatment methods, fuel type. (TA)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 1.2 Workshop was organized and agreed document on required institutional and technical capacities of competent authorities has been prepared.. (TA)</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Activity 1.3. Preparation of Website. (TA)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Activity 2.1 Preparation of Regulatory Impact</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Assessment Report (TA), including social, environmental and economic analyses, covering the issues such as investment plan, feasibility studies for the plants, etc.

| Activity 2.2. Workshop arrangements in order to develop coordination and cooperation among stakeholders for the preparation of impact assessment analysis for the implementation of LCP Directive. (TA) | X | X | X |
| Activity 3.1. Evaluation of the institutional and technical capacity for the implementation of LCP Directive in Turkey. | X | X |
| Activity 3.2. A comprehensive training programme implemented covering trainings both in Turkey and Member States. | X | X | X | X |
| Activity 3.3. Dissemination workshops on the implementation of NEC Directive in Turkey | X | X | X |
| Activity 3.4. Two study tours were organized for 5 beneficiary staff | X |

3.6 Linked activities
A number of projects related to Large Combustion Plant Directive were carried out in Turkey.

- Air Quality Project, the first component of the Project for “Assistance to Turkey in the Fields of Air Quality, Chemicals, and Waste” which was suggested by our Ministry in scope of Year 2003 Financial Cooperation PHARE Program and made benefit of Twinning Mechanism of EU Commission was started in October 2004.

- In 2007, “Council Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants (Directive on Large Combustion Facilities)(LCPD-2001/80/EC)” (which is one of the priorities of National Program of Turkey) was dealt with in the scope of the project named “Strengthening the Capacity of Impact Analysis, Awareness Raising and Implementation on Environment in the EU Accession Process” and impact analysis pilot study was made for the facilities which use lignite.

3.7 Lessons learned
During the previous Twinning project, we had good communication and collaboration among related parties and we provided coordination among related parties on the topic of determination the conditions of existing LCPs.

We examined the investment plans, timetables and taken measures of member states to upgrade their existing LCPs. This study was useful but it would be better to examine more facilities and to spare more time.
During the previous project study, we clearly understood that related parties should make a projection to transpose this directive.

2001/80 EC directive was introduced in country and experiences were shared with related sectors.

During the study visit in member state, we noticed that the time is not enough to examine both technical and executive structure of member state.
4. Indicative Budget (amounts in EUR)

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>IB (1)</th>
<th>INV (1)</th>
<th>TOTAL EXP.RE</th>
<th>TOTAL PUBLIC EXP.RE</th>
<th>IPA CONTRIBUTION</th>
<th>NATIONAL PUBLIC CONTRIBUTION</th>
<th>PRIVATE CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR (a)=(b)+(e)</td>
<td>EUR (b)=(c)+(d)</td>
<td>EUR (c)</td>
<td>% (2)</td>
<td>EUR (d)=(x)+(y)+(z)</td>
<td>% (2)</td>
<td>Central EUR (x)</td>
</tr>
<tr>
<td>Technical Assistance contract 1.1</td>
<td>X</td>
<td>1.000.000</td>
<td>1.000.000</td>
<td>900.000</td>
<td>90</td>
<td>100.000</td>
<td>10</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>TOTAL IB</td>
<td>1.000.000</td>
<td>1.000.000</td>
<td>900.000</td>
<td>90</td>
<td>100.000</td>
<td>10</td>
<td>100.000</td>
</tr>
<tr>
<td>TOTAL INV</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>TOTAL PROJECT</td>
<td>1.000.000</td>
<td>1.000.000</td>
<td>900.000</td>
<td>100.000</td>
<td>10</td>
<td>100.000</td>
<td>-</td>
</tr>
</tbody>
</table>

NOTE: DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW. USE SEPARATE ROW

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV
(2) Expressed in % of the Public Expenditure (column (b))
(3) Expressed in % of the Total Expenditure (column (a))

In the context of beneficiary staff participating in missions outside of Turkey paid for under a contract, the maximum amounts eligible for accommodation costs and daily allowances ("per diems") are the official rates provided for by EuropeAid for the destination country (see website for the latest rate). Provided the total cost of daily allowance and accommodation charged to the contract remains below these maximum rates, the applicable Turkish rules and regulations for per diems shall be applied when reimbursing these costs for public servants from the beneficiary institutions. Where a contract foresees the reimbursement of such expenses for Turkish public servants and other beneficiaries of IPA projects...
during missions inside of Turkey, the maximum costs reimbursed under the contract will be those provided for domestic missions under the applicable Turkish legislation provided that they are subject to the same ceiling for maximum rates. This provision cannot be construed and applied in contradiction with the IPA Framework Agreement and in particular the IPA Implementing Regulation.
5. Indicative Implementation Schedule (periods broken down per quarter)

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Start of Tendering</th>
<th>Signature of contract</th>
<th>Project Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Assistance Contract 1.1</td>
<td>2011 II</td>
<td>2011 IV</td>
<td>2013 IV</td>
</tr>
</tbody>
</table>

All projects should in principle be ready for tendering in the 1st Quarter following the signature of the FA

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

Participation in this project will be open to both males and females involved in the sector. Records of professionals’ participation in all project related activities will reflect this and will be kept with the project documentation. Equal participation of women and men will be considered in each activity to be implemented, and stakeholder engagement through public participation will be fostered by equal participation.

6.2 Environment

The Project itself is focused on the achievement of long-term environmental improvements in Turkey. The Project itself will probably not have any adverse environmental impacts, other than those due to normal activities (e.g. transport). Nevertheless, as an example to others and as a matter of principle, the environmental impact of activities must be minimized as far as possible.

6.3 Minorities and Vulnerable Groups

According to the Turkish Constitutional System, the word minority encompasses only group of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party. This project has no negative impact on minority and vulnerable groups. The utmost importance will be given to diversity and equal participation and it is assured that vulnerable groups (such as disabled people) will be fully involved in this project and will not be excluded in whatever form.

6.4 Civil Society

Electrical Manufacturers Association will be a part of the trainings as participants or as trainers and in the impact assessment study. And also one representative from each NGO will be invited to the steering committee meetings.
ANNEXES

1- Log frame in Standard Format

2- Amounts contracted and Disbursed per Quarter over the full duration of Programme

3- Description of Institutional Framework

4 - Reference to laws, regulations and strategic documents:
   Reference list of relevant laws and regulations
   Reference to AP / NPAA / EP / SAA
   Reference to MIPD
   Reference to National Development Plan
   Reference to national / sector investment plans

5- Details per EU funded contract (*) where applicable:
   For **TA contracts**: account of tasks expected from the contractor
   For **twinning covenants**: account of tasks expected from the team leader, resident twinning advisor and short term experts
   For **grants schemes**: account of components of the schemes
   For **investment contracts**: reference list of feasibility study as well as technical specifications and cost price schedule + section to be filled in on investment criteria (**)
   For **works contracts**: reference list of feasibility study for the **constructing works** part of the contract as well as a section on investment criteria (**); account of services to be carried out for the **service part** of the contract

(*) non standard aspects (in case of derogation to PRAG) also to be specified

(**) section on investment criteria (applicable to all infrastructure contracts and constructing works):
- Rate of return
- Co financing
- compliance with state aids provisions
- Ownership of assets (current and after project completion)
# ANNEX 1: Logical framework matrix in standard format

<table>
<thead>
<tr>
<th>LOGFRAME PLANNING MATRIX FOR Large Combustion Plants Directive Project</th>
<th>Programme name and number</th>
<th>IPA-1 2009 PIS 21</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contracting period expires:</strong> 2 years after the DATE signature of the Financing Agreement</td>
<td><strong>Disbursement period expires:</strong> 5 years after the signature of the Financing Agreement</td>
<td></td>
</tr>
<tr>
<td><strong>Total budget</strong> 1.000.000</td>
<td><strong>IPA budget:</strong> 900.000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall objective</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve the protection of human health and environment in Turkey by implementation and enforcement of the Large Combustion Directive.</td>
<td>Air quality values decreased below the air quality limit values.</td>
<td>Outputs of air quality monitoring stations in provinces.</td>
</tr>
<tr>
<td></td>
<td>Health problems caused by air pollution decreased.</td>
<td>Records of Ministry of Health.</td>
</tr>
<tr>
<td></td>
<td>Turkey will improve the capacity to meet the requirements of the LCP Directive by 2013.</td>
<td>Accession Partnership Document - Environment Chapter.</td>
</tr>
<tr>
<td></td>
<td>Monitoring and measurement systems are calibrated correctly.</td>
<td></td>
</tr>
<tr>
<td>Project purpose</td>
<td>Objectively verifiable indicators</td>
<td>Sources of Verification</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>The project purpose is to establish the necessary capacity to implement Large Combustion Plant Directive (2001/80/EC) in Turkey.</td>
<td>Number of permit and licences of plants which operates in the scope of LCPD increased.</td>
<td>Permits and licences. Online monitoring systems in plants. Amount of investments.</td>
</tr>
<tr>
<td></td>
<td>Strengthening the administrative capacity necessary for applying the new legislation and establishing the necessary institutional structure, at the end of project.</td>
<td>EU Progress Reports</td>
</tr>
<tr>
<td>Results</td>
<td>Objectively verifiable indicators</td>
<td>Sources of Verification</td>
</tr>
<tr>
<td>1- A detailed inventory of all large combustion plants in Turkey and a web-site including information about large combustion plants is available to use.</td>
<td>1.1 Emission values of all large combustion plants were determined by comparing between limit values of LCPD</td>
<td>Inventory</td>
</tr>
<tr>
<td></td>
<td>1.2- At least 4 Workshops were done with all stakeholders to share emission inventory until the end of 2013.</td>
<td>Website, published reports.</td>
</tr>
<tr>
<td></td>
<td>1.3- Web-site of the project was prepared within three months after the project started.</td>
<td>All stakeholders interested with the project and participated to all of the workshops.</td>
</tr>
<tr>
<td></td>
<td>2.1- Regulatory Impact assessment</td>
<td></td>
</tr>
</tbody>
</table>
2. Regulatory Impact assessments for the implementation of Large Combustion Plant Directive, is available to use.

2.2- 3 seminars were done together with related sectors.

3. Required institutional structure, technical capacity and procedural arrangements defined and developed to implement LCP Directive.

3.1- Roles and responsibilities of related institutions are agreed and clearly defined at the end of the project.

3.2- Related institutions and other stakeholders awareness of directive

3.3- 35 key Turkish experts at technical level, possessing the major information necessary for conducting their roles regarding implementing LCP Directive.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity 1.1</strong> Preparing inventory including the important characteristics such as emission, technology, treatment</td>
<td>1. TA</td>
<td>TA: 1.000.000</td>
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</table>
methods, fuel type. (TA)

**Activity 1.2.** Workshop was organized and agreed document on required institutional and technical capacities of competent authorities has been prepared.

**Activity 1.3** Preparation of Website.

**Activity 2.1** Preparation of Regulatory Impact Assessment Report, including social, environmental and economic analyses, covering the issues such as investment plan, feasibility studies for the plants, etc.

**Activity 2.2** Workshop arrangements in order to develop coordination and cooperation among stakeholders for the preparation of impact assessment analysis for the implementation of LCP Directive.

**Activity 3.1** Evaluation of the
institutional and technical capacity for the implementation of LCP Directive in Turkey.

**Activity 3.2** A comprehensive training programme implemented covering trainings both in Turkey and Member States

**Activity 3.3.** Dissemination workshops on the implementation of LCP Directive in Turkey

**Activity 3.4.** Two study tours were organized for 10 beneficiary staff.

<table>
<thead>
<tr>
<th>Pre conditions</th>
<th>9. TA</th>
<th>10. TA</th>
<th>11. TA</th>
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# ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project (IPA contribution only)

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<tbody>
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