

Susurluk Wind Farm

Gold Standard

Passport



Gold Standard Annexes to Toolkit Version 2.1 effective 1 July 2009 use together with
Versions 2.1 of the Gold Standard Requirements and Toolkit

Developed by Ecofys, TÜV-SÜD and FIELD

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Annex 1 ODA declarations

SECTION A. Project Title

Balıkesir Susurluk 45 MW Wind Farm Project – Turkey

Version number of the document: 03

Date: **30/12/2010**

SECTION B. Project description

Summary:

The objective of proposed Gold Standard VER project activity is to generate renewable electricity from wind energy and feed it into power grid. The Susurluk Wind Farm Project (hereafter referred to as the Project) will be developed and operated by Alentek Enerji AS, affiliate of İtek İletişim Teknolojileri AS

The project involves the development of a 45 MW onshore wind farm located in the Balıkesir province, Susurluk District in Turkey. The Project involves the installation of 18 turbines (18 * 2, 5 MW) and the development of a 29,326 m. transmission line between the proposed project area and the national grid. An estimated 136,176 MWh/year¹ of electricity generated by the Project will be delivered to the Turkish national grid. The annual emission reductions are estimated as 82,658.8 tCO₂-eq/years.

İtek İletişim Teknolojileri AS is active on hydro energy projects. Their first hydro project recently commissioned. They have also 3 more hydro energy projects that are under early construction stage. Although İtek İletişim has experience on developing hydro energy projects, Alentek Enerji AS Susurluk project will ever be their first wind farm project. İtek İletişim is Affiliate Company of EKSİM Holding AS. www.eksim.com.tr

The start date of the project activity is 18/08/2010






¹ According to production license (available to DOE)

SECTION C. Proof of project eligibility

C.1. Scale of the Project

Category	Scale
Renewable Energy	Large

Please tick where applicable:

Project Type	Large	Small
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		

C.2. Host Country

Alentek Enerji A.Ş. is the operating company of the project activity.

Ecofys Turkey is the carbon consultant for this project and is the baseline study and monitoring Methodology developer for this project.

C.3. Project Type

Please tick where applicable:

Project type	Yes	No
Does your project activity classify as a Renewable Energy project?	√	
Does your project activity classify as an End-use Energy Efficiency Improvement project?		

Please justify the eligibility of your project activity:

Project Type

The project is within the Renewable Energy Supply category is defined as the generation and delivery of energy services (e.g. mechanical work, electricity, heat) from non-fossil and on-depletable (landfill gas excluded) energy sources.

Gold Standard Goals

Overriding aim of Gold Standard is the promotion of (local) sustainable development going one step beyond sole support for less carbon intensive energy production. The project will produce clean energy with benefits to the local population by livening up the local market and enhancing the regions technological capacity. Details of such sustainability indicators can be found in LSC report and the proof of additionally can be found in the PDD.

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Eligibility

There are no restrictions for this type of project in Gold Standard Took-lit Annex C and hence the project is eligible.

Pre-Announcement	Yes	No
Was your project previously announced?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Explain your statement on pre-announcement		
<p>The project owner "Alentek Enerji AS" has decided to undertake energy investments in Turkey and started doing feasibility studies of various technologies in various regions in Turkey. Alentek Enerji AS Susurluk project will ever be their first wind farm project. Alentek Enerji would like Gold Standard accreditation was undertaken for the project by Alentek enerji</p> <p>Since the financial closure and the feasibility of the project would not be possible without finalizing the procedures for carbon credit development the project had not been announced.</p>		

C.4. Greenhouse gas

Greenhouse Gas	
Carbon dioxide	<input checked="" type="checkbox"/>
Methane	
Nitrous oxide	<input type="checkbox"/>

C.5. Project Registration Type

No double counting with other certification schemes.

Project Registration Type	
Regular	

Pre-feasibility assessment	Retroactive projects (T.2.5.1)	Preliminary evaluation (e.g.: Large Hydro or palm oil-related project) (T.2.5.2)	Rejected by UNFCCC (T2.5.3)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If Retroactive, please indicate Start Date of Construction
dd/mm/yyyy: _____

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SECTION D. Unique project identification

D.1. GPS-coordinates of project location

The coordinates below indicate two diagonal points of a rectangular grid to give the indication of the project site. For detailed coordinates of the turbines please refer to the PDD.

	Coordinates
Latitude	39° 48' 9" N
Longitude	28° 01' 21" E
Latitude	39° 47' 41" N
Longitude	28° 02' 51" E



Explain given coordinates

SECTION E. Outcome stakeholder consultation process

E.1. Assessment of stakeholder comments

Tracking invitations

Category code	Organization (if relevant)	Name of invitee	Way of invitation	Date of invitation	Confirmation received? Y/N
A	Village Headman	Üzayir Ünsal	Phone / In person	01/04/2010	Y
A	Village Headman	Tayyar Barsbay	Phone / In person	01/04/2010	Y
B	Ministry of Environment and Forestry	Fulya Somunkıranoglu	E-mail	01/04/2010	N
B	Electrical Power Resources Survey and Development Administration	Mustafa Çalışkan	E-mail	01/04/2010	N
B	Susurluk Provincial Administration	Mahmut Nedim Tunçer	Phone	01/04/2010	Y
B	Regional Directorate of Ministry of Environment and Forestry - Balıkesir	Emine Tamer	E-mail	01/04/2010	N
D	Balıkesir Provincial and Environmental Protection Association	Gül Kaman	E-mail and phone	01/04/2010	Y
F	WWF Turkey	Guniz Bursalı	E-mail	01/04/2010	N
F	WWF Turkey	Tolga Baştak	E-mail	01/04/2010	N
F	Greenpeace Turkey	Hilal Atıcı	E-mail	01/04/2010	N

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Participant List

Name/Surname	Position / Organization
Levent Göçmenöz	Alentek
Ömer Arslan	Alentek
Üzayir Ünsal	Muhtar
M. Ümit Kamacı	Balıkesir Provincial and Environmental Protection Association Chamber of Mechanical Engineering
Aytuğ Yarmaz	Chamber of Mechanical Engineering
Zeki Öncü	Chamber of Mechanical Engineering
Tayyar Barsbay	Muhtar
R. Hamamcı	Alentek
Türker Ekşi	Alentek
Murat Barış Kayırhan	DAS Mühendislik
Berkay Çengel	Eksim Holding
Ramazan Memiş	Local
Ferit Orçun	Local
İ. Hakkı Erdem	Local
Bozkurt Şin	Local
Bahtiyar Efe	Local
Üsmer Ülke	Local
Mustafa Ayan	Local
Serafettin Kahraman	Local
Veysel İnak	Local
Aydın Kayış	Local

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Name/Surname	Position / Organization
Dındar Özkan	Local
Abdülkadir Evren	Local
F. Kemal Mardin	Local
İbrahim Efe	Local
Mehmet Yılmaz	Local
Ahmet Bedir Koyun	Local
Mustafa Cansız	Local
Sayım Şen	Local
Abdullah Özen	Local
Fevzi Erdem	Local
İsmail Yılmaz	Local
Erkut Şenol	Local
Şerif Gökkurt	Local
Deniz Yener	ECOFYS Turkey
F. Müge Apaydın	ECOFYS Turkey

Apart from the attendees listed above the Captain of the Gendarmerie was present in the meeting. He stated that they came to the meeting as outside observers and they did not get involved in the conversations. Nevertheless officials from the project owner informed him thoroughly about the project.

Although the participation of women was strongly mentioned both by the project owner and the carbon consultant there were no women in the meeting except Ms. Muge Apaydın from Ecofys and Gul Taman who dropped by the village before the physical meeting. Unfortunately this fact arises from the socio-cultural heritage of the region and the country. When some villager women passing by were asked to attend the meeting they showed lack of interest and told that their husband was already there to comment.

Assessment of Comments

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Disturbance of noise level on local wild animal and livestock production	Yes	No such harm is monitored but further research will be done (see section D.2 of LSC Report for details)
Employment opportunity for the local people	Yes	2 person is already hired for the implementation stage. Other employment opportunities are in the control firms that will be subcontracted. (see section D of LSC Report for details)
Which wind map will be used during implementation of the project	Yes	Alentek Enerji has done 2 years of wind measurement
Maintenance cost and how it will be ensured	Yes	12 years of technical maintenance contract is signed with Spanish firm
Effect of soil drying because of the wind circulation caused by turbines	Yes	No such effect is observed (see section D.2 of LSC Report for details)
Possible radioactive effect of turbines on human health like electric poles	Yes	No such effect is observed ²
How to protect possible historical heritage while the construction stage of roads to wind turbines,	Yes	The project complies with the national laws and regulations regarding historical heritage. No cultural and historical or archaeological site was found ³ in the project site in line with "World Heritage Convention" ⁴ .
free electricity to be provided to the nearby villages.	Yes	Since the project is commercial activity, free electricity cannot be provided.

² See web site of Centre for Renewable Sources (Greek national entity for the promotion of renewable energy sources): <http://www.cres.gr/kape/publications/papers/dimosieyseis/CRESTRANSWINDENVIRONMENT.doc>

³ Project documentation available to the DOE.

⁴ <http://whc.unesco.org/archive/convention-en.pdf>

The project complies with the national laws and regulations regarding historical heritage and that no cultural and environmental heritage was found⁵ in the project site in line with "World Heritage Convention"⁶. Nevertheless a low risk has been added to the do-no harm assessment following the comment made by Tayyar Barsbey in the evaluation form.

E.2. Stakeholder Feedback Round

Stakeholder feedback round has been started on 09/06/2010 after publication of this report in the web site of Gold Standard. Additionally Stakeholder consultation report has been translated into Turkish Both Turkish and English versions of LSC, PDD and GS Passport have been uploaded to the web site of Alentek Enerji. The links can be found below;

Stakeholder Consultation Meeting (in Turkish);

<http://www.alentekenerji.com/LSC> Report hsa_0306c_TR

Stakeholder Consultation Meeting;

http://www.alentekenerji.com/LSC-REPORT-HSA_0306c/

PDD Project Design Document;

http://www.alentekenerji.com/PDD-SUSURLUK-WEPP_0706/

Gold Standard Passport;

http://www.alentekenerji.com/PASSPORT-SUSURLUK-WEPP_0706/

The electronic copies of the reports are still available under the web site of Alentek Enerji.

Moreover, e-mails sent to all the invitees and participants to the meeting with this reports linked in appropriate language. Hard copy of the report was sent to those who do not have internet access. We have asked the opinion of relevant parties such as TEMEV (Clean Energy Foundation), TEMA (Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats) and TCV (Turkey Environmental Foundation). (National level NGO's and supporters) who did not attend Stakeholder meeting.

5 international NGO supporters of Gold Standard (WWF, HELIO International, Greenpeace, Mercy Corps and REEEP was invited to SFR.

All the invitees to the meeting have been informed on how they can find the document.

Two hard copies have been left to three village houses individually, near by the project location. Apart from these provisions representatives of Alentek Enerji frequently meet with local people in the village café to listen to their comments. 16 local people have seen the documents (signatures have been submitted to DOE) and no negative comments have been received.

There was no return from authorities and NGO's who were electronically mailed

⁵ EIA available to the DOE.

⁶ <http://whc.unesco.org/archive/convention-en.pdf>

SECTION F. Outcome Sustainability assessment**F.1. 'Do no harm' Assessment****i. 'Do no harm' assessment**

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
1 The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.	Not Relevant. Human rights issues are not affected by the project. Turkey has ratified European Convention on Human Right in 10/03/1954	Low	N/A
2 The project does not involve and is not complicit in voluntary resettlement/.	Project land has not formerly been used for settlement. Land is used as grassland by local people. No resettlement will occur due to the	Low	N/A
3 The project does not involve and is not complicity in the alteration, damage or removal of any critical cultural heritage.	There is no archeological site at project location accordance with the identification and registration of the relevant articles within the scope of the areas ⁷	Low	Cultural and Natural Heritage searched by the study of "The project introduction report" ⁸ has been sent to DOE

⁷ Cultural and Natural Heritage Protection Act 2863 No. 2 Article "A - Definitions," paragraph 1, 2, 3 and 5 sub-paragraphs "Cultural Heritage", "Natural Heritage", "Sit" and "Conservation Area" as defined in the law and the same with the Law No. 3386 (Cultural and Natural Heritage Protection Act 2863 and the Amendment of Some Articles of the Law on the Inclusion of certain products the Act)

⁸ Susurluk Rüzgar Enerjisi Santrali Proje Tanıtım Dosyası MİMKO pg. 44-46

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
4 The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights	Not Relevant. Turkey has ratified ILO 87 and 98 conventions ⁹ . All staff recruited are employed according to the national requirements and legislations.	Low	N/A
5 The project does not involve and is not complicit in any form of forced or compulsory labor.	Not relevant The project respects the provisions of ILO conventions no. 29 and 105 ¹⁰ .	Low	N/A
6 The project does not employ and is not complicit in any form of child labor.	There will be no employees younger than 18 years old. The project also respects ILO conventions no. 138 and 182. and 4857 Labor act of Turkey ¹¹	Low	N/A
7 The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.	The project respects ILO conventions no. 100 and 111 also the prohibition of discrimination is regulated in no. 4857 Labour Act of Turkey. ¹²	Low	N/A

⁹ <http://www.ilo.org/public/turkish/region/eurpro/ankara/sozlesme/onaylanan.htm>

¹⁰ <http://www.ilo.org/ilolex/cgi-lex/ratifce.pl?Turkey>

¹¹ <http://www.ilo.org/public/english/region/eurpro/ankara/info/legislation.htm>

¹² <http://www.ilo.org/public/english/region/eurpro/ankara/info/legislation.htm>

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
8 The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments	There is a risk for health and safety of workers on implementation and operation phase of the project.	Medium	Comprehensive Health and Safety trainings were scheduled for implementation and operation phase of the project. First training has already been held. Documentation ¹³ was submitted to the DOE.
9 The project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle.	All environmental impacts of the project searched by the study of "The project introduction report" ¹⁴ has been sent to DOE	Low	N/A

¹³ Training report and list of signatures of the participants.

¹⁴ Susurluk Rüzgar Enerjisi Santrali Proje Tanıtım Dosyası MİMKO 1.3

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low/medium/high)	Mitigation measure
10 The project does not involve and is not complicity in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value or (d) recognized as protected by traditional local communities	There is a small fountain (1m.x 2m.) that is legally protected on the connection route to the project site. There is a risk to harm fountain while the construction stage of the routes.	Medium	The direction of the connection route has been changed in order not to harm fountain. Alentek enerji applied to related organization for having any necessary permits. ¹⁵
11 The project does not involve and is not complicit in corruption.	Turkey ratified OECD ¹⁶ and the UN ¹⁷ convention against corruption.	Low	N/A

¹⁵ All related correspondences with related organizations are available to DOE

¹⁶ <http://www.oecd.org/dataoecd/2/18/43198860.pdf>,

¹⁷ <http://www.unodc.org/unodc/en/treaties/CAC/signatories.html>

F.2. Sustainable Development matrix

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Gold Standard indicators of sustainable development.	If relevant copy of `-`mitigation measure from "do no harm"-table, or include mitigation measure used to neutralize a score	Check www.undp.or/mdg and www.mdgmonitor.org Describe how your indicator is related to local MDG goals		Negative impact: score `-' in case negative impact is not fully mitigated score 0 in case impact is planned to be fully mitigated No change in impact: score 0 Positive impact: score `+'
Air quality		MDG 7 A is "Ensure Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources	The amount of Sulphur and nitric oxide emissions from fossil fuel power plants as in baseline. The project does not emit Sulphur and Nox. Over 82% of total electricity is generated by fossil fuel sources in Turkey (2008) ¹ .	+
Water quality and quantity		MDG 7 target C "Halve, the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015"	Amount of discharged cooling water from fossil fuel plants as in baseline. The project does not use water for operation. Over 82% of total electricity is generated by fossil fuel sources in Turkey (2008). It is difficult to justify the direct effect of the project and parameters regarding water quality and quantity.	0
Soil condition		Target 7.A: Integrate the principles of sustainable development into country policies and programs and reverse the <u>loss of environmental resources</u>	The area that affected by Sulphur or NOx that fossil fuel plant emits as in baseline. The project does not emit Sulphur or NOx, thus not affect to the Soil. Over 82% of total electricity is generated by fossil fuel sources in Turkey (2008). It is difficult to correlate the direct effect of the project and parameters regarding the soil condition in the area.	0

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Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Other pollutants		Target 7.A: Integrate the principles of sustainable development into country policies and programs and reverse the <u>loss of environmental resources</u>	Amounts of heavy metals (Hg) that fossil fuel plants emit as in baseline. The project does not emit heavy metals. Over 82% of total electricity is generated by fossil fuel sources in Turkey (2008).	+
Biodiversity		MDG 7.A Integrate the principles of sustainable development into country policies and programs and reverse the <u>loss of environmental resources</u>	The number of birds strike. There may be risk for birds to strike turbines. But project is not located in bird's migration route ¹⁸ .	0
Quality of employment		MDG 1.B "Achieve full and productive employment and decent work for all, including women and young people"	Health and Safety training documents and participation list Operation and Maintenance training documents and participation lists Health and Safety Trainings will reduce project related job risks and Operation and Maintenance Trainings will support employers to have high quality labor skills.	+
Livelihood of the Poor		MDG 1.A "Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day"	Number of people under poverty line. The project will be located in Balikesir. The GDP of Balikesir province is higher than the average of other provinces in Turkey.	0
Access to affordable and clean energy services		MDG 7.A is "Ensure Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources	Amount of produced clean energy. The project generates clean energy, but there is only one grid in Turkey and end users still buy the electricity from the same price so this indicator does not have positive effect	0
Human and institutional capacity		MDG 3: Promoting gender equality and the empowerment of women	The number of hired woman. Although the project creates jobs, related jobs are mainly performed by male engineers, workers, etc.	0

¹⁸ Susurluk Rüzgar Enerjisi Santrali Proje Tanıtım Dosyası MİMKO 1.3

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Quantitative employment and income generation		MDG 1.B: "Achieve full and productive employment and decent work for all, including women and young people"	The number of hired people. Project creates jobs for local people during construction stage. But project does not require intensive jobs while in operational period	0
Balance of payments and investment		MDG 8 A is Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	Amounts of produced energy in place of produced energy of imported fossil fuel sources as in baseline. Energy imports will reduce resulting in net currency savings. Amount of clean energy produced will be monitored at each verification round. During the project lifetime, the project will avoid approximately 180 million USD worth natural gas imports.	+
Technology transfer and technological self-reliance		MDG 8.F "In cooperation with the private sector, make available the benefits of new technologies, especially information and communications"	The number of trained people for operational and maintenance of wind turbines. Significant know how and technology transfer which is highly important for sustainable development, will occur by foreign wind Turbine manufacturer Nordex.	0

To be eligible under Gold Standard the project must contribute positively at least two of the three categories and neutral to the third. Table below shows the overall result of the consolidated sustainability assessment.¹⁹

Category	Score
Environment	+ 2
Social Development	+ 1
Economic and Technological Development	+ 1

Since all the categories receive "+" score the project is eligible for Gold Standard.

¹⁹ See Gold Standard Requirements VII.c3:

http://www.cdmgoldstandard.org/fileadmin/editors/files/6_GS_technical_docs/GSv2.1/GSv2.1_Requirements.pdf

SECTION G. Sustainability Monitoring Plan

According to Gold Standard Tool Kit v.2.0, all non-neutral indicators must be monitored. This project has neutral and positive indicators. The project's Sustainable Development Monitoring Plan will focus on monitoring indicators where the project has a positive impact on sustainable development.

The main contribution of the project acknowledged by the stakeholders is the production of clean energy that will be fed to the Turkish National grid, resulting in improved air quality, reduced other pollutants, improved quality of employment and positive effect on balance of payments and investment. Electricity production and emission reduction will be monitored in accordance with the PDD by monitoring yearly production of electricity.

No	1
Indicator	Air Quality
Mitigation measure	N/A
Chosen parameter 1.1	SO ₂ emissions avoided by the project activity
Current situation of parameter 1.1	Total annual electricity generation is 183,339.7 GWh in 2007, while total SO ₂ emission related to electricity generation is 936.1 Gg for 2007 according to National Inventory of Turkey ²⁰ . SO ₂ emission per GWh is calculated as 5.3 t/GWh
Future target for parameter 1.1	The project activity is expected to avoid emissions by multiplying project annual electricity generation <u>by</u> the latest data available of SO ₂ emissions on National Inventory of Turkey; In 2011: 360.86 t SO ₂ From 2012 on: 721.73 t SO ₂ (annually)
Chosen parameter 1.2	NO _x emissions avoided by the project activity
Current situation of parameter 1.2	Total annual electricity generation is 183,339.7 GWh in 2007, while total NO _x emission related to electricity generation is 202.09 Gg for 2007 according to National Inventory of Turkey ²¹ . NO _x emission per GWh is calculated as 1.1 t/GWh
Future target for parameter 1.2	The project activity is expected to avoid emissions by multiplying project annual electricity generation <u>by</u> the latest data available of NO _x emissions on National Inventory of Turkey; In 2011: 74.89 t NO _x From 2012 on: 149.79 t NO _x (annually)

²⁰ http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/tur_2009_crf_13apr.zip ,Worksheet:Table1s1

²¹ http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/tur_2009_crf_13apr.zip ,Worksheet:Table1s1

Way of monitoring	How	Electricity generation of the plant NOX and SO2 emission data from GHG inventory of Turkey will be used as references in calculation of the SO2 and NOx emission reductions.
	When	Yearly
	By who	Plant Manager or Project Developer

No	2	
Indicator	Other Pollutants	
Mitigation measure	N/A	
Chosen parameter	Hg emissions avoided by the project activity	
Current situation of parameter	<p>In 2007, 64,7 million tons of coal were used to generate electricity by coal thermal plant²²</p> <p>Although there is no inventory of Mercury emissions of coal plants in Turkey, UNEP²³ has estimation of the mercury emissions from coal fired power plant which is 0.1 -0.3 g Hg/ton coal. By conservative approach, the lowest value 0, 1 g Hg/ton is taken in consideration.</p>	
Future target for parameter	<p>The project activity is expected to avoid Hg emissions by multiplying total consumed coal of power plants for generating electricity <u>by</u> the latest data available of Hg emissions on UNEP;</p> <p>In 2011: 3,235 kg Hg</p> <p>From 2012 on: 6,470 kg Hg (annually)</p>	
Way of monitoring	How	<p>The latest data of total coal consumption for generating electricity in Turkey.</p> <p>Hg emission data from UNEP study for Hg emission factor of coal power plant.</p> <p>will be used as references in calculation of the Hg emission reductions.</p>
	When	Annually
	By who	Plant Manager or Project Developer

²² http://www.enerji.gov.tr/yayinlar_raporlar/Sektor_Raporu_TKI.pdf

²³ http://www.chem.unep.ch/mercury/Atmospheric_Emissions/Technical_background_report.pdf

No	3	
Indicator	Quality of Employment	
Mitigation measure	Health and Safety trainings for the employees. Providing necessary safety equipment.	
Chosen parameter	Certificates and safety equipment distributed.	
Current situation of parameter	All employees trained on Health and Safety issues Training documents were handed out. Necessary protective equipment was supplied to employees. All employees received social security benefits.	
Future target for parameter	All employees will be trained on Health and Safety issues. The related employees will be trained on "Operational and Maintenance" of the turbines or plant. Training documents both on "Healthy and Safety" and "Operational and Maintenance" will be handed out. Necessary protective equipment will be supplied to employees. All employees will receive social security benefits.	
Way of monitoring	How	Checking certificates and equipment distributed. Health and Safety training documents and employee participation list. (with signature) Operation and Maintenance training documents and employee participation lists. (with signature) Official social security documents that prove all employees have social security benefit at site. Responsible on giving these trainings and will submit relevant training materials, participant signature lists, social security documentation at each verification round.
	When	Annually
	By who	Plant Manager and Health and Safety Inspector

No	4	
Indicator	Balance of payments and investment	
Mitigation measure	The project supports to decrease the dependency of imported fossil fuels (like Natural Gas, coal etc.)	
Chosen parameter	Produced clean energy results reducing the amount of imported fossil fuel as in Baseline status.	
Current situation of parameter	<p>Baseline is how much Turkey spends for importing fuels (coal, natural gas, petrol, etc.) for electricity generation in a yearly basis. Amounts of produced energy in place of produced energy of imported fossil fuel sources as in baseline. Energy imports will reduce resulting in net currency savings. Amount of clean energy produced will be monitored at each verification round.</p> <p>According to study of EIA²⁴, the projected costs of Natural gas fired plants is an average of 98 USD/MWh (in OECD countries) in which 67% represents only fuel costs.</p>	
Future target for parameter	<p>The project will reduce 136,176 MWh * 98 USD/MWh* 0,67 = 8,95 mio USD worth Natural gas import, annually.</p> <p>In 2011 4,475 mio USD</p> <p>From 2012 on 8,95 mio USD</p>	
Way of monitoring	How	Multiply, the annual electricity generation of the plant through monitoring by the latest available data for the average projected cost of Natural gas fired plants in OECD countries according to EIA.
	When	Annually
	By who	Project Developer

²⁴ <http://www.iea.org/textbase/nppdf/free/2005/ElecCost.PDF>

SECTION H. Additionality and conservativeness



Additionality and baseline follows Gold Standard Guidance and was done in accordance with UNFCCC Methodology ACM 0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable resources ver.11". Please refer to the PDD for more details.

