

SOCIALCARBON REPORT

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Identifying the Project

Basic Information	
Indicators	<i>Based on Indicators for Hydropower Plants, Version 4.1 (Indicators adapted for Pembelik Hydro Electricity Power Plant Project, Turkey http://www.socialcarbon.org/uploadDocs/Ekobil_pembelik_adapted_indicators.pdf)</i>
Project Name	Pembelik Hydro Electricity Power Plant
Year-Point of Project	<i>Zero (2011)</i>
Monitoring period (SOCIALCARBON)	<i>27/06/2011 to 23/02/2012¹</i>
Version + Date of report completion	<i>31/10/2013 version 2.02 completed</i>
Corresponding Monitoring Report (Carbon Accounting Standard)	<i>Not applicable as at the time being the project is under validation and not started.</i>
Location	<i>Elazığ-Tunceli/Turkey</i>

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¹ The monitoring period is determined as the first date Ekobil was involved , marked by the contract of Ekobil assigned for the preparation of the VCS PD and Socialcarbon report, and the end date is considered as the date we have performed the site visit with the DOE.

² Registered to the Ankara Chamber of commerce with the registration number 145009 and the full title of Ekobil Çevre Hizmetleri Danışmanlık Eğitim Tarım Hayvancılık Madencilik İnşaat İthalat İhracat Turizm ve Ticaret Limited Şirketi

2. General description of the reduction of GHG emissions Project activity

2.1. Context and history of the reduction of GHG emissions project

Darenhes Elektrik Üretimi A.Ş.. is planning to construct Tatar Hydro Electric Power Plant (HPP) on the Peri Stream, within the jurisdiction of Tunceli and Elazığ Provinces. The purpose of the project is electricity production using the potential energy of Peri Stream as a renewable resource. Therefore, the electricity is going to be produced without causing airborne pollutants or Green House Gas (GHG) emissions. The construction and operation of the Tatar Hydroelectric Power Plant (HPP) will be delaying the addition of conventional thermal power plants to the Turkish National Electricity Grid.

The set capacity of Tatar HPP is 128.22 MWe, with 2 turbines of 64.11 MWe each. Based on the available water and of the total capacity of the project, the project is indicated to produce 429,560 MWh of electricity per year, based on revised feasibility studies. Based on Turkey's Combined Margin Emission Factor of 0. 5398522 tCO_{2e}/MWh, the project is expected to produce 231,898 tonnes of CO_{2e} GHG reductions each year.

The environmental impacts of the project will be kept at a minimum level and all the regulations that are in act in the host country, Turkey, will be obeyed during the construction and operation stages of the Tatar HPP project. At the planning stage these impacts have been investigated and were presented to the Ministry of Environment and Forestry (MoEF now renamed and structured as Ministry of Environment and City Planning), in the form of a EIA report². The report was examined by the an EIA evaluation committee coordinated by MoEF and it was decided that the project could proceed, so they have granted an EIA Affirmative certificate. Considering that the project will be using the water resource that is also essential for the aquatic life in the area, there will be a fish ladder (fish passage way)³ within the regulator for the downstream and upstream movement of the fish, to facilitate fish migration. In addition to this, the minimum water (considered as 10 % of the average flow according to the water usage agreement with DSI-State Water Works) necessary for the sustainability of the aquatic life in the river will always be released.

The Major milestones at the project development history can be summarized as shown in the following table (Table 1):

² The Environmental Impact Assessment (EIA) Report) in the original language is presented to the validating DOE.

³ The plans of the fish ladder are provided to the validating DOE

Table 1: Major Milestones of Tatar HPP Project

Date	Milestone	Reference
February-04	First Feasibility Study Report Was prepared	FS Report
06-Feb-05	Electricity Production License issued by Energy Market Regulatory Authority (EMRA) (Updated on 17-Nov-2011)	EMRA License
10-Feb-06	Stakeholders Meeting Announced in Local news papers	EIA Report p. 117
15-Feb-06	Stake Holder Consultation Meeting Held at Karakoçan Town of Elaziğ	EIA Report p. 116
16-Feb-06	Stake Holder Consultation Meeting Held at Elmalı Village of Mazgirt -Tunceli	EIA Report p. 116
October-2006	EIA Final Report submitted to the MoEF for Approval	EIA Report
15-Nov-06	EIA Affirmative Certificate issued	See Annex-3
10-Jan-2008	Expropriation Approval issued by EMRA	Approval Letter
01-Apr-10	Carbon Finance considered	Board Decision
6-June-2011	Construction Started	NHS Record
27-Jun-11	Ekobil Contracted for Carbon Finance	Contract
Sept-2011	Revised Feasibility Study Report Submitted to DSI	Revised FSR
10-Nov-2011	The Revised Feasibility Study Report Approved by DSI	Approval letter of DSI
18-Nov-2011	Water Usage Agreement amended by DSI to fit the capacity improvement	Water Usage Agreement
14-Dec-11	Validating DOE Contracted	Mail Order
16-Feb-12	PDD submitted to DOE	E-mail
24-Feb-12	Site Visit for Validation	DOE Testimonial

The Tatar HPP is to be constructed at the downstream of two state owned dam, namely Özlüce Dam⁴ (170 MW) and Kiğı Dam⁵ (140 MW), two privately owned dams namely, Seyrantepe (57 MWe) and Pembelik (127 MWe)⁶, dams, that are aimed for energy production purposes. Among these Pembelik and Kiğı HPP are under construction and they are expected to finish before Tatar HPP, and Seyrantepe is operational. Pembelik and Seyrantepe electricity production licenses also belongs to DarenHES A.Ş.

The water that will be regulated by the upstream Pembelik HPP will reach the reservoir lake of the Tatar HPP, than it will reach the water intake body of the Tatar HPP and it will be passed to the regulators via the penstock, the electricity will be produced and through the generators it will go to the switch gear area and transformers, and will be connected to the Turkish electricity Grid via two transmission substations namely, 154kV Seyrantepe TM and 154 kV, Ferrokrom TM. The excess water from the reservoir and the water used to produce electricity will be transferred to the tail water canal and will be left to the Peri Stream to reach to the Keban Dam.

These five dams that are being constructed behind each other are intended to reduce the sediment flow to the Keban Dam (the first large dam in Turkey's history) and was planned in 70s, but they were not possible to construct until now.

How the project activity will be operating is shown schematically below in Figure 1:

⁴ <http://www2.dsi.gov.tr/bolge/dsi9/bingol.htm>

⁵ <http://www2.dsi.gov.tr/bolge/dsi9/bingol.htm#kig%FD>

⁶ <http://www.bilgin.com.tr/darenhes.asp?ide=darenhes>

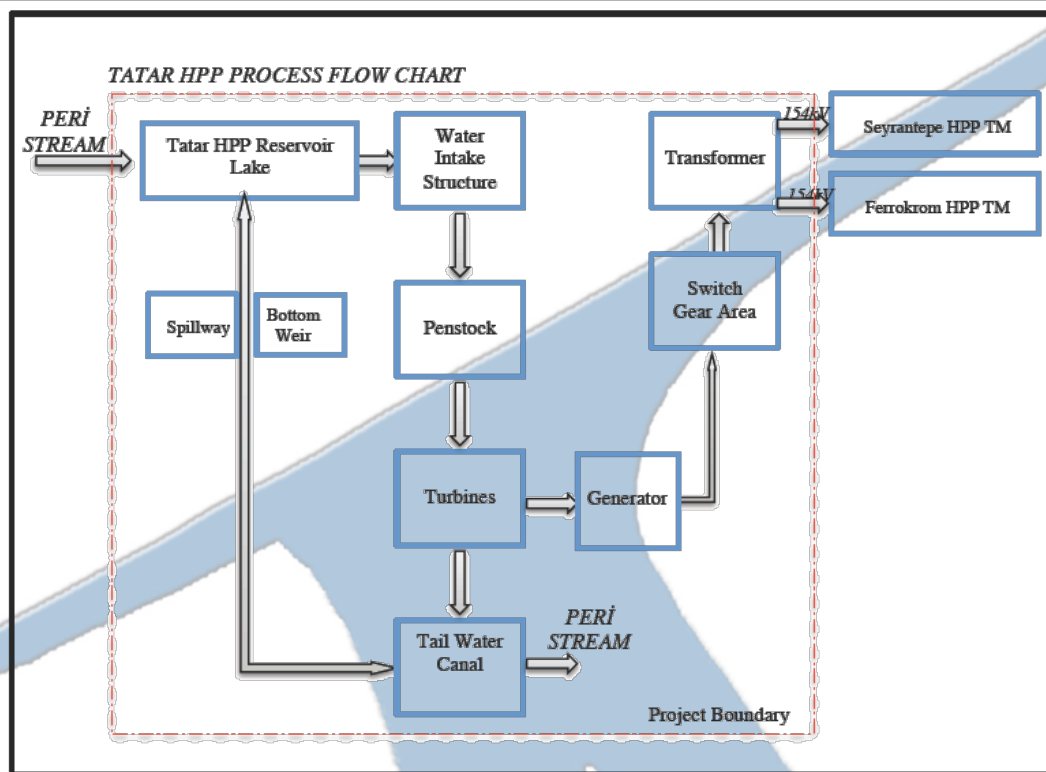


Figure 1: Flow chart showing the basic operational principles of the project activity.

2.2. Activities and methodology used for reduction/capture of GHGs

The Emission Reductions that result from the Tatar HPP Project activity are determined using "Approved consolidated baseline and monitoring methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources." Version 13.0.0.

The Approved Methodology refers to the following tools:

- "Tool for the demonstration and assessment of additionality" (Version 7.0.0)
- "Tool to calculate the emission factor for an electricity system". (Version 03.0.0)

ACM0002 methodology defines the baseline scenario for the proposed project as:

"Electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations."

The choice of methodology ACM0002, Version 13.0.0, is justified as the project activity meets its applicability criteria:

1. The Tatar Hydro Electricity Power Plant Project is a grid-connected renewable power generation project that adds electricity from a run off river's potential energy.
2. The project does not involve switching from fossil fuels to renewable energy at the site of the project activity.
3. The geographic and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the grid is available.

4. The project activity results in creation of new reservoirs and the power density of the project activity is 11.84 W/m^2 which is greater than 4 W/m^2 as shown in the following calculation:

<u>Project Activity</u>	<u>Installed Capacity</u>	/	<u>Reservoir Area</u>	=	<u>Power Density</u>
Tatar HPP	128,220,000 W	/	10,830,000 m ²	=	11.84 W/m ²

The project therefore fulfils the power density criteria and the methodology is applicable.

There is a further requirement that projects with a power density between 4 and 10 W/m^2 must take account of the emissions from the reservoir. As the power density of the Project exceeds the threshold, the ER calculations in the PDD of the project did not have to take account of this potential source of emissions.

The baseline methodology has been applied in a conservative manner in a way that the expected increase in the use of fossil fuels for electricity generation has been ignored although it is well-known that new domestic coal reserves will be utilised in future and are likely to form a higher proportion of the electricity generated in Turkey. Therefore, the basic assumptions are:

- Weight of thermal power plants (and thus the emission factor will remain same over the crediting period.
- When there is no data about the emission factor of fuels sources, it has been accepted as "0" or the lowest value of IPCC Guidelines for National Greenhouse Gas Inventories has been used. In addition, the lowest values have been taken into consideration in the Build Margin Emission factor calculations in accordance with the applied methodology. The emission factors for fuels have been taken as the IPCC values at the lower limit of the uncertainty at 95% interval. Net calorific values of the fuels, on the other hand, have been calculated by the country specific data.

The additionality of the Project activity has been demonstrated using the latest version (version 7.0.0) of the Tool for assessment and demonstration of additionality obtained from the UNFCCC website.

The Green House Gases that have been taken into consideration in within the project boundaries are given in the below table (Table2):

Table 2 Gases included in the project boundary

Source	Gas	Included?	Justification/Explanation
Baseline Electricity generation in baseline (Turkey Grid)	CO ₂	Yes	Main Emission Source
	CH ₄	No	Minor emission source. Excluded for simplification
	N ₂ O	No	Minor emission source. Excluded for simplification
Project Emission from the reservoir of Activity the proposed project (inside project boundary)	CO ₂	No	Zero-emission electricity generation
	CH ₄	No	Minor emission source since power density is very high. Excluded for simplification
	N ₂ O	No	Zero-emission electricity generation

The project boundary is limited by the National Electricity Grid of Turkey. The geographical and physical boundaries of the Turkish grid and location of the power plants are clear. All the data about power generation including imported electricity is obtained from TEİAŞ and have been included in the calculations of the combined margin emissions.

The details of the ex-ante emission reduction calculations can be found in the PDD. The combined margin Emission factor for the Tatar HPP Project is calculated to be:

“0.53985 tCO₂/MWh”

Based on the PDD, the annual electricity production of the project is estimated to be 429,560 MWh. Accordingly the annual Emission reduction is calculated to be as follows:

$ER = 429,560 \text{ MWh} \times 0.53985 \text{ tCO}_2\text{e/MWh} = 231,898 \text{ tCO}_2 \text{ equivalent}$

For the crediting period of 10 years the emission reductions that are expected for each year is summarized in the below table (Table 5):

Table 3: Summary of Ex-ante Emission Reductions over the project crediting period of 10 years.

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 0: 2013 (November 1 st to December 31 st)	38,755
Year 1: 2014	231,898
Year 2: 2015	231,898
Year 3: 2016	231,898
Year 4: 2017	231,898
Year 5: 2018	231,898
Year 6: 2019	231,898
Year 7: 2020	231,898
Year 8: 2021	231,898
Year 9: 2022	231,898
Year.10: 2023 (1 January- 31 October)	193,143
Total estimated ERs	2,318,980
Total number of crediting years	10
Average annual ERs	231,898

3. Method of applying SOCIALCARBON Methodology

3.1. Elements considered in the application of the SOCIALCARBON Method for the sector

For the preparation of this report the “Approved Indicators for Hydroelectric Power Plants Version 4.1, June 2011” is being used, with the exception of indicator “APP (Permanent Protected Areas) and Legal Reservation” under the Biodiversity resource. This indicator was excluded, because there is no PPAs around the project vicinity and therefore this indicator is not applicable. Also the indicator related to technology transfer is excluded as there is no technology transfer aspect of the project.

3.2. Social, economic and environmental impacts of the emission reductions project

The Social, economic and environmental impacts of the project activity was investigated and summarized in an officially approved Environmental Impact Assessment report that resulted in an EIA affirmative certificate. The report indicates no major impacts related to the project activity. As a result the project has granted EIA affirmative opinion by the Ministry of Environment and Forestry⁷.

A non technical summary of the officially approved project description report can be submitted upon request.

3.3. Method used for obtaining information

The data for the above mentioned approved indicators is collected by:

1. *semi-structured interviews with key stakeholders on the project site,*
2. *based on the questionnaires that are sent to the project owner and each indicator is discussed with the project owner.*
3. *and based on the reports related to the project activity such as the project description report.*

3.4. Actors involved

The stakeholders of the project are determined based on their relation to either the project itself or their relation to the location of the project. The following table provides a list of the stakeholders involved in the diagnostics, with their job/title and an explanation of why they were chosen to be a stakeholder.

Name	Contact Info	Job/Title	Reason Involved
Muhammed Salih Çetiner	muhammedsalih23@hotmail.com	Forestry Deputy Director	To obtain information about the reforestation and management of the marginal areas, and information about the acceptance of the local public and other social resources related issues.
Muhittin Karabulut	mkarabulut@cevreorman.gov.tr	EIA and Planning Branch Manager	To gather information about the environmental compliance
Orhan Çelikdemir	orhancelikdemir@hotmail.com	EIA and Planning Branch Officer	To gather information about the environmental compliance and legal compliance issues
Şah Demir	sahdemir54@hotmail.com	Environmental Officer(Former)	To gather information about the environmental and public relations

⁷ The name of the Ministry has changed later in 2011 to Ministry of Environment and Urban Planning

			aspects of the project.
Hatice Çınar	hcinar@limak.com.tr	HSE Manager	To gather information about the environmental regulation compliance aspects of the project activity.
Özdal Özdemir	ozdalozdemir@hotmail.com	Engineer at the site	To learn more about the project and to obtain information about human resources related issues
Cafer Saka	cafersaka@hotmail.com	Apprentice engineer	To learn more about the project and to obtain information about human resources related issues
Ahmet Doğan		Tatar inhabitant village	To obtain information about the acceptance of the local public and other social and human resources related issues.
Ferit Sönmez		Nişankaya inhabitant village	To obtain information about the acceptance of the local public and other social and human resources related issues.
Şeref Taşdelen		Chief of Security	To learn more about the project and to obtain information about human resources related issues
Gülistan Demir	gulistand@dsi.gov.tr	DSI	To obtain information about the acceptance of the local public and other social resources related issues.
Ahmet Ayeri	ahmet.ayeri@dsi.gov.tr	DSI	To obtain information about the acceptance of the local public and other social resources related issues.
Burcu Tülek	bkilic@bilgin.com.tr	Commercial Project Specialist	Answered questions related to each indicator
Aybike Öner	aoner@limak.com.tr	Finance Specialist	Answered questions about project history
Elçin Caner	ecaner@limak.com.tr	Corporate Finance Manager	Answered questions related to each indicator
Yusuf Bilgin	yusuf@bilgin.com.tr	Project Manager	Answered questions related to each indicator

4. Results

The results are presented by using the names and numbers of each indicator as they are demonstrated in the original “hydro indicators version 4.1”. The name, description of each indicator is given, the comments on present situation, the score of the indicator determined based on the present situation and the future target for the considered indication is given. The targets are tried to be kept to the most realistic level, in order not to increase expectation for the future. The achievability of some of these targets depends on the availability of the human and financial resources, whereas some of the targets are relatively easier to achieve since these are to improve the present situation by implementing a recording and reporting system.

4.1. Social Resources

<i>Name of Indicator</i>	<i>Population Displacement</i>
<i>Description of Indicator</i>	Evaluates if the project requires people, activities or services to be displaced due to the implementation of the project, as well as the measures adopted during the planning and implementation stages, in order to minimize negative impacts or maximize positive impacts.
<i>Comments on present situation</i>	As the settlements are close to the river's flood plain some houses and private property (with agricultural land use) needed to be expropriated. The expropriation is done according to government rules. The initial estimates in the Feasibility studies for the expropriation costs were about 88% less than what was realized, indicating that all the property owners were fairly compensated.
<i>Score of the index</i>	5- Participatory Relocation Program, including negotiations with different actors (owners, public agencies, and civil society organizations).
<i>Future Targets</i>	The project is going to help, within its limits, improve the infrastructure of the new settlements.
<i>Name of Indicator</i>	<i>Communication With Stake Holders</i>
<i>Description of Indicator</i>	Evaluates the process for contacting stakeholders in the planning, implementation and operation stages.
<i>Comments on present situation</i>	The project owner is open to dialogue with stakeholders. They communicate regularly with the village heads, and welcome the visitors. From time to time, the nearby villages are visited regularly and the project officers talks to them and explains issues related to the project and listens to their needs and answers their questions.
<i>Score of the Index</i>	4-Establishment of a permanent forum in order to maintain communication with local stakeholders.
<i>Future Targets</i>	The Project Owner will continue to improve the communication with stakeholders. As part of Environmental Communications Program The Project Owner will organize a competition in one of the neighbour village school. The students will be asked to prepare an essay where they will discuss different primary sources for electricity production and compare it with renewable energy. This will help to increase the awareness of school children on issues such as environment, and importance of renewable energy.

Name of Indicator	Acceptance
Description of Indicator	Evaluates the level of support or acceptance from the neighbouring population in regard to the project construction or management of the reservoir.
Comments on present situation	All the parties interviewed in this aspect agrees that the project is accepted in general but there is minor opposition. When you try to understand the reasons behind opposition it is understood that the opposition is either because it is fashionable to protest hydro power plants or because of personal reasons such as a person who wanted a job to work but was not suitable to work in the construction site.
Score of the Index	4-Support from local stakeholders, but some opposition still exists
Future Targets	In order to keep this support the project owner is going to continue its openness policy and the good relationship that was already established with the local stakeholders.
Name of Indicator	Social Demands
Description of Indicator	Social Demands may be understood as institutional or civil society interests: demands made by institutions, agencies, NGOs, municipalities or other institutions which aim to improve the human development and/or the environment near the project. This item evaluates which social demands the entrepreneur addresses.
Comments on present situation	The entrepreneur is maintaining the roads of the new settlements and providing earthmovers or construction materials when requested by the villagers. They especially help the villagers during the winter times when the roads are blocked by snow cover.
Score of the Index	4-The entrepreneur takes actions that surpass compulsory activities.
Future Targets	The entrepreneur is developing a policy that will cover the rules and other criteria to address voluntary social actions. Within one year the project owner is going to prepare an internal code of conduct that will outline these rules.
Name of Indicator	Social Programs
Description of Indicator	Evaluates the quality and results of additional social programs, such as: - Social and Environmental Communications Program - Community development / income generation - Ethnic integration (Not Applicable in this case) - Other social areas (women's involvement in family income generation)
Comments on present situation	The entrepreneur gives great importance to such issues; however such programs are at the planning stage since the project itself is at the construction stage, which is the most vulnerable stage of a project from an economical point of view.
Score of the Index	2 Actions are in planning stage with high uncertainty that benefits can be delivered.
Future Targets	The Entrepreneur is going to be identifying programs and activities together with the local stakeholders. They will assess the situation taking into account socio economical characteristics of the area.

<i>Name of Indicator</i>	<i>Social Benefits</i>
<i>Description of Indicator</i>	Evaluates the additional benefits to local stakeholders, when these benefits are measurable or evident. These benefits may include: Improvements in health system (new installations, enhanced water and electricity systems, support for health programs, and others) Additional economic activities (industry, commerce, and others) Improvements in the infrastructure (roads, energy provision, leisure spaces, and others)
<i>Comments on present situation</i>	The project owner is improving the connection roads between the villages and the town, and In addition to this the project owner have made a drilling to find drinking water and helped the water supply to the nearby settlements.
<i>Score of the Index</i>	5. Project delivers in two major areas to a large number of local stakeholders.
<i>Future Targets</i>	The Project will keep helping the community by improving the roads, and helping the communal areas.

The rate of the critical indicators: 17 %
The rate of satisfactory indicators: 50 %
The rate of sustainable indicators: 33 %
The total of the 6 social indicators is: 24
The average score for the social resource is: 4

4.2. Human Resource

<i>Name of Indicator</i>	<i>Human Resource Availability Capacity Building Initiatives</i>
<i>Description of Indicator</i>	Level of experience and capacity of people involved in the operation and maintenance of the project.
<i>Comments on present situation</i>	In the immediate vicinity there were not enough people with the ability to work in the tunnel construction and other hydro power plant specific structures require significant experience. But still the entrepreneur prioritized the local workers, when there is a job opening for unskilled workers. The entrepreneur has a dedicated space in the construction site, for in-house trainings and seminars in the facility. Also the unskilled workers learn from the experienced ones by observation. However the entrepreneur had enough engineers and workmanforce to complete the design and organize the construction works of the project activity, that the project construction was not delayed.
<i>Score of the Index</i>	5. Implementation: Human resources available for the implementation/design of the project.
<i>Future Targets</i>	The entrepreneur targets to keep the regular in-house trainings.
<i>Name of Indicator</i>	<i>Health & Safety</i>
<i>Description of Indicator</i>	Evaluates if a comprehensive employee safety program is in place and its effectiveness can be demonstrated by the absence of life-threatening accidents
<i>Comments on present situation</i>	The project site also has a regular medical doctor responsible for the H&S of the employee. There is a an established OHSAS certification that is audited by a third party.
<i>Score of the Index</i>	6. Existence of an Occupational Health and Safety Management System certified by a third party.
<i>Future Targets</i>	The project owner will keep implementing the OHSAS management system and renew its certification as deemed necessary

Name of Indicator	Benefits
Description of Indicator	Evaluates existence of additional benefits to workers regarding the following: - Education (support for studies) - Health (medical and hospital assistance) - Retirement assistance - Other (leisure, sports, and meal vouchers, among others). In cases where the services for implementation, operation and maintenance are outsourced, the indicator evaluates the outsourced employees also.
Comments on present situation	The project provides benefits such as free access to medical services at the on site health cabin and accommodation and free lunch and dinner at the construction site .
Score of the Index	4-Benefits are offered to all employees involved in the project in to two of the areas.
Future Targets	The project owner will ensure employee job satisfaction and consider feedbacks to further improve working environment.
Name of Indicator	Involvement of Employees in the Project
Description of Indicator	Evaluates internal communication process of the entrepreneur in relation to project emissions reductions.
Comments on present situation	The employees are not aware of the contribution of the project to the global climate change. Only the upper management and those that are immediately involved in carbon project know about these issues.
Score of the Index	2. Only management and employees directly involved in the carbon project are aware.
Future Targets	The project owner is planning to organize a training session to inform the employee about the climate change and the carbon project.

The rate of the critical indicators: 25%

The rate of satisfactory indicators: 50%

The rate of sustainable indicators: 25%

The total of the 4 Human Resources Related indicators is: 15

The average score for the Human Resource is: 3.75

4.3. Financial Resource

Name of Indicator	Economic Performance
Description of Indicator	Evaluates if the economic performance of the project met the expectations of the shareholders and directors regarding, for example, goals for energy generation, stated periods for executing jobs, and operational and maintenance costs. It evaluates if the goals were met or if they did not meet the expectations for the given period.
Comments on present situation	The project is going for now according to planned schedule and the project owner indicates that their expenditures are within their expected margins, therefore they think that they have achieved their goals.
Score of the Index	4. Adequate Performance. Goals and expectations established with shareholders have been accomplished.
Future Targets	The project owner is in the opinion to sustain and if possible improve the performance of the project by maintaining and protecting the project and its surroundings

<i>Name of Indicator</i>	<i>Market</i>
<i>Description of Indicator</i>	Evaluates eligibility of credits to CDM Market or to other voluntary markets as well as their attractiveness to potential buyers.
<i>Comments on present situation</i>	The carbon asset of the project is developed considering the CDM rules and the project is validated to the Voluntary Carbon Standard and can only reach to the voluntary markets.
<i>Score of the Index</i>	3. Project activities are eligible for the voluntary market.
<i>Future Targets</i>	The project owner is hoping to have an opportunity to bring the project into compliance market. However, this depends mainly on the change of the status of Turkey. So the project owner will actively contribute to the lobbying activities to support improvement of Turkey's status in global carbon markets.
<i>Name of Indicator</i>	<i>Sale of Credits</i>
<i>Description of Indicator</i>	Evaluates uncertainties regarding the value of commercialized credits generated by the project
<i>Comments on present situation</i>	The project owner started to probe potential buyers by the help of their carbon finance consultant. But the carbon asset is till at a early stage of development.
<i>Score of the Index</i>	At this stage this indicator is not going to be evaluated as the construction is still going on and the carbon asset development of the project is at an early stage.
<i>Future Targets</i>	The project owner is willing to improve the value of their VCU's by distinguishing their project by adding the social carbon standard and by emphasizing the distinctive aspects of the project.

The rate of the critical indicators: 0 %
The rate of satisfactory indicators: 100%
The rate of sustainable indicators: 0%
The total of the 3 financial indicators is: 7
The average score for the financial resource is: 3.50

4.4. Natural Resource

<i>Name of Indicator</i>	<i>Sustainability Principles</i>
<i>Description of Indicator</i>	Evaluates the existence of specific policies and programs geared toward project sustainability and the applicability of the principles, values and objectives regarding sustainability.
<i>Comments on present situation</i>	The sustainability concept and principles are appreciated and practiced as environmental protection, improved working environments, in-house trainings and improving the quality of life in the vicinity of the project area. These are applied as common sense and as part of the company culture.
<i>Score of the Index</i>	3. Incorporation of sustainability in the values, strategy and principles of the project owner.
<i>Future Targets</i>	The project owner will write an internal code of conduct to incorporate sustainability principles and will set sustainability goals and monitor achievement towards these goals. In addition to that they will incorporate sustainability principles to the tender documents they prepare for their subcontractors encouraging them to adapt sustainability principles.
<i>Name of Indicator</i>	<i>Environmental Management</i>
<i>Description of Indicator</i>	Evaluates environmental management procedures adopted by the

	project, including organization, coordination of actions, and documentation of impacts identification, monitoring, and periodic emissions reporting, as well as existence of regular certification.
Comments on present situation	The project is implementing an environmental management system that is followed by a government accredited environmental officer that follows the commitments project made in its EAI report. This is followed by 6 monthly reports to the MoEUP ⁸ . Additionally, there is a ISO 14001 Environmental Management System certificate in place. Certification was done by a third party.
Score of the Index	6. Certified environmental management system by a third party.
Future Targets	The project owner will ensure the perfection of the Environmental Management System, and renew its certification periodically.
Name of Indicator	Environmental Legislation
Description of Indicator	Evaluates accordance of the project with environmental laws and norms, including agreements with public authorities, such as environmental licenses, requested authorizations for installation, etc.
Comments on present situation	The project complies with the Turkish environmental regulations and rules. All the environmental permits and licenses are valid and up to date. Environmental permits and licenses are not only followed up the by the responsible staff for the collection of the necessary work within the company but also are carried out through a consulting firm which is accredited by MoEU. All relevant changes to the current legislation and compliance to the environmental regulations are followed up by the management at the central office, and by the help of the intranet system, such changes are shared with the relevant project managers. This way all environmental permits are ensured to be complete and on time. The project's compliance with all the environmental rules and regulations have also been testified by the relevant government officials that was interviewed during the site visit.
Score of the Index	6. In addition to the items in Index 5, the entrepreneur has systematic control of the licensing process.
Future Targets	The project owner will maintain the current situation.
Name of Indicator	Legal Procedures
Description of Indicator	Evaluates if the project was involved with any lawsuit or administrative sanctions executed by public organs, person or people, aiming the environment and human health protection or repair.
Comments on present situation	In the past one year there was no such legal law suits nor there were any judicial actions related to the project. There were only some minor warnings related to some of the environmental practices, and this was corrected immediately. The local branch of the MoEUP indicated that the project owner does everything in order and all their permits and papers are in place.
Score of the Index	6. The project did not suffer from public civil or judicial action or receive any warnings due to potential risk or effective damage

⁸ MoEUP:Ministry of Environment and Urban Planning

to human health or the environment.

Future Targets	The project will keep carefully obeying the rules and regulations to avoid any public lawsuit.
Name of Indicator	Environmental Impacts
Description of Indicator	<i>Evaluates magnitude of environmental impacts of the project, existence of environmental impact statements/studies, and maintenance of environmental evaluation procedures.</i>
Comments on present situation	The project has submitted an EIA report to the MoEUP. The report is examined by the EIA committee and the project received an EIA affirmative certificate.
Score of the Index	5. Studies show insignificant environmental impact.
Future Targets	The project owner will ensure to keep the impacts at a minimal level
Name of Indicator	Environmental Risk Management
Description of Indicator	Evaluates the definition, implementation and maintenance of procedures relevant to potential emergencies and accidents related to the project, as well as those relevant to the preparation of answers for such situations, in case of emergency.
Comments on present situation	The project has its environmental risk management plans in place and there were no environmental risk or emergency situations during the specified validation period. In addition to this environmental risks are periodically evaluated and monitored together with the compliance monitoring regarding the commitments made in the EIA report. As a general company policy, environmental risk assessments are performed before the commencement of construction works. Necessary control measures are developed to manage the identified risks for the project activities, and these risk management activities are carried out by the project site employees. These activities are monitored and controlled by the central office authorized personnel. Hence, there were no environmental emergency situations during the specified assessment period. The Emergency action plan is also submitted to the attention of the Ministry of Environment and Urban Planning, as part of the EIA report. On top of that the project has ISO 14001, OSHAS 18001 and ISO 9001 certifications that also partially matches the evaluated period. Environmental risks are monitored by a third party, a consultant company and technical reports regarding environmental management are issued on a monthly basis.
Score of the Index	6- Periodic internal and external audits of environmental risks and technical reports regarding environmental management are conducted.
Future Targets	No target assigned. The Project owner will maintain the current situation.
Name of Indicator	Reservoir and marginal areas management
Description of Indicator	Measures the effectiveness of the Reservoir and marginal areas management, considering: a) existence of invasions in the marginal and adjacent areas and mitigation measures adopted b) existence of plan or program for use of the reservoir and surrounding areas, considering its coverage and efficacy for assurance of the planned uses.
Comments on present	The project is highly focused to construction affairs, but there is

<i>situation</i>	no intrusion to the project area.
<i>Score of the Index</i>	3. There are no invasions or inadequate uses of project owner' areas around the reservoir.
<i>Future Targets</i>	The project owner is targeting to develop a plan for the management of the reservoir and marginal areas.
<i>Name of Indicator</i>	Erosion, landslides, silting and floods
<i>Description of Indicator</i>	Evaluate the current stage of erosion and silting of the reservoir and if the operations are a major cause of the problem and the existence of programs to manage these risks, such as monitoring, and erosive processes control (ex: protection and reforestation programs for reservoir protection zone).
<i>Comments on present situation</i>	The project is developed as part of a 5 set of dams at the upstream direction of the first biggest hydro power project of Turkey: Keban HPP. Therefore the erosion and siltation is not much, as Tatar is the 5 th dam in the sequence. Also the forestation and erosion control studies in the entire catchment area is coordinated by the Forestry department and during the operation stage Tatar management will contribute to these studies.
<i>Score of the Index</i>	4. Operations cause minimal or none on going sedimentation or erosion problems in Reservoir or downstream areas.
<i>Future Targets</i>	The project owner will improve the surrounding area by reforestation projects.
<i>Name of Indicator</i>	Water Resources
<i>Description of Indicator</i>	Evaluate the current stage of water quality of the reservoir or downstream water and if the operations are a major cause of the problem and the existence of programs to manage these risks, such as monitoring data and measures of control implemented (ex: sewage treatment station eventually implemented in local communities due to construction of the hydroelectric plant, actions taken for sanitary vigilance, etc.).
<i>Comments on present situation</i>	As these are the stage dams, water exits one HPP and enters the next, so there is no change in the quantity or quality of the water available in the stream. So, the project has no negative impact on the water quality and quantity. The general company policy involves protection of water quality. Therefore, untreated wastewater discharge is not at all allowed. To avoid discharge of untreated wastewater, a package wastewater treatment plant was installed and the effluent is then transferred to the wastewater treatment facilities are established. During Tatar construction period, a package wastewater treatment plant was established for the sanitary wastewater generated from construction activities. Additionally, settlement ponds were constructed for purpose of treatment for wastewater generated from batching plant. It is also ensured that the discharges are to be made in compliance with the nationally allowed limits and monitoring are carried out by performing analysis, with the competent laboratories and in collaboration with the Provincial Directorates of Environment. Additionally, precautions are taken to avoid contamination of the reservoirs or other water resources from other construction related rubble and wastes. Construction of protective barriers, waste management practices and activities carried out for the protection of water quality.

Score of the Index 5. Program includes preventive actions.

Future Targets The project owner is planning to prepare a program that will determine preventive actions that will protect the water quality of the river water. Including basic awareness programs that will inform local inhabitants on how to protect their river.

The rate of the critical indicators: 0%
The rate of satisfactory indicators: 33%
The rate of sustainable indicators: 67%
The total of the 9 natural resource indicators is: 44
The average score for the natural resource is: 4.88

4.5. Biodiversity Resource

Name of Indicator *Recovery of Degraded Areas*

Description of Indicator *Evaluates existence of reforestation projects in marginal areas of the reservoir, procedures for planting, maintenance, control measures and surveillance. It also evaluates extent of actions: limited legal obligations, areas of the company, riparian forest in the incremental basin, and so on.*

Comments on present situation The project is at the construction stage but as soon as the construction will be completed there are voluntary landscaping and tree planting plans that are going to be implemented by the project owner.

Score of the Index 4. Voluntary recovery of degraded areas but only in areas of project ownership.

Future Targets For the operation stage the project owner is planning to initiate a tree planting campaigns together with the local inhabitants of the area, thus helping to improve areas that are outside the project borders.

Name of Indicator *Biodiversity Conservation*

Description of Indicator *Evaluates actions of biological monitoring developed in surrounding environmental areas and influence of the power plant; assesses specific programs developed for flora and fauna on the banks of the reservoir or in surrounding areas for conservation and research.*

Comments on present situation As the project is at the construction phase, the project owner is only doing their legal obligations for the moment.

Score of the Index 3. Limited to legal obligation.

Future Targets The project owner will be watching the area and will be helping the preventing of illegal hunting and will support conservation actions by distributing information about the necessity of the protection of the local wildlife.

Name of Indicator *Ichthyofauna*

Description of Indicator *Evaluates existence of procedures for monitoring the Ichthyofauna, partnerships for research, and management actions (restocking, culture in ponds, net)*

Comments on present situation The project is supporting the fish life by preventing illegal hunting. In the body of the project area, also they are constructing a fish passage to support fish migration.

Score of the Index 5. The project is implementing a program for preventive actions

Future Targets The project owner is going to complete the fish passage and

ensure its maintenance and operation.

The rate of the critical indicators: 0%
The rate of satisfactory indicators: 67%
The rate of sustainable indicators: 33%
The total of the 3 Biodiversity indicators is: 12
The average score for the financial resource is: 4.00

4.6. Carbon Resource

<i>Name of Indicator</i>	<i>Additionality</i>
<i>Description of Indicator</i>	Consists of reduction of greenhouse gas emissions or increase in removal of CO ₂ beyond what would occur in absence of project activity. This item evaluates tools used for assessing additionality and compliance with national and international standards.
<i>Comments on present situation</i>	The project is implementing VCS version 3 standard and CDM Approved tools to demonstrate additionality the project is under validation..
<i>Score of the Index</i>	6. It is considered additional according to criteria stated in a monitoring methodology approved by the CDM Executive Board. The project is developed to the VCS rules.
<i>Future Targets</i>	The project is targeting to comply with the VCS rules and will be monitored to be in compliance with CDM approved emission reduction methodology.

<i>Name of Indicator</i>	<i>Emissions Reductions Calculations & Monitoring</i>
<i>Description of Indicator</i>	Evaluates methodologies used to calculate emissions and monitor compliance with national and international standards.
<i>Comments on present situation</i>	The projects emission reductions are going to be calculated and monitored based on CDM approved Methodology "ACM0002 version 13.0.0: Grid-connected electricity generation from renewable sources"
<i>Score of the Index</i>	6. The project has a methodology to calculate emissions reductions and a monitoring plan based on a methodology approved by the CDM Executive Board.
<i>Future Targets</i>	The project owner is targeting to keep complying with the VCS and CDM rules.

<i>Name of Indicator</i>	<i>Validation & Verification</i>
<i>Description of Indicator</i>	Evaluates existence of total or partial validation/verification of project by a third party, if third party is accredited by UNFCCC, and compliance procedures for validation/verification with national and international standards.
<i>Comments on present situation</i>	The ongoing validation of the project is conducted by a UNFCCC accredited DOE.
<i>Score of the Index</i>	6. Validation and Verification are conducted by a Designated Operational Entity according to UNFCCC specifications.
<i>Future Targets</i>	The project owner is targeting to keep complying with the VCS and CDM rules.

<i>Name of Indicator</i>	<i>Project Performance</i>
<i>Description of Indicator</i>	Evaluates performance of project, verified by comparison with estimates of emissions reductions under the PDD.

Comments on present situation	The project is not yet commissioned. It is expected to achieve at least 95 to 95% of the VERs targeted in the PDD.
Score of the Index	It is not possible to provide a score at this stage.
Future Targets	The project is targeting to produce at least 95% of the amount of VERs estimated in the validated PDD.

The rate of the critical indicators:0%
The rate of satisfactory indicators: 0%
The rate of sustainable indicators: 100%
The total of the 3 carbon resource indicators is: 18
The average score for the carbon resource is: 6

5. Analysis of results

To analyze the situation of the project, it is important to consider what is represented by the score obtained for each of the resources. The indicators are established to express the following relationship between the scores obtained and the situation of the project:

Scores 1 and 2:

Situation: Critical.

Characteristics: existence of irregularities; high socio-environmental risk; significant levels of social and environmental degradation; or situation of extreme hardship, which significantly compromises the quality of life of the population.

Scores 3 and 4:

Situation: Satisfactory.

Characteristics: meets all the legal requirements relating to its activities; surpass them through the adoption of good practices and voluntary actions in some cases; or a quality of life that reaches the minimum acceptable standard, but which requires improvement.

Scores 5 and 6:

Situation: Sustainable.

Characteristics: exceeds its legal obligations and/or common practice in the market, in many cases adopting the best-possible practices for the sector; or communities have reached a sustainable livelihood, with adequate access to material and social goods, are capable of recovering independently from situations of stress, and are not causing the deterioration of basic environmental resources through their activities.

In order to obtain an analysis of the Resources average, an equal distribution is adopted between the decimal intervals from 1 to 6, expressing the following relationship amongst the indexes obtained and the project performance.

Average index obtained for the Resource	Decimal interval	Situation
Interval from 1 to 2,6	1,7	Critical
Interval from 2,7 to 4,3	1,7	Satisfactory
Interval from 4,4 to 6	1,7	Sustainable

5.1. General performance

Based on the above explanation the sustainability performance of the Tatar Hydroelectric Power Plant Project can be summarized as follows (Table 6):

Table 4: Sustainability Performance of Tatar Hydro Electric Power project - Point Zero (1.January 20011-31 January 2012)

Resource	Critical	Satisfactory	Sustainable	Average Score	General Performance
Social	17%	50%	33%	4.00	Satisfactory
Human	25%	50%	25%	3.75	Satisfactory
Financial	0%	100%	0%	3.50	Satisfactory
Natural	0%	33%	67%	4.88	Sustainable
Biodiversity	0%	67%	33%	4.00	Satisfactory
Carbon	0%	0%	100%	6.00	Sustainable
Overall Assessment	6.94%	50.00%	43.06%	4.36	Satisfactory

Based on the above table (Table 6) that summarizes the general state of the Tatar HPP, the project is performing satisfactorily based on the overall assessment. In addition to this the project didn't perform critical in any of the resources. However, to reach the ideal performance the project needs to improve its performance on all of the resources, that have scored satisfactory and needs to maintain the situation for the two resources that have scored sustainable.

On the other hand there are resources where the project owner cannot improve much as there are issues that are out of their control. Such as project performance related to financial resources is not only dependent to the project it self but also to the improvements in the global carbon markets. Therefore it is difficult to hope for the project to improve its performance in this area where there are elements that cannot be controlled. But the project is expected to pass the critical range after it will get into operation.

The Carbon resource is the strongest aspects of the project. The carbon resource of the project is also strong as it was developed using UNFCCC approved methodologies and tools and since it was validated by UNFCCC accredited DOE.

The lowest average performance point of the project is related to the human resources and financial resource. The project is within the satisfactory range with a score of 3.50 for these two indicators. This can be attributed to project being at the construction stage, which is the most vulnerable stage for a project.

The biodiversity resource and natural resources are observed to get scores within the satisfactory and sustainable range, respectively. Biodiversity is very close to sustainable range and natural resources is just above it. As the project is at the construction stage, this can be attributed to the lack of systematic programs that document the entrepreneur's willingness to protect environment and support biodiversity.

5.2. Performance by resource

As explained above the overall performance of the Tatar HPP is satisfactory, with the best performance for the natural and carbon resources and satisfactory performances for social, human, financial and biodiversity resource.

5.2.1. Performance of Social Resource

To assess the social resource, 6 indicators are evaluated. The average performance regarding the social resource is satisfactory (Average mark 4.00<4.4 indicating satisfactory range). The

analysis of this resource in detail shows that the local stakeholders accept the project, with some non-project specific opposition against the project technology. This acceptance is established as a result of the good communication between the project and the local community, but the communication is not systematic and the effect of this communication is not measured. The studied indicators to assess the social resource have shown that the project owner has surpassed the compulsory actions to satisfy social demands of the community. And the compensations paid for the displacement of some settlements was satisfactory. Also in some interviews some of the local citizens indicated an improvement in the lifestyles of their re-located neighbors. Yet, the lowest mark is given to the indicator related to the presence of the social programs that would improve the quality of life for the immediate vicinity of the project. This is because such programs are at the research stage as the project is itself at the construction stage. The social resource related indicators obtained marks indicating critical for only 17% of the indicators, satisfactory for 50% of the indicators and sustainable for 33% with an average mark of 4.00 indicating satisfactory performance.

5.2.2. Performance of Human Resource

To assess the human resource, 4 indicators are evaluated. The average performance of the project regarding the human resources is 3.75, indicating a satisfactory performance. The project gets sustainable marks for the indicator that diagnose the health and safety conditions of the project site and the employees, due to the well structured H&S system implemented at the project site. The working conditions are satisfactory. It is revealed on the site visit that employees were not aware of climate change and the contribution of the project to tackle this challenge. This indicator which is one of two indicators that scored critical within the entire Social Carbon Standard assessment, will be improved in the near future by in-house trainings that will provide information to the employees about the carbon project.

5.2.3. Performance of Financial Resource

To assess the performance of the project against the financial resource, 3 indicators are evaluated. The average performance of the project scored 3.50, indicating a satisfactory Performance. Since the project is under construction, the last indicator is not evaluated at this stage. The uncertainties and the global financial crises that effect the market conditions also lead to a down scoring of this resource.

5.2.4. Performance of Natural Resource

To assess the performance of the project against the Natural Resource, 9 indicators are evaluated. The average performance of the project scored 4.88, indicating a sustainable performance. The project showed that it is sustainable for 6 of the 9 evaluated indicators, because, the project complies to the Turkish regulations and environmental laws, and proved that it has minimum impact to the environment by a government approved Environmental Impact Assessment affirmative certification. However, regarding the 3 other indicators the project scored relatively less because, although the project owners have a decent understanding of the sustainability concepts, they do not have a monitoring system, and performance targets regarding sustainability. Similarly since the project is at the construction stage the programs regarding the improvement and management of the marginal areas and the reservoir, erosion control and programs to explain importance of the water resources are at the development stage.

5.2.5. Performance of Biodiversity Resource

To assess the performance of the project against the Biodiversity Resource, 3 indicators are evaluated. The average performance of the project scored 4.00, indicating a satisfactory performance. The project scored 4- a satisfactory performance regarding the recovery of the degraded areas as they are going to be performing tree plantation within the project

boundaries. The program scored 5 since it will have a fish passage within the body of the regulator. The project owners are willing to improve their status to be fully sustainable by implementing tree planting campaigns to improve degraded areas outside their jurisdiction and by developing supportive programs that would encourage biodiversity protection in their region.

5.2.6. Performance of Carbon Resource

To assess the performance of the project against the Carbon Resource, 3 out of 4 indicators are evaluated. The project scored 6, a full score indicating a sustainable performance for the first 3 of these indicators. The reason for this is that the project's carbon assets were developed according to a UNFCCC CDM executive board approved methodology. The additionally, the emission reduction calculations and the validation and verification (under progress) of the project are all performed by UNFCCC accredited DOEs, based on UNFCCC approved methodologies, and tools. Since the project performance is not known yet, this last indicator is not evaluated at this stage.

5.3. Historic performance and comparative analysis

Since the assessment period is between 27/06/2011 and 24/02/2012 (both days inclusive), is the first assessment period, or the point zero year, based on the Social Carbon Standard criteria. Therefore no historical performance and comparative analysis is being made.

5.4. The Graphic performance of the project

Based on the above explained scores, the graphic performance of the Tatar Hydro Electric Power Plant project is as shown in Figure 2.

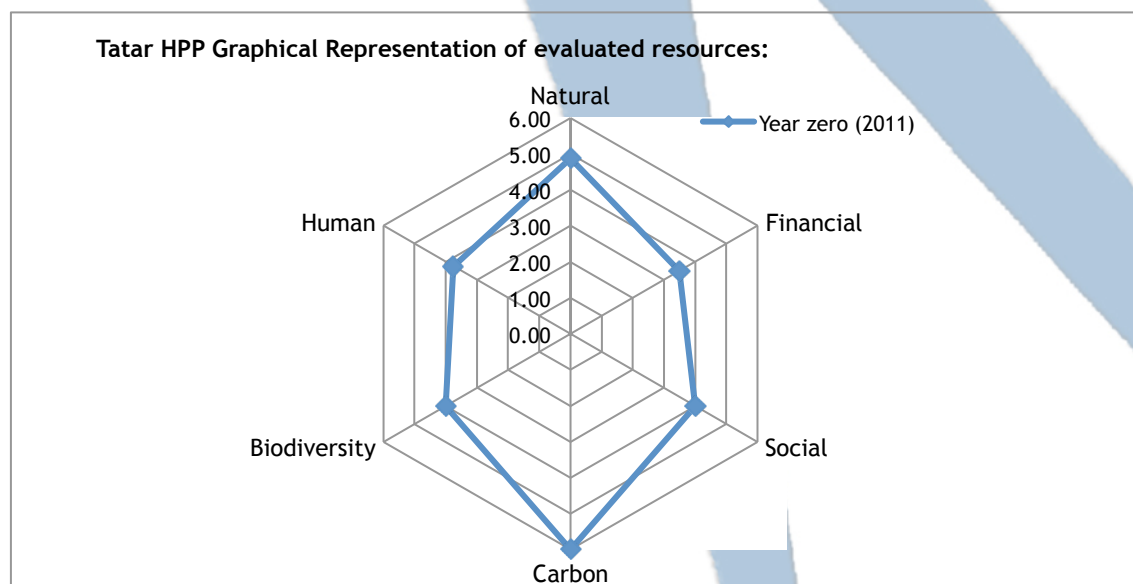


Figure 2-The hexagonal graphic with the results of application of SOCIALCARBON Methodology, for the point zero year of Tatar HPP project.

⁹ The monitoring period is determined as the first date Ekobil was involved, marked by the contract of Ekobil assigned for the preparation of the VCS PD and Socialcarbon report, and the end date is considered as the date we have performed the site visit with the DOE.

6. Perspectives/Future Targets

The following is a compilation of the immediate actions and the future activities that the project owner is intending to implement in order to:

1. Make sure the situation will be improved to sustainable for the critical indicators,
2. Sustain the situation for the indicators that acquired a score ≥ 5 .
3. And improve the situation for the satisfactory indicators so that they will become sustainable.

The immediate actions cover mainly the issues the project owner will solve only by implementing some more monitoring and recording procedures, and those that they have already planned and started to do some activities. The others are future perspectives and targets that they are willing to achieve along the continued improvement of the project, but these targets need some more research to understand the resources needed for their realizations.

Below Table 7 provides a list of the immediate and future actions, and the relationship of each action with the selected indicators. The immediate actions are indicated as high priority at the last column and the others as normal priority.

Table 5 The list of immediate and future targets and actions that will be carried out with regard to each indicator evaluated in this report.

Resource	Indicator Name	Score	Target	Action	Who	When	Priority
Social Resource	Population Displacement	5	The project is going to help improve the infrastructure of the new settlements.	The project owner will help the maintenance of the roads if there may be a need in the future.	Site Manager	Continuous action	High
	Communication with stakeholders	4	The Project Owner will continue to improve the communication with stakeholders. As part of Environmental Communications Program The Project Owner will organize a competition in one of the neighbour village school. The students will be asked to prepare an essay where they will discuss different primary sources for electricity production and compare it with renewable energy. This will help to increase the awareness of school children on issues such as environment, and importance of renewable energy.	Organize a renewable energy contest amongst school children.	Central Management	within the first half of 2013	High
	Acceptance	4	In order to keep this support the project owner is going to continue its openness policy and the good relationship that was already established with the local stakeholders.	In order to keep this support the project owner is going to continue its openness policy and the good relationship that was already established with the local stakeholders.	Site Manager and staff	Continuous action	High
	Social Demands	4	The entrepreneur is developing a policy, that will cover the rules and other criteria to address voluntary social actions.	Develop a policy, that will cover the rules and other criteria to address voluntary social actions.	Central management	within the first half of 2013	High
	Social programs	2	The Entrepreneur is going to be identifying programs and activities together with the local stakeholders. They will assess the situation taking into account socio economical characteristics of the area.	Identify Social Programs that will benefit the majority of the local inhabitants.	Central management	within 2013	High
	Social benefits	5	The Project will keep helping the community by improving the roads, and helping the communal areas.	Keep helping the community	Site management	within 2013	High

Resource	Indicator Name	Score	Target	Action	Who	When	Priority
Human Resources	Capacity Building Initiatives	3	The project owner will continue organizing regular and various occupational in-house trainings to improve the experience and capacity of the employee	Plan suitable in-house trainings	Central Management	Continuous action	Normal
	Health & Safety	6	The project owner will keep implementing the OHSAS management system and renew its certification as deemed necessary.	Keep implementing the OHSAS Management system and renew the cerification if necessary.	Central Management	within 2012	High
	Benefits	4	The project owner will establish a workers satisfaction assessment questionnaire to be implemented once in a year.	Prepare a questionnaire to measure employee satisfaction and implement it to test employee satisfaction.	Site Manager and staff	Continuous action	Normal
	Involvement of Employees in the Project	2	The project owner is planning to organize a training session to inform the employee about the climate change and the carbon project.	Organize a training session to inform employees about climate change and the carbon project.	Central Management	within 2012	High
Financial Resources	Economic Performance	4	The project owner is in the opinion to sustain and if possible improve the performance of the project by maintaining and protecting the project and its surroundings	During the operation phase do regular maintenances to improve project performance	Site Manager and staff	Continuous action	Normal
	Market	3	The project owner is hoping to have an opportunity to bring the project into compliance market. However, this depends mainly on the change of the status of Turkey. So the project owner will actively contribute to the lobbying activities to support improvement of Turkey's status in global carbon markets.	The project owner is hoping to have an opportunity to bring the project into compliance market. However, this depends mainly on the change of the status of Turkey. So the project owner will actively contribute to the lobbying activities to support improvement of Turkey's status in global carbon markets.	Central Management	Continuous action	High
	Sale of Credits	Not Evaluated	The project owner is willing to improve the value of their VCUs by distinguishing their project by adding the social carbon standard and by emphasizing the distinctive aspects of the project.	The project owner is willing to improve the value of their VCUs by distinguishing their project by adding the social carbon standard and by emphasizing the distinctive aspects of the project.	Central Management	Continuous action	High

Resource	Indicator Name	Score	Target	Action	Who	When	Priority
Natural Resources	Sustainability Principles	3	The project owner will write an internal code of conduct to incorporate sustainability principles and will set sustainability goals and monitor achievement towards these goals. In addition to that they will incorporate sustainability principles to the tender documents they prepare for their subcontractors encouraging them to adapt sustainability principles.	Write a policy document	Central management	In the first half of 2012	High
	Environmental Management	6	The project owner will ensure the perfection of the Environmental Management System, and renew its certification periodically.	Maintain the system and renew certification periodically	Central Management	Continuous action	Normal
	Environmental Legislation	6	The project owner will integrate the systematic control of the licensing process to their environmental management system.	Integration of the systematic control system to follow up environmental permits	Central Management	Continuous action	Normal
	Legal Procedures	6	The project owner will maintain the current situation	Maintain the current situation	Central Management	Continuous action	Normal
	Environmental Impacts	5	The project owner will ensure to keep the impacts at a minimal level	Maintain the current situation	Central Management	Continuous action	Normal
	Environmental Risk Management	6	No target assigned the project owner will maintain the currents situation.	Maintain the current situation	Central Management	Continuous action	Normal
	Reservoir and marginal areas management	3	he project owner is developing a plan for the management of the reservoir and marginal areas.	Develop a reservoir and marginal area management plan	Project Management	Continuous action	High
	Erosion, landslides, silting and floods.	4	The project owner will improve the surrounding area by reforestation projects.	Plan reforestation studies for the surrounding of the reservoir and project area	Central Management	Continuous action	High
	Water Resources	5	No target assigned the project owner will maintain the currents situation.	Maintain the current situation	Site Management	Continuous	Normal

Resource	Indicator Name	Score	Target	Action	Who	When	Priority
						action	
Biodiversity Resources	Recovery of Degraded Areas	4	For the operation stage the project owner is planning to initiate a tree planting campaigns together with the local inhabitants of the area, thus helping to improve areas that are outside the project borders.	Initiate tree planting campaigns together with local authorities and local NGOs	Central Management	To be implemented in Spring or Autumn of 2012	High
	Biodiversity Conservation	3	The project owner will help watching the area to help preventing illegal hunting and will support conservation actions by distributing information about the necessity of the protection of the local wildlife.	Watch the area for illegal hunting and help authorities start a campaign to explain importance of protecting local wildlife.	Central Management	First half of 2012	High
	Ichthyofauna	5	The project owner is going to complete the fish passage and ensure its maintenance and operation.	Construct the fish passage and maintain its operation	Central Management	First half of 2012	High
Carbon Resources	Additionality	6	The project is targeting to comply with the VCS rules and will be monitored to be in compliance with CDM approved emission reduction methodology.	The project is targeting to comply with the VCS rules and will be monitored to be in compliance with CDM approved emission reduction methodology.	Project Directors	Continuous Action	High
	Emissions Reductions Calculations & Monitoring	6	The project owner is targeting to keep complying with the VCS and CDM rules.	The project owner is targeting to keep complying with the VCS and CDM rules.	Project Directors	Continuous Action	High
	Validation & Verification	6	The project owner is targeting to keep complying with the VCS and CDM rules.	The project owner is targeting to keep complying with the VCS and CDM rules.	Project Directors	Continuous Action	High
	Project Performance	Not Evaluated	For the first monitoring period, the project is targeting to produce at least 95% of the amount of VERs estimated in the validated PD.	Make sure the project operates efficiently to be able to achieve 95% emission reductions estimated in the VCS-PD.	Site Manager	Continuous Action	High