

ANNEX Q – LSC REPORT TEMPLATE

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SECTION A. PROJECT DESCRIPTION

A. 1. Title of the project activity

Title: Barbaros WPP Date: 21.03.2013 Version no.: **01**

A. 2. Project eligibility under the Gold Standard

[See Toolkit 1.2 and Annex C]

Barbaros WPP is in accordance with the Gold Standard toolkit and requirements and eligible under Gold Standard because of the fact that:

- The project is a renewable energy project.
- The project falls under sectoral scope 1 (grid connected electricity generation from renewable sources: Wind)

A. 3. Current project status

Barbaros WPP has obtained electricity generation license from EMRA(Energy Market Regulatory Authority) on 28.06.2012. As stated on the license, foreseen completion date for Barbaros WPP is 28.10.2016. Given a month to test runs, project will start to operation in 28.11.2016.

Project introductory file of Barbaros Wpp is completed by Nazka Mühendislik San. Tic.Ltd.Şti on February 2012.



Barbaros WPP is projected to be financed through both project proponent's own resources and bank loans. However, dialogues in regard to bank loans have not been finalized yet.

Barbaros WPP project is in pre-planning phase and has not concluded any agreements with companies regarding equipment and the construction.

[See Toolkit 2.5]

SECTION B. DESIGN OF STAKEHOLDER CONSULTATION PROCESS

B. 1. Design of physical meeting(s)

i. Agenda

The following agenda was presented during the meeting;

- Opening of the meeting
- Explanation of the project
- Overhead screening of various WPPs all over the world



- Questions for clarification about the project
- Blind SD exercise
- Discussion on monitoring SD
- Closure of the meeting
[See Toolkit 2.6.1 and Annex J]

ii. Non-technical summary

During meeting preparations the non-technical project summary was sent to all stakeholders with their invitations. The same non-technical project summary was also distributed to participant stakeholders during the meeting.

The original copy of the non-technical project summary in local language is as follows;







BARBAROS RÜZGAR SANTRALİ TEKNİK OLMAYAN PROJE ÖZETİ

Projenin Amacı

Yenilenebilir Enerji Kaynakları yerel kaynakları kullandığı için enerji güvenliği sağlar, sürdürülebilirdir, yerel, ulusal veya küresel anlamda çevreye zarar vermez. Havayı, denizi veya karayı kirletmez.

Verim Enerji Yatırım Üretim ve Tic. A.Ş. ülkemizin elektrik enerjisi üretimine katkıda bulunmak, "Yenilenebilir Enerji Kaynakları" içerisinde en önemlilerinden biri olarak gördüğü rüzgâr enerjisi ile elektrik üretimi teknolojisinin ülkemizdeki uygulamalarının yaygınlaştırılması amacıyla, Barbaros RES projesi için EPDK tarafından 28 Haziran 2012 tarihli üretim lisansı verilmiştir.

Barbaros Rüzgâr Enerjisi Santrali, Türkiye'nin enerji ihtiyacının karşılanabilmesine katkıda bulunmanın yanı sıra, yerli endüstrinin oluşması ve istihdam sağlamayı da amaçlamaktadır. Santral Tekirdağ ili, Şarköy ilçesi sınırları içerisinde olup, santralin toplam kapasitesi 12 MW'dır. Tesisin tamamı 2016 yılı ortalarında bitirilip devreye alınacaktır. Santralde ünite gücü 2000 kW olan 1 türbin ve 1000 kW olan 10 türbin kullanılması öngörülmektedir. Ulusal şebekeye verilecek toplam enerji üretimi yıllık 42.000.000 kilovat saat olarak hesaplanmıştır. Sonuç olarak proje kapsamında gerek inşaat aşamasında çalışacak mühendis, teknisyen ve makine operatörleri gibi vasıflı personel gerekse işletme aşamasında çalışması planlanan personelin istihdam edilmesinde bölge halkına öncelik tanınacağından, proje bölge için önemli bir istihdam imkanı sağlamış olacaktır.

Proje Özeti

Son yıllarda, yenilenebilir enerji kaynaklarından olan rüzgâr enerjisi başlı başına ayrı bir sektör olmuş, konvansiyonel enerji kaynakları ile rekabet edebilir hale gelmiştir.

Ülkemizin belirli bölgelerinde elverişli rüzgâr potansiyeli olduğu bilinmekle beraber, rüzgâr enerjisinden yararlanma amacına yönelik olarak Rüzgâr Enerjisi Santrali (RES) kurmaya uygun lokasyonlar çoğunlukla ormanlık ve hazine alanlarına rastlamaktadır. Bu özellik, RES kurup, enerjiyi otoprodüktör veya üretim lisansı statüsünde üretmek için avantaj sağlamaktadır. Bu tür alanlarda, Bozcaada, Soma, Sayalar, Sebenoba, Gelibolu, Çatalca vb. Rüzgâr Enerjisi santrali (RES) örneklerinde olduğu gibi, kurulacak RES'lerin hemen tamamının çevresel veya görsel hiç bir olumsuz etkisi olmayacağı bilinmektedir.



Rüzgar enerjisi santralarının kurulacağı yerlerin belirlenmesinde en önemli faktörün rüzgar potansiyeli olduğu, RES'lerden yararlanabilmek için rüzgar potansiyelinin ve lokasyonun optimum olduğu yerlerin seçiminin tercihlere bağlı olmayıp, tamamen doğal yapıdan kaynaklandığı ve bunların yerlerinin değiştirilemeyeceği dikkate alındığında, öncelikle rüzgar potansiyeli uygun alanlarda RES uygulamalarına başlanılması çok önemlidir. Ayrıca, ülkemizde iyi rüzgâr potansiyeli ve uygun arazi özellikleri gösteren lokasyonların çoğunlukla yerleşim birimlerinden uzak dağlık bölgelerde olması da bir şans olarak düşünülmelidir. Bu durum, çoğunlukla dağlık coğrafya özelliği gösteren ülkemizin atıl durumda kalan dağlarının veya uygun alanlarının temiz enerji üretilerek değerlendirilmesi anlamına da gelmektedir.

Rüzgâr enerjisi konusunda yerli teknoloji, zamanla rüzgâr enerjisinin yaygın olarak kullanılması ve bununla birlikte gelişecek endüstri ile birlikte ortaya çıkacaktır. Bu endüstrinin ulusal ve uluslararası pazarlara yönelmesi yerli teknolojinin gelişmesini sağlayacaktır. Yerli teknolojinin gelişmesi tamamen yerli endüstrinin doğmasına bağlıdır.

Rüzgar Santralleri Nasıl Enerji Üretir?

Yel değirmeni mantığıyla çalışan türbinler, kanatlarına gelen rüzgar sayesinde döner ve hemen arkalarında bulunan alternatörleri çevirerek elektrik üretirler. Kanatlarda oluşan kinetik enerji bu vasıtayla elektrik enerjisine dönüşür. Kanatlar rüzgarın hızına ve yönüne göre otomatik olarak kendilerini ayarlarlar. Barbaros Rüzgar Santralinde üretilecek olan enerji 29 km. uzunluğunda enerji nakil hattı ile Tekirdağ Trafo Merkezine bağlanacak ve buradan da ulusal şebekeye aktarılacaktır.



The English version of the non-technical project summary is as follows;

Project Purpose

Since renewable energy sources use local sources, they are sustainable, providing energy safety as well as being harmless to the environment locally, nationally and globally. They do not pollute the air, water or land.

In order to contribute to the electricity generation of our country and to popularize electricity generation from wind energy which is considered as one of the most important technologies among the renewable energy resources, Verim Enerji Yatırım Üretim ve Tic. Aş. has been granted electricity generation license from EMRA for Barbaros WPP project on 28.06.2012.

Barbaros WPP pursues both to contribute to providing energy needs of Turkey and to create local industry as well as providing employment. Barbaros WPP is located in Tekirdağ province, Şarköy district of Turkey and has the installed capacity of 12 MW. Estimated completion date of the entire project is mid 2016. Power plant will include 10 turbines with 1000 kW unit capacity and 1 turbine with 2000kW unit capacity. Annual electricity generation is calculated as 42.000.000 KWh which will be transmitted to the national substation. Barbaros WPP will provide employment to the project region in terms of qualified staff such as engineers, technicians and machine operators as well as regular personnel since the priority of employment during both the construction period and operation period will be given to the region.

Project Summary

In recent years, among the renewable energy resources, wind energy has become a sole sector, competing with the conventional energy resources.

Even though it is known that in some regions of our country wind potential is convenient, most of the appropriate locations for the wind power plants to be built remain within the forestry or treasury areas. This situation has become advantageous in establishing a WPP project and producing energy under autoproducer or generation license status. As seen in the examples of wind power plants in Bozcaada, Soma, Sayalar, Sebenoba, Gelibolu, Çatalca etc. WPP projects that will be built are going to be environmentally and visually harmless. The most important factor in determining of the location of a wind energy plant is the wind potential and the choice of the wind potential and optimum location is not on preference since they are outcomes of natural structure, it is very important to start WPP projects in areas where wind potential is appropriate. It should also be stated that it is a chance for our country that the most efficient areas in terms of wind potential are located outside of residential areas, at highlands. This situation means that, unexploited highlands of our country will be qualified as locations to produce clean energy.



Local technologies that are related to wind energy will evolve in the future as wind energy will be used widespread improving the industry. As industry will spread to national and international markets, local technology will improve inevitably. Thus local technology is dependent on the creation of the local industry.

HOW DOES WPP GENERATE ENERGY?
Turbines work with the same logic of a windmill, rotating by the wind passing through the wings, generating electricity by rotating the generators thus the kinetic power transforms into electric power. Wings automatically adjust to the speed and direction of the wind. The electricity generated in the Barbaros WPP will be transferred to Tekirdag substation and to the national network through a 29 km. long energy transmission line.
[See Toolkit 2.6 and Annex J]



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iii. Invitation tracking table

[See Toolkit 2.6 and Annex J]

Category code	Organisation (if relevant)	Name of invitee	Way of invitation	Date of invitation	Confirmation received? Y/N
В	Governor of Şarköy	Zekeriya Güney	Phone / Mail	06.03.2013	Y
В	Mayor of Tekirdağ	Ali Yerlikaya	Phone / Mail	06.03.2013	Y
A	Mursallı Village Headman	Şaban Akgün	Phone / Mail	06.03.2013	Y
В	Tekirdağ Provincial Directorate of Agriculture	Cevdet Soyak	Phone / Mail	06.03.2013	Y
D	Tekirdağ Industrialists' and Businessmen's Association	Kasım Özadalı	Phone / Mail	06.03.2013	Y
D	Association for the Protection and Education of Environment	Nesrin Yuvanç	Phone / Mail	06.03.2013	Y
D	Head of	Süreyya	Phone/Mail	06.03.2013	Υ



	Department of Environmental Engineering,	Meriç Pagano			
	Namık Kemal University				
A	Güzelköy Village Headman	Abdullah Onat	Phone/Mail	06.03.2013	Y
F	Greenpeace Akdeniz	Cenk Levi	Phone/Mail	06.03.2013	Y
D	Çorlu Protection of Environment Association	Represent ative	Phone/Mail	06.03.2013	N
А	Uçmakdere Village Headman	Recep Karaoğlu	Phone/Mail	06.03.2013	N
F	WWF	Eren Atak	Phone/Mail	06.03.2013	N
А	Gaziköy Village Headman	Ercan Gürbüz	Phone/Mail	06.03.2013	N
А	Ormanlı Village Headman	Hikmet Ateş	Phone/Mail	06.03.2013	Y
A	Araphacı Village Headman	Erdoğan Kayı	Phone/Mail	06.03.2013	Y
A	Semetli Village Headman	Bayram Yazır	Phone/Mail	06.03.2013	Y
A	Işıklar Village Headman	Necip Atik	Phone/Mail	06.03.2013	Y
D	Tekirdağ Tema Foundation	İhsan Soysal	Phone/Mail	06.03.2013	Y
В	Tekirdağ Provincial Directorate of Envronment and	Represent ative	Phone/Mail	06.03.2013	N

	Urbanization				
F	Helio- International	Laura Williamso n	E-Mail	06.03.2013	N
F	REEEP	Represent ative	E-Mail	06.03.2013	N
E	Gold Standard	Bahar Ubay Güçlüsoy	E-Mail	06.03.2013	N
A	Müsellim Village Headman	Kazım Topçu	Phone/Mail	06.03.2013	N
D	Environmental Protection Agency	Represent ative	Phone/Mail	06.03.2013	N

Stakeholders from above categories have been selected in accordance with the Gold
Standard Toolkit. In order to reach stakeholders from each category, invitation letters
and e-mails were sent and most of the stakeholders especially the village headmen were
also reached via phone calls and given information about the importance of their
attendances. Besides, in order to provide the attendance of local people public
announcements were made in local newspaper and flyers were sent to village headmen
to be hung on their offices.

iv. Text of individual invitations



04.03.2013

Sayın Yetkili,

Verim Enerji Yatırım Üretim ve Ticaret Anonim Şirketi'nin yetkilendirdiği Borga Karbon Danışmanlık olarak, Tekirdağ ili, Şarköy ilçesi sınırları içerisinde bir adet rüzgar santrali projesinin hayata geçirilmesi ve Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi'nin regülasyonlarına uyumlu olarak çevresel anlamdaki etkilerini tartışmak üzere 20 Mart 2013 Çarşamba qünü saat 21:00'de Ormanlı Köyü Köy Kahvesi'nde kamu yetkilileri ve yerel halkın da katılımıyla bir bilgilendirme toplantısı düzenlemekteyiz. Toplantıda projenin tüm teknik detayları ve muhtemel etkileri tartışılacaktır. Bu toplantıda sağlayabileceğiniz her türlü katkıdan memnun olacağımızı belirtir, devam eden proje ile ilgili görüşlerinizi toplantıya şahsen katılarak ya da aşağıda adresi belirtilen BorgaCarbon Ltd.'ye posta yolu ile ulaştırabileceğinizi bildirmek isteriz.

Verim Enerji Yatırım Üretim ve Ticaret Anonim Şirketi'nce Tekirdağ İli, Şarköy İlçesinde kurulup işletilmesi planlanan Barbaros Rüzgar Enerji Santrali, Temiz ve Yenilebilir Enerji Projesi olup, toplam kurulu gücü 12 MW tır. Öngörülen yıllık enerji üretim miktarı ise 49.000.000 kWh olarak hesaplanmıştır. Bu üretim yaklaşık 16500 hanenin (60 000 kişi) yıllık enerji ihtiyacını karşılayabilir. 2011 yılı adrese dayalı nüfus sayımında Tekirdağ merkez nüfusu; 147 490 kişi olarak belirlenmiş olup, Tekirdağ da yaşayan nüfusun %44 üne tekabül etmektedir.

Üretim lisansında yer alan 10 adet rüzgar türbini Bekirdede Tepe, Hünkar Yaylası, Ucudere Tepe, Pınarlık Tepe, Nişan Tepe, Çayırlar Tepe, Kartalbakacak Tepe, Eskiiğrek Tepe, Bayrak Tepe, Tumba Tepe ve Çoban mevkilerinde bulunmaktadır. Projemizin tesis edileceği alan üzerinde milli park, yaban hayatı geliştirme sahası, vb. qibi hassas alanlar bulunmamakta olup projemizin etüd, geliştirme, yapım ve işletme hakkındaki bilgileri söz konusu toplantıda detaylı olarak paylaşılacağı bilgisini sunarız. Kurulacak Barbaros Rüzgar Enerji Santrali'nin herhangi bir yerleşim alanı üzerinde etkileyici bir özelliği bulunmamaktadır. Proje sahası ve türbin yerleşimleri ile ilgili detaylı bilgi toplantıda verilecektir.

Ülkemizin artan enerji açığı ve dışa bağımlılığı göz önünde bulundurulduğunda, yenilenebilir enerji yatırımlarının gerek ülke ekonomisi, gerekse bölgesel istihdam ve teknoloji transferi anlamında faydaları açıkça ortaya çıkmaktadır. Bununla birlikte fosil yakıtların sebep olduğu hava kirliliği uzun vadede iklim değişiklikleri ve küresel ısınmaya yol açarken yenilenebilir kaynaklarla enerji üretimi bunun önüne geçmekle beraber gelecekte fosil yakıtların atmosferdeki etkilerini geriye döndürebilme imkânına sahiptirler.

Amacımız yenilenebilir enerji projelerinin, sosyal ve ekolojik değerler açısından en yüksek standartlarda sürdürülebilir uygulanmasından emin olmaktır. Bu sebepten dolayı, projemizi Birleşmiş Milletler çatısı altında oluşturulmuş ve çeşitli sivil toplum örgütlerince desteklenen Gold Standard'a uygun olarak geliştirmeyi tercih ettik. İşleyen süreçte, ilgili tüm sosyal ve çevresel etkileri göz önüne aldığımız konusunda sizleri bilgilendirmek ve görüşlerinizi almak amacıyla bu toplantıyı düzenlemekteyiz.

Bilgilennizi ve tüm bu hususlar çerçevesinde kaynakların etkin, verimli ve tasarruflu olarak kullanılmasını sağlayacak olan Barbaros RES projemizin Paydaşlar Toplantısına katılımınızı önemle arz ederiz.

Saygılarımızla,

BORGA KARBON DANIŞMANLIK LTD.ŞTİ. ZÜNTÜ Paşa Mah.Recep Peker Cad. Sani Site Apt.No:38/12 Kızıltoprak KADIKÖY / İSTANBUL 0 (216) 414 99 27

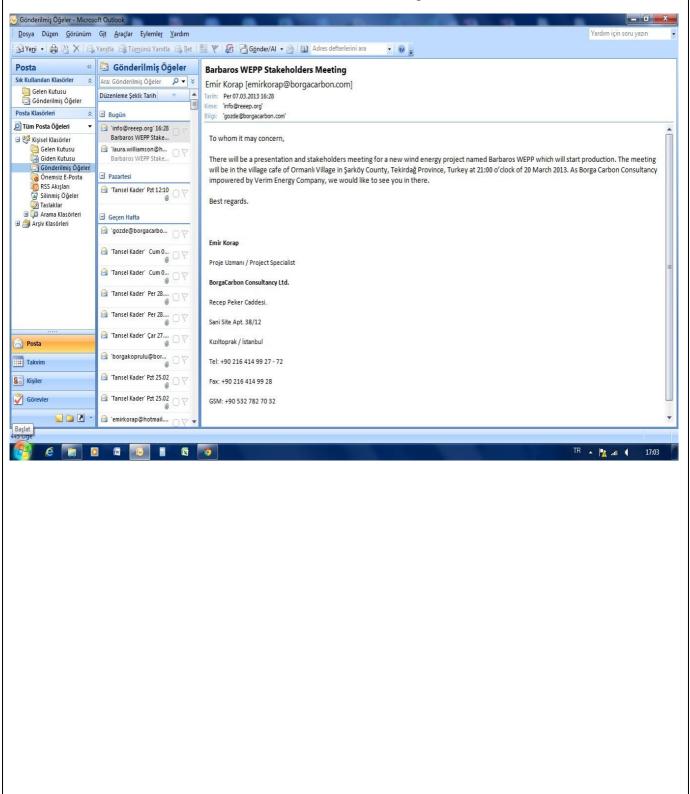


e-posta : gozde@borgacarbon.com

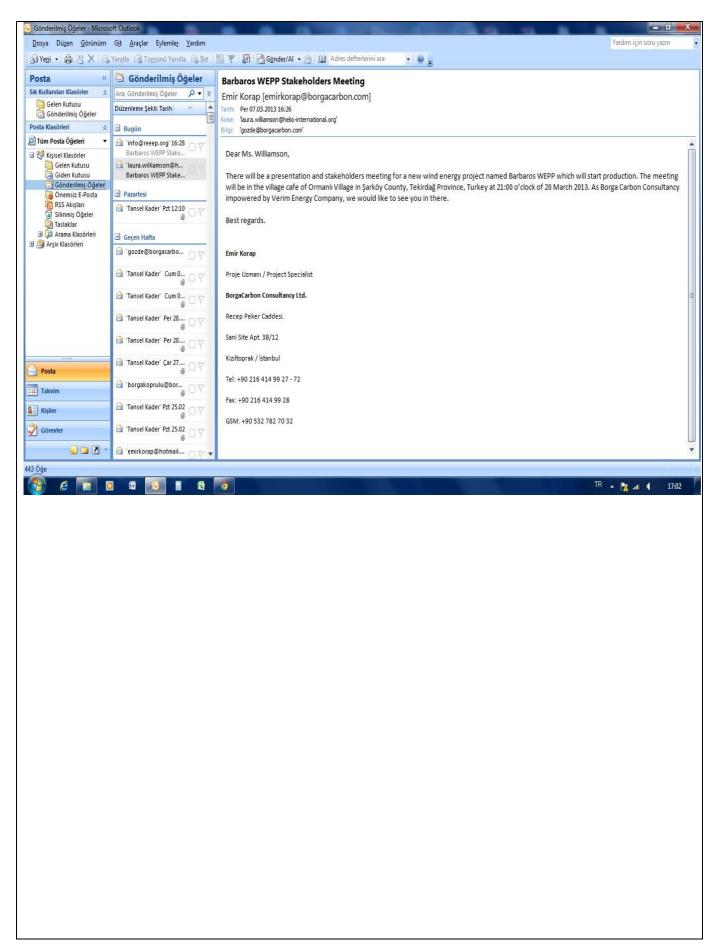


Invitation letter seen above has been sent to all of the stakeholders via mail on 06.03.2013.

Below screenshots of e-mail were sent to stakeholders from categories F.









v. Text of public invitations



birçoğu canlarını Çanakkale'de



TOPLANTIYA DAVET

Verim Enerji Yatırım Üretim ve Ticaret
Anonim Şirketi tarafından
Tekirdağ İli, Şarköy İlçesi sınırları içerisinde
hayata geçirilecek olan
Barbaros Rüzgar Enerji Santrali projesini
tanıtmak ve yerel halkın görüşlerini almak
üzere bir toplantı düzenlenecektir.
Verim Enerji ve BorgaCarbon Danışmanlık
tarafından ortak düzenlenecek ve Barbaros
Rüzgar Enerji Santralinin tüm teknik
özelliklerinin ve çevresel katkılarının tartışılacağı
bu toplantıya tüm halkımız, yerel yöneticilerimiz
ve sivil toplum kuruluşları temsilcileri davetlidir.

Katılımlarınızı bekliyoruz.

Tarih: 20 Mart 2013, Çarşamba

Saat: 21:00

Yer: Ormanlı Köyü Köy Kahvesi





VERIM ENERJI*



B. 2. Description of other consultation methods used

Apart from the public announcements made in the local newspaper, further announcements made in the villages via megaphones by the village headmans about the content of the stakeholder meeting in relation to the detailed briefing given via phone.

SECTION C. CONSULTATION PROCESS

C. 1. Participants' in physical meeting(s)

i. List of participants

[See Toolkit 2.6.1 and Annex J]



Please attach original participants' list (in original language) as Annex 1.

Participant					
	me:20.03.2013, 21:00 pr				
Location: O	rmanlı Village Coffee Ho				
Category Code	Name of participant, job/ position in the community	Male/ Female	Signature	Organisation (if relevant)	Contact details
A	Ahmet Can	Male		Farmer	05315527995
A	Mehmet Baykara	Male		Farmer	
A	Nevzat Sezer	Male		Farmer	05367876750
A	İsmail Ata	Male		Farmer	
A	Hasan Özer	Male		Farmer	
A	Hasan Acar	Male		Farmer	
Α	Zeynel Dallı	Male		Farmer	
Α	Süleyman Altanar	Male		Farmer	05379738931
Α	Seçkin Altıntaş	Male		Student	05414117707
A	Tevfik Mert	Male		Farmer	05422189416
A	Abdullah Onat	Male		Village Headman	
A	Abdullah Yayır	Male		Village Headman	05362197920
А	Ercan Gürbüz	Male		Village Headman	05324926148
A	Salih Tuncar	Male		Village Headman	05366083359
A	Raif Özdemir	Male		Village Headman	05375889169
A	Şerif Şen	Male		Village Headman	05366123311
A	Hayri Yıldırım	Male		Resident	05316230613
A	Bayram Yücel	Male		Resident	05362970448
A	Şahin Esen	Male		Resident	05376748859
A	Bayri Mert	Male		Village Headman	05354199775
A	Hikmet Ateş	Male		Village	05353995389



			Headman	
Α	Cevat Çınar	Male	Farmer	
Α	Orhan Çınar	Male	Forester	05433751860
Α	Recep Turan	Male	Farmer	05469867774
Α	Cemil Batı	Male	Resident	
Α	Ramazan Güneş	Male	Farmer	05446369774
Α	Fedail Gültekin	Male	Farmer	05455870964
Α	Şenol Sevinç	Male	Farmer	05432212277
Α	Rıdvan Çınar	Male	Resident	
Α	Çınar Sevinç	Male	Resident	
A	Erdoğan Kayı	Male	Village Headman	05334190122

Comments accompanying Annex 1

Within the invitation process many local people, local authorities, village headmen and organizations have been invited. But even if we insisted on their attendance, none of the NGO's or authorities attended the meeting. During the Stakeholder Feedback Round, we will be getting in touch with them, organize appointments if possible to get their opinions about the project. As seen from the participation list above and the original copies attached in Annex 1, 31 local people attended the meeting. We can easily say that the local people's interest and support on the project is far beyond our expectations.



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ii. Evaluation forms

[See Toolkit 2.6.1, 2.6.2 and Annex J]

Please add at least 4-5 representative samples in English.

Please attach original evaluation forms (in original language) as Annex 2.

Name	Abdullah Yayır
What is your impression of the meeting?	Being an informative meeting, I think it was very
	positive and beneficent.
What do you like about the project?	I like the fact that energy will be produced only
	from the wind without any fuel used.
What do you not like about the project?	None.
Signature	
Name	Seçkin Altıntaş
What is your impression of the meeting?	My impression of the meeting is very positive, I
	think that adequate explanations were given in
	the meeting.
What do you like about the project?	I like the fact that the project will contribute to
	the growth of Turkey.
What do you not like about the project?	None.
Signature	
Name	Basri Mert
What is your impression of the meeting?	Meeting was very successful, detailed briefing



were given about the project.
It is a very beneficent project for Turkey.
We don't want to be dependant to other
countries so we want more electricity production.
Süleyman Alanar
Information given was positive.
I like the benefits of the project to the local
people.
None.
Şahin Esen
I generally like the content of the meeting.
It will be beneficial to Turkey.
None.

Comments accompanying Annex 2

Totally 13 evaluation forms were filled in the meeting, but only 5 of them are translated as to be samples. As seen from the comments of the sample evaluation forms above, the common sense about the project is very positive and all of the participants shared their supports to the project. The scanned copies of the original evaluation forms are attached in Annex 2 of this document.



C. 2. Pictures from physical meeting(s)

[See Toolkit 2.6 and 2.6.1]



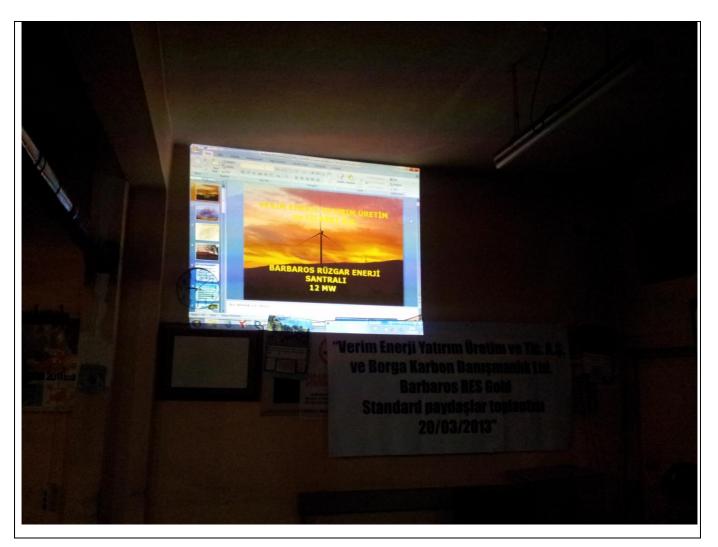
















C. 3. Outcome of consultation process

i. Minutes of physical meeting(s)

The meeting was held in Ormanlı Village Coffee House at 21:00pm. The participation was really high. The participants welcomed by Gözde Özveren from BorgaCarbon and Emrah Akıntürk and Ali Şensoy from the investor company Verim Enerji. The aim of the meeting was explained to the participants by Gözde Özveren and a presentation of the meeting including the meeting agenda, non-technical summary, matrices and evaluation forms



were distributed to the participants. The presentation started by Gözde Özveren's speech about climate change and new energy generation technologies reducing the environmental impacts. Supported by the videos and slight shows of sample renewable energy power plants from all around the world, the participants were informed about the benefits of renewable energy generation. Owner company Verim Enerji's representatives talked about the technical characteristics of the project as well as the beneficiaries of the project to the environment and the local area. The presentations were followed by face to face questions and answers session and discussions on sustainable development indicators. Below is the summary of some questions asked during the meeting and answers given to them;

Q1: Will you create employment for local people?

A1: Except technical and qualified staff, the investor company will pay special attention and will be happy to employ local people during construction and operation phases.

Q2: Will the project be beneficiary for us to have new roads for transportation?

A2: Of course, we will built new roads for the transportation to the project area since turbines and other equipments will be transported. Transportation will pass through the Ormanlı village and all of the roads will be built and renewed if damaged and you will be able to use these roads for transportation.

Q3: Once the Turbines will be start to function will the underground water resources will be affected negatively?

A3: Since the project will not produce any waste in operation, there will not be any damage on the nature including the underground waste resources.

Q4: What will happen to the excavation that will occur during the construction phase?

A4: 5 holes will be dug for the turbines erection during construction period and all of the excavation will be used for the landscaping.



ii. Minutes of other consultations

No other consultations except than stakeholder consultation meeting have been conducted at this stage.

iii. Assessment of all comments

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
Will you create employment for local people?	No	Except technical and qualified staff, the investor company will pay special attention and will be happy to employ local people during construction and operation phases.
Will the project be beneficiary for us to have new roads for transportation?	No	We will built new roads for the transportation to the project area since turbines and other equipments will be transported. Transportation will pass through the Ormanli village and all of the roads will be built and renewed if damaged and you will be able to use these roads for transportation.
Once the Turbines will be start to function will the underground water resources will be affected negatively?	No	Since the project will not produce any waste in operation, there will not be any damage on the nature including the underground waste resources.
What will happen to the excavation that will occur during the construction phase?	No	5 holes will be dug for the turbines erection during construction period and all of the excavation will be



	used for the landscaping.

iv. Revisit sustainability assessment

Are you going to revisit the sustainable development assessment?	Yes	No
Please note that this is necessary when there are indicators scored 'negative' or if there are stakeholder comments that can't be mitigated		х

Since the project does not have a negative impact on the environment and social life in the region no negative comments received from the stakeholders. Therefore, there is no need to revisit the sustainable development assessment.

v. Summary of alterations based on comments

Based on the comments from stakeholders, there is no need to make any alterations on the project design. The company will take all the precautions about the concerns of the stakeholders such as excavation due to the project and will try to do its best to provide contributions to the region. The company will give priority to the local labor force and provide in contributions for infrastructure improvements upon the requests of the stakeholders, if possible.



SECTION D. SUSTAINABLE DEVELOPMENT ASSESSMENT

D. 1. Own sustainable development assessment

i. 'Do no harm' assessment

The host country, Turkey, has ratified:

- ILO Convention 87 (freedom of association) and 98 (right to collective bargaining).
- ILO Convention 29 and 105 on elimination of forced and compulsory labor.
- Convention 138 (minimum age) and Convention 182 (worst form of child labor) under the ILO Declaration on Fundamental Principles and Rights at Work?
- Convention 100 (equal remuneration) and Convention 111 (Discrimination in employment/occupation) under the ILO Declaration on Fundamental Principles and Rights at Work
- UN Convention against Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

Safeguarding principles	Description of relevance to my project	Assessment of my project risks breaching it (low, medium, high)	Mitigation measure
Human Rights			
1 The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Right abuses.	The project area is not inhibited by indigenous people. The project does not pose any activity that impedes or obstructs the personal or collective freedom of the citizens in the project districts. The host country has ratified the European Convention on Human Rights. Individuals have the right to apply the European	No Risk.	No Risk.

2 The project does not involve and is not complicit in involuntary settlement.	Human Rights Court. 1 The project does not cause any resettlement. All the lands to be used for the project are forestry lands. Therefore, there is no private lands and resettle included in this project.	No Risk.	No Risk.
3 The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.	There is no cultural heritage or protected natural zone in the project area ² .	No Risk.	No Risk.
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.	Turkey ratified ILO Convention 87 (freedom of association) and 98 (right to collective bargaining). Article 33 of the Turkish Constitution legalizes freedom of association. According to this Article, every citizen has right to form associations or become a member of an association as	No Risk.	No Risk.

¹ Source: http://tr.wikipedia.org/wiki/Avrupa İnsan Hakları Sözleşmesi
² Barbaros WPP Project Introductory File



5 The project does not involve and is not complicit in any	well as withdraw from membership without prior permission. ³ Turkey ratified ILO Conventions 29.	No Risk.	No Risk.
form of forces or compulsory labour.			
6 The project does not employ and is not complicit in any form of child labour.	Turkey ratified ILO Conventions 138 for minimum age and 182 against worst forms of Child Labour.	No Risk.	No Risk.
7 The project does not involve and is not in complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.	Turkey ratified ILO Conventions 100 for equal remuneration and Convention 111 against discrimination in employment and occupation under the ILO Declaration on Fundamental Principles and Rights at Work. According to Turkish Labor and Employment Law, no discrimination based on language, race, sex, political opinion, philosophical belief, religion,	No Risk.	No Risk.

a http://www.anayasa.gov.tr



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 Environmental Protection	sex or similar reasons is permissible. The construction of the projects requires intensive labour for construction and machinery / equipment operation. Workers may be exposed to serious risks on the construction site in terms of occupational hazard and accidents. According to the Project Introductory File of the project, during construction and operation phases of the project "Regulation on Labour Health and Labour Safety" will be followed.	Low.	All the workers will be trained about health & safety issues and the issues related to labor standards will be fully in line with the Labor Law and relevant regulations.
9. The project takes	The construction	Low.	The construction
a precautionary approach in regard to environmental challenges and is not complicit in	of the project may incur environmental challenges with		works will be fully in line with relevant regulations such as "Regulation on the



			A
practices contrary to	some level of		Assessment and
the precautionary principle.	harm to human		Management of
P. III C. P. C.	health and		Environmental
	environment.		Noise" and
	The public		"Regulation on the
	around the		Control of Solid
	project site		Wastes". In the
	maybe exposed		content of the EIA
	to solid and		procedure a Project
	sanitation waste		Introductory File
	during the		has been submitted
	construction.		to the MOEF. All
			the possible
			environmental
			impacts of the
			proposed project
			have been assessed
			in the PIF and the
			project received an
			EIA Exemption
			Decision on
			05/11/2009 as an
			outcome of this
			report.
10. The project does	The construction	No Risk.	As stated in the
not involve and is	and operation of	INO MISK.	Project
not in complicit in	the project may		Introductory File of
significant	incur		Barbaros WPP,
conversion or	environmental		•
degradation of			project area is not
critical natural habitats including	challenges with		located in a natural
those (a) that are	some level of		or cultural heritage
legally protected (b)	harm to natural		area. ⁴
officially proposed	habitats.		
for protection (c)	Th		
identified by authoritative	The natural		
resources for their	habitats around		
1 200 21.000 101 111011	l .	l	

 $^{^{-4}}$ Project Introductroy File of Barbaros WPP, page 73.



high conservation value or (d) recognised as protected by traditional local communities.	the project site maybe exposed to degradation and destruction.		
Anti-Corruption			
11. The project does not involve and is not complicit in corruption.	No corruption exists in the project. Turkey has ratified UN Convention against Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business	N/A	N/A
	Transactions		

ii. Sustainable development matrix

[See Toolkit 2.4.2 and Annex I]

Indicator	Mitigation measure	Relevance to achieving MDG	Chosen parameter and explanation	Preliminary score
Gold Standard indicators of sustainable development	If relevant, copy mitigation measure from 'Do No Harm' assessment, and include mitigation measure used to neutralise a	Check www.undp.org/ mdg and www.mdgmonit or.org Describe how your indicator is	Defined by project developer	Negative impact: score '-' in case negative impact is not fully mitigated, score '0' in



	score of '-'	related to local MDG goals		case impact is planned to be fully mitigated
				in impact: score '0'
				Positive impact: score '+'
Air quality	The project may cause dust emissions during the construction activities. The expected amount of dust emissions from these activities are calculated to be 0,1 kg/hour and proved that the dust emissions of the project is below the limit of 1,5 kg/hour allowed by the related Industrial Air Pollution Control Regulation ⁵ . All necessary precautions to ensure the air quality will be taken by the investor. Also, it is expected that the project will not have any negative impact	MDG 7: Ensure Environmental Sustainability Target 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources."	Parameters for Target 7.A: 1. Sulphur dioxide (SO ₂) emissions / MWh 2. Nitrogen oxide (NO _x) emissions / MWh. 3. Level of dust emissions during construction. The project will contribute to decrease SO ₂ ,NO _x and CO ₂ emissions The renewable energy generated by the project	0

⁵ Barbaros WPP Project Introductory File

	on the closest residential areas in respect to the dust emissions rising from construction works.		will decrease the rate of fossil fuel in national energy mix, and therefore the combined margin emission factor will be lowered. But still, comparing to the fossil fuel dominated national grid, project's contribution is not expected to be significant.	
Water quality and quantity	Drinking water and utility water needs during construction and operation phases will be provided by the project owner company and its contractors from Ormanlı village. Providing water from natural and underground sources will be conducted after obtaining necessary permissions from the State Hydraulic Works ⁶ .	MDG 7: Ensure Environmental Sustainability Target 7.C: "Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation."	Parameter for Target 7.C: Water quantity and cleanliness. The project will not generate any harmful chemical wastes that will cause water pollution.	O

⁶Barbaros WPP Project Introductory File



			Parameter for Target 7.A: Erosion and soil loss.	
Soil condition	Some amount of earth will be excavated during project's construction activities such as erecting wind turbines and building energy transmission lines and switchyard. All the excavations in the project area will be in line with the Excavated Earth, Construction and Debris Control Regulation #25406, enacted on 18.03.2004.	MDG 7: Ensure Environmental Sustainability Target 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources."	Before the construction start, the geological surveys will be completed and the necessary precautions will be taken. Compared to the previous condition, the project is not expected to cause any changes in soil condition. The project activities do not generate any polluting wastes or chemicals. The amount of excavated earth during construction activities have been calculated as 15950 m³ including wind turbine erections, construction of energy transmission line masts and the construction of	0

			switchyard. These excavated earth will be used in landscaping and rehabilitation of ruined land due to slopes.	
			Negative effects of excavated earth, construction and debris wastes on environment and human health will be minimised by taking necessary precautions identified in the Excavated Earth, Construction and Debris Wastes Control Regulation #25406.	
Other pollutants	Disposing and stocking the construction and excavation materials will be fully in line with the relevant regulation. Excavated materials will be collected in areas determined by the municipality. Some of the excavated materials will be	MDG 7: Ensure Environmental Sustainability Target 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental	Parameters for Target 7.A: 1. The amount of excavated materials and other wastes. 2. Noise pollution and shadow flickering affect to nearest settlements.	0



	used for landscaping and filling up the holes. The closest residential area close to the activities is Ormanlı village. In accordance with the 25. Clause of the Regulation on the Assessment and Management of Environmental Noise, the activities are subject to environmental noise limit of 60 dBA for rural areas. Since the nearest residential area is 4,5 km away to the activity area, the level of noise that will occur is calculated to be below the allowed limits after 200m. The project is	MDG 7: Ensure	All the wastes will be collected and disposed in line with the relevant regulation. The project is not expected to cause any noise pollution during operation and since the nearest settlement Ormanlı village is 4,5 km away, shadow flickering effect is not expected to be irritating in residential areas.	
Biodiversity	totally located in forestry land and there is no endemic, wild or	MDG 7: Ensure Environmental Sustainability	Target 7.B:	0



	protected species under national or international regulations. There is no agricultural land or wetland around the project area ⁷ .	Target 7.B: "Reduce biodiversity loss, achieving, by 2010, significant reduction in the rate of loss."	 Number of trees affected by the project activities. Bird migration route. 	
	Since the project is located in forestry land, there will be need to cut some trees.	ruce or 1033.	The investors are obliged to pay reforestation fee to the provincial directorate of forestry and water works, determined in relation with the amount of trees that are cut.	
			The project is not expected to cause a negative effect on bird migration routes, but still red lights will be located on wind turbines as a precaution.	
Quality of employment	All the personnel will be trained in accordance with the work security regulations. An emergency plan will be implemented for accidents.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.B: "Achieve full and productive employment	Parameter for Target 1.B: Number of training hours. In order to provide a healthy and secure work environment, all the personnel in	+

 $^{^{7}}$ Barbaros WPP Project Introductory File

		and decent work for all, including women and young people."	this project have the rights given by the laws regarding the security standards, working hours and work conditions.	
			For the positions that require skilled personnel, trainings will be conducted by the turbine and other electromechanica I equipment's manufacturers on site.	
Livelihood of the poor	Not Relevant.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.B: "Achieve full	The project will contribute income generation in the area. The local people will be given priorities for employment. And the investor will support the social life according to their needs.	0
		and productive employment and decent work for all, including women and young people."	Despite all the above mentioned benefits, the project will not have a direct effect on the livelihood of the poor.	

Access to affordable and clean energy services	Not Relevant.	MDG 7: Ensure Environmental Sustainability Target 7.B: "Reduce biodiversity loss, achieving, by 2010, significant reduction in the rate of loss."	The project will contribute the national grid with clean and national energy source. By this, it will reduce the fossil fuel usage and foreign source dependency. But still, it will not have an effect on local people's access to affordable energy services.	0
Human and institutional capacity	Not Relevant.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.B: "Achieve full and productive employment and decent work for all, including women and young people."	The investor will implement some socio-economic projects in accordance with the local needs. But still, the project is not expected to have a direct effect on human and institutional capacity in the area.	0
Quantitative employment and income generation	During construction 35-50 people will be employed by the project, and also 15 positions will be employed during operation of the wind power plant.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.A: "Halve, between 1990 and 2015,	Parameter for Target 1.A: Household income generated by the project. Parameter for Target 1.B:	0



		the proportion of people whose income is less than 1\$ a day." Target 1.B: "Achieve full and productive employment and decent work for all, including women and young people."	Number of employments provided by the project. The investor will give priorities to local people while selecting staff for both construction and operation phases. As directed and secured by the law, the workers' salaries will not be below the predetermined amount of annual minimum wage rate ⁸ . As a result, the employment rate and income	
			generation will increase in the area.	
Balance of		MDG 8: Develop A Global Partnership For Development.	Parameter for Target 8.D: Net currency savings due to the reductions in fossil fuel imports.	
payments and investment	Not Relevant.	Target 8.D: "Deal comprehensivel y with the dept problems of developing countries."	Turkish national grid is mainly dominated by fossil fuel fired thermal power plants.	0

 $^{^8}$ http://www.yaklasim.com/malibilgiler/pratikbilgiler/maddeler/003.htm

			The project contributes to balance of payments by generating electricity with wind power. But, when compared to national electricity generation, the project's affect will not be very significant.	
Technology transfer and technological self-reliance	Not Relevant.	MDG 8: Develop A Global Partnership For Development. Target 8.F: "In cooperation with the private sector, make available benefits of new technologies, especially information and communication s."	Target 8.F: Number of training hours provided by the manufacturer. The electromechanica I equipments will be provided from abroad and the manufacturer company will conduct training sessions for the technical staff. The technical staff will be trained as experts on the operation of wind power plant. Barbaros WPP project will build usable and sustainable know-how in the region for a	0



	technology, where know-how was previously lacked. This capacity building enables spill-over effects to the area by replicating similar projects.
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Comments accompanying own sustainable development matrix				

D. 2. Stakeholders Blind 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 mitigation measure from 'Do No Harm' assessment, and include mitigation measure used to neutralise a	Check www.undp.org/ mdg and www.mdgmonito r.org Describe how your indicator is	Defined by project developer	Negative impact: score '-' in case negative impact is not fully mitigated, score '0' in



	score of '-'	related to local MDG goals	case impact is planned to be fully mitigated
			No change in impact: score '0'
			Positive impact: score '+'
Air quality			0
Water quality and quantity			0
Soil condition			0
Other pollutants			0
Biodiversity			0
Quality of employment			+
Livelihood of the poor			0
Access to affordable and clean energy services			0
Human and institutional capacity			0
Quantitative employment and income generation			0
Balance of payments and investment			0



Technology		
transfer and technological		+
self-reliance		

General view about the project was positive. Stakeholders asked some questions about the project location, the amount of trees that will be cut and relevant permissions and the turbine operations. The representatives of the investor company and BorgaCarbon explained the participants the licensing applications, forestry permissions and how the project location has been selected. Stakeholders' concerns regarding the forestry land have been overcame by explaining the permissions achieved and fees paid to the provincial directorate of forestry and water works. Other than these few concerns, the stakeholders did not raise any questions and the whole opinions regarding the sustainable development issues were positive.

Give analysis of difference between own sustainable development matrix and the one resulting from the blind exercise with stakeholders. Explain how both were consolidated.

Score Comparison Table

Sustainable Indicator	Project Developers' Scoring	Stakeholders Scoring
Air Quality	0	0
Water Quality and Quantity	0	0
Soil Condition	0	0
Other Pollutants	0	0
Biodiversity	0	0
Quality of Employment	+	+
Livelihood of the Poor	0	0
Access to Clean and Affordable Energy Services	0	0
Human and Institutional Capacity	0	0

Quantitative Employment and Income Generation	0	0
Balance of Payments and Investment	0	0
Technology Transfer and Technological Self-reliance.	+	+

As seen from the score comparison table above, the stakeholders' scores are the same as project developer's scores. The local people are fully convinced about the benefits of wind power and shared their full support on the project.

D. 3. Consolidated 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 mitigation measure from 'Do No Harm' assessment, and include mitigation measure used to neutralise a score of '-'	Check www.undp.org/ mdg and www.mdgmonit or.org Describe how your indicator is related to local MDG goals	Defined by project developer	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 '+'



The project may cause dust emissions during the construction activities. The expected amount of dust emissions from these activities are calculated to be 0,1 kg/hour and proved that the dust emissions of the project is below the limit of 1,5 kg/hour allowed by the related Industrial Air Pollution Control Regulation ⁹ . All necessary precautions to ensure the air quality will be taken by the investor. Also, it is expected that the project will not have any negative impact on the closest residential areas in respect to the dust emissions rising from construction works.	MDG 7: Ensure Environmental Sustainability Target 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources."	1. Sulphur dioxide (SO ₂) emissions / MWh 2. Nitrogen oxide (NO _x) emissions / MWh. 3. Level of dust emissions during construction. The project will contribute to decrease SO ₂ , NO _x and CO ₂ emissions. The renewable energy generated by the project will decrease the rate of fossil fuel in national energy mix, and therefore the combined margin emission factor will be lowered. But still,	0
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⁹ Barbaros WPP Project Introductory File .

			comparing to the fossil fuel dominated national grid, project's contribution is not expected to be significant.	
Water quality and quantity	Drinking water and utility water needs during construction and operation phases will be provided by the project owner company and its contractors from Ormanlı village. Providing water from natural and underground sources will be conducted after obtaining necessary permissions from the State Hydraulic Works ¹⁰ .	MDG 7: Ensure Environmental Sustainability Target 7.C: "Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation."	Parameter for Target 7.C: Water quantity and cleanliness. The project will not generate any harmful chemical wastes that will cause water pollution.	O
Soil condition	Some amount of earth will be excavated during project's construction activities such as erecting wind turbines and building energy transmission lines	MDG 7: Ensure Environmental Sustainability Target 7.A: "Integrate the principles of sustainable development	Parameter for Target 7.A: Erosion and soil loss. Before the construction start, the geological	0

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and switchyard.	into country	surveys will be	
All the	policies and	completed and	
excavations in the	programmes and reverse the loss	the necessary precautions will	
project area will	of environmental	be taken.	
be in line with the	resources."	DC taken.	
Excavated Earth,	,		
Construction and		Compared to	
Debris Control		Compared to the previous	
Regulation		condition, the	
#25406, enacted		project is not	
on 18.03.2004.		expected to	
		cause any	
		changes in soil	
		condition. The	
		project	
		activities do not	
		generate any	
		polluting	
		wastes or	
		chemicals.	
		The amount of	
		excavated earth	
		during	
		construction	
		activities have	
		been calculated as 15950 m ³	
		including wind	
		turbine	
		erections,	
		construction of	
		energy	
		transmission	
		line masts and	
		the	
		construction of	
		switchyard.	
		Thosa	
		These excavated earth	
		will be used in	
		landscaping and	
		rehabilitation of	
		ruined land due	

			Negative effects of excavated earth, construction and debris wastes on environment and human health will be minimised by taking necessary precautions identified in the Excavated Earth, Construction and Debris Wastes Control Regulation #25406.	
Other pollutants	Disposing and stocking the construction and excavation materials will be fully in line with the relevant regulation. Excavated materials will be collected in areas determined by the municipality. Some of the excavated materials will be used for landscaping and filling up the holes.	MDG 7: Ensure Environmental Sustainability Target 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources."	Parameters for Target 7.A: 1. The amount of excavated materials and other wastes. 2. Noise pollution and shadow flickering affect to nearest settlements. All the wastes will be collected	0



	The closest residential area close to the activities is Ormanlı village. In accordance with the 25. Clause of the Regulation on the Assessment and Management of Environmental Noise, the activities are subject to environmental noise limit of 60 dBA for rural areas. Since the nearest residential area is 4,5 km away to the activity area, the level of noise that will occur is calculated to be below the allowed limits after 200m.	MDG 7: Enguro	and disposed in line with the relevant regulation. The project is not expected to cause any noise pollution during operation and since the nearest settlement Ormanlı village is 4,5 km away, shadow flickering effect is not expected to be irritating in residential areas.	
Biodiversity	The project is totally located in forestry land and there is no endemic, wild or protected species under national or international regulations. There is no agricultural land	MDG 7: Ensure Environmental Sustainability Target 7.B: "Reduce biodiversity loss, achieving, by 2010, significant	Parameter for Target 7.B: 1. Number of trees affected by the project activities.	0



	or wetland around the project area ¹¹ . Since the project is located in forestry land, there will be need to cut some trees.	reduction in the rate of loss."	2. Bird migration route. The investors are obliged to pay reforestation fee to the provincial directorate of forestry and water works, determined in relation with the amount of trees that are cut. The project is not expected to cause a negative effect on bird migration routes, but still red lights will be located on wind turbines as a precaution.	
Quality of employment	All the personnel will be trained in accordance with the work security regulations. An emergency plan will be implemented for accidents.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.B: "Achieve full and productive employment and	Parameter for Target 1.B: Number of training hours. In order to provide a healthy and secure work	+

 $^{^{\}rm 11}$ Barbaros WPP Project Introductory File

		decent work for all, including women and young people."	environment, all the personnel in this project have the rights given by the laws regarding the security standards, working hours and work conditions.	
			All the unskilled personnel will be trained. Certified personnel will be employed for high voltage.	
			For the positions that require skilled personnel, trainings will be conducted by the turbine and other electromechanical equipment's manufacturers on site.	
Livelihood of the poor	Not relevant.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.B: "Achieve full and productive	The project will contribute income generation in the area. The local people will be given priorities for employment. And the	0

		employment and decent work for all, including women and young people."	investor will support the social life according to their needs. Despite all the above mentioned benefits, the project will not have a direct effect on the livelihood of the poor.	
Access to affordable and clean energy services	Not relevant.	MDG 7: Ensure Environmental Sustainability Target 7.B: "Reduce biodiversity loss, achieving, by 2010, significant reduction in the rate of loss."	The project will contribute to the national grid with clean and national energy source. By this, it will reduce the fossil fuel usage and foreign source dependency. But still, it will not have an effect on local people's access to affordable energy services.	0
Human and institutional capacity	Not relevant.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.B: "Achieve full and productive employment and decent work for	The investor will implement some socio- economic projects in accordance with the local needs. But still, the project is not expected to have a direct	0

		all, including women and young people."	effect on human and institutional capacity in the area.	
			Parameter for Target 1.A: Household income generated by the project.	
Quantitative employment and income generation	During construction 35-50 people will be employed by the project, and also 15 positions will be employed during operation of the wind power plant.	MDG 1: Eradicate Extreme Poverty and Hunger. Target 1.A: "Halve, between 1990 and 2015, the proportion of people whose income is less than 1\$ a day." Target 1.B: "Achieve full and productive employment and decent work for all, including women and young people."	Parameter for Target 1.B: Number of employments provided by the project. The investor will give priorities to local people while selecting staff for both construction and operation phases. As directed and secured by the law, the workers' salaries will not be below the pre-determined amount of annual minimum wage rate ¹² . As a result, the employment rate and	0

 $^{^{12}\} http://www.yaklasim.com/malibilgiler/pratikbilgiler/maddeler/003.htm$

			income generation will increase in the area.	
			Parameter for Target 8.D: Net currency savings due to the reductions in fossil fuel imports.	
Balance of		MDG 8: Develop A Global Partnership For Development.	Turkish national grid is mainly dominated by fossil fuel fired thermal power plants.	
payments and investment	Not relevant.	Target 8.D: "Deal comprehensively with the dept problems of developing countries."	The project contributes to balance of payments by generating electricity with wind power. But, when compared to national electricity generation, the project's affect will not be very significant.	0
Technology transfer and technological self-reliance	Not relevant.	MDG 8: Develop A Global Partnership For Development. Target 8.F: "In cooperation with	Parameter for Target 8.F: Number of training hours provided by the manufacturer.	+
		the private	The	



sector, make available benefits of new technologies, especially information and communications.

electromechani cal equipments will be provided from abroad and the manufacturer company will conduct training sessions for the technical staff. The technical staff will be trained as experts on the operation of wind power plant.

Barbaros WPP project will build usable and sustainable know-how in the region for a technology, where knowhow was previously lacked. This capacity building enables spillover effects to the area by replicating similar projects.

Justification choices, data source and provision of references

A justification paragraph and reference source is required for each indicator, regardless of score



Air quality	http://www.teias.gov.tr/ist2007/31(40-07).xls , highlight that the electricity generationmix of Turkey is currently dependent on thermal power plants.
	The project may cause dust emissions during the construction activities. The expected amount of dust emissions from these activities are calculated to be 0,1 kg/hour and proved that the dust emissions of the project is below the limit of 1,5 kg/hour allowed by the related Industrial Air Pollution Control Regulation ¹³ . All necessary precautions to ensure the air quality will be taken by the investor. Also, it is expected that the project will not have any negative impact on the closest residential areas in respect to the dust emissions rising from construction works. As precaution, the circulations roads will be irrigated and no explosive material will be used during the constructions.
Water quality and	Wind Power Plant project operation does not consume
quantity	surface or groundwater, or discharge wastewater containing heat of chemicals. Drinking water and utility water needs during construction and operation phases will be provided by the project owner company and its contractors from Ormanlı village. Providing water from natural and underground sources will be conducted after obtaining necessary permissions from the State Hydraulic Works ¹⁴ .
	Also, the wastewaters and other wastes during the construction will be collected in tanks/containers and these wastes will be transported and disposed by the local municipality. Project Introductory File for Barbaros Wind Power Plant Project in Turkey, prepared by NAZKA Mühendislik, dated Feb 2012.
Soil condition	
	The amount of excavated earth during construction activities have been calculated as 15950 m ³¹⁵ including wind turbine erections, construction of energy transmission line masts and the construction of switchyard.

¹³ Barbaros WPP Project Introductory File. ¹⁴ Barbaros WPP Project Introductory File. ¹⁵ Barbaros WPP, Project Introductory File.

These excavated earth will be used in landscaping and rehabilitation of ruined land due to slopes.

Negative effects of excavated earth, construction and debris wastes on environment and human health will be minimised by taking necessary precautions identified in the Excavated Earth, Construction and Debris Wastes Control Regulation #25406.Project Introductory File for Barbaros Wind Power Plant Project in Turkey, prepared by NAZKA Mühendislik, dated Feb 2012.

Other pollutants

No blasters will be used during project's construction phase and thus no dust pollution, noise or vibration is expected due to blasting activities. Even if the amount of dust pollution assessed and calculated in the PTD file is below the allowed limits of the relevant regulation, the precautions identified in the Industrial Air Pollution Control Regulation #27277, dated 03/07/2009 will be taken. These precautions are;

- Watering the stocked excavated soil and material to prevent dusting.
- Watering the circulation roads in the project area.
- Covering top of the materials during transportation by trucks.

There will be need to build some access roads and use heavy machinery which may somehow damage the road surfaces, but these damages will be mitigated by the project owner company and these roads will also be renovated.

The closest residential area close to the activities is Ormanlı village. In accordance with the 25. Clause of the Regulation on the Assessment and Management of Environmental Noise, the activities are subject to environmental noise limit of 60 dBA for rural areas. Since the nearest residential area is 4,5 km away to the activity area, the level of noise that will occur is calculated to be



below the allowed limits after 200m. It is projected that the construction activities will cause noise emission of 87 dbA for 10m away from the project site, Ormanlı village which is 4.5 km distant. Therefore it is expected that the noise level will be even under 87 dbA¹⁶. Sound, as it propagates in the atmosphere, its pressure level decreases. As an example, assuming the spherical propagation, sound level reduces 6 dB per doubling the distance. Hence, the noise from the source reduces as distance increases¹⁷. Effect of turbine noise emissions from 10 turbine masts to the nearest village, Ormanlı, is calculated considering the turbine mast height, turbine coordinates, village coordinates¹⁸ and village elevation¹⁹ has taken into account. According to the project introductory file, the project site elevates between 700m and 800m for 10 turbines. Following the conservative approach, the lowest value for elevation is adopted. In calculations, spherical weight propogation is considered and the atmospheric absorbtion hasn't been taken into account. For an ENERCON E82 2000 kW wind turbine, which is one of the brands that the project owner is going to select from, the sound level pressure is given as 102,5 dbA²⁰. According to the calculations²¹ the noise caused by the proposed project in Ormanlı village from 10 turbines operating simultaneously is 25.96 dbA, where for sensitive areas such as containing hospitals, the ideal outdoor noise level is between 35 - 45 db(A) + 0 (hospital) - 5 (evening) = 30 – 40 dbA²². Therefore the noise level of 25.96 db(A) heard outside the nearest residential area to the project site, which is calculated with the worst conditions in order to be on the safe side, has no negative impact for the residents.

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¹⁶ Please refer to the Project Introductory File.

 $^{^{17}}$ Applied Acoustics, G. Porges, page 83.

¹⁸ Google Earth

¹⁹ Google earth

²⁰ The specs can be checked from the PDF file which can be downloaded from http://www.ventderaison.com/grandrieu/eie-SGS/annexes/ENERCON.pdf

²¹ Excel worksheet for sound pressure level is available upon request.

²² Acoustic Noise Measurements, Jens Trampe broch, 1971, page 37.



The only known shadow flicker regulation to date was enacted in Germany, where a court ruled that the maximum allowable flicker would be 30 hours per year²³. Since there are no known national or local regulations that govern shadow flicker in Turkey, the international standards were adopted to determine the potential impacts of shadow flickering. It is clear that there is no standard methodology that all developers adopt when carrying out shadow flicker assessments, and different developers and local authorities have different ways of approaching the assessment. Current guidance to assess shadow flicker in the Companion Guide to PPS22 (2004)²⁴ states that only dwellings within 130 degrees either side of north relative to a turbine can be affected and the shadow can be experienced only within 10 rotor diameters of the wind farm.

Considered rotor diameters of market leading five turbine manufacturers vary from 82,50 m to 99,8 m. As the nearest residential spot, Ormanlı Village to be 4,5 km distant to the project site, no shadow flickering effect is expected. The village roads that will be used for access to the project site will be rehabilitated. By the end of the construction, any damage caused will be repaired.

Project Introductory File for Barbaros Wind Power Plant Project in Turkey, prepared by NAZKA Mühendislik, dated Feb 2012.

Biodiversity

The project is totally located in forestry land and there is no endemic, wild or protected species under national or international regulations. There is no agricultural land or wetland around the project area²⁵.

Since the project is located in forestry land, there will be need to cut some trees.

The project site does not lie within any Important Bird

²⁵ Barbaros WPP Project Introductory File

 $^{^{23}\} http://www.eon.com/en/downloads/Appendix_M_Shadow_Flicker_Modeling_Report.pdf$

²⁴ http://www.communities.gov.uk/publications/planningandbuilding/planningrenewable



	Area (IBA).
	Although the project site is not located on a major migration route, in order to mitigate the risk of collision of birds and bats with the wind turbines, the wind mills will be designed and located appropriately.
	Project Introductory File for Barbaros Wind Power Plant Project in Turkey, prepared by NAZKA Mühendislik, dated Feb 2012.
Quality of employment	The Project will comply with the 4857 numbered Labor Law and its regulations. The project will be implemented in line with the Turkish Health and Safety Laws and Regulations. For the positions that require skilled personnel, trainings will be conducted by the turbine and other electromechanical equipment's manufacturers on site. All the workers will benefit from trainings on construction health and safety. Also, an Emergency Action Plan will be prepared in case of natural disasters, accidents, etc. Project Introductory File for Barbaros Wind Power Plant Project in Turkey, prepared by NAZKA Mühendislik, dated Feb 2012.
Livelihood of the poor	The company contributes to the livelihood of the poor with in kind contributions for infrastructure improvements.
	The company will provide in kind contributions to the public institutions and will continue to contribute the livelihood of the poor at Ormanlı village and other settlements around the project area. But, the project does not have a direct impact on livelihood of the poor.
Access to affordable and clean energy services	http://www.teias.gov.tr/ist2007/31(40-07).xls, highlights that the electricity generation mix of Turkey is currently dependent on thermal power plants.
Human and institutional capacity	The workers of the project will be trained and also, the company is ready to provide in kind contributions to the infrastructure improvements in the region. However, no major impact is expected from the project on improvement of the human and institutional capacity in the region.
Quantitative employment	The project owner is committed to prioritize local labour



and income generation	force (labour force in Ormanlı village and other surrounding settlements) in selecting construction workers. Also, for the operation of the plant, the company will employ workers such as technicians, security staff etc. As directed and secured by the law, the workers' salaries will not be below the pre-determined amount of annual minimum wage rate ²⁶ . As a result the employment rate and income generation in the region will increase. Project Introductory File for Barbaros Wind Power Plant Project in Turkey, prepared by NAZKA Mühendislik, dated Feb 2012.
Balance of payments and investment	The company saves net foreign currency by replacing renewable energy in place of electricity generation from imported fossil fuels. The link: http://www.iea.org/textbase/nppdf/free/2008/Key stats/2008.pdf shows that Turkey is one of the biggest natural gas importers in the world. And also, the link: http://www.teias.gov.tr/istatistik2008/3.xls shows that Turkey's installed capacity is mostly from thermal sources.
Technology transfer and technological self-reliance	The wind turbines have not been purchased yet. The investor is still communicating with well known foreign turbine manufacturers. After selecting one of the manufacturers a purchase agreement will be made between the manufacturer and the investor company. Such agreement strengthens technology transfer and technological self-reliance in Turkey. The supplier company will provide trainings to the technical staff and this result in a know-how transfer. Imported professional assistance for trainings and external technical support will be the parameters of monitoring this indicator as well as the number of total trainees.

References can be an academic or non-academic source, such as a university research document, a feasibility study report, EIA, relevant website, etc.

SECTION E. SUSTAINABILITY MONITORING PLAN

 $^{^{26}\} http://www.yaklasim.com/malibilgiler/pratikbilgiler/maddeler/003.htm$



E. 1. Discussion on Sustainability monitoring Plan

One of the issues discussed in the meeting was the monitoring of the sustainable development indicators. The project developers asked the participants to share their ideas of monitoring, but no comments have been received.

The project developers suggested to leave a log book in the site office for the stakeholders to write down their concerns, comments or observations. Mr. Ali Şensoy – Project Coordinator of the project owner company – also encouraged the stakeholders not to hesitate to share their views with the project owner company. He also promised to take action in case of a major concern about the project.

The pictures taken on the project site at different phases of construction works will be provided to the project developers to compare and contrast the impacts of access road opening, excavations, top soil stripping and landscaping.

Gözde Özveren from BorgaCarbon requested the stakeholders to be sensitive about the environmental issues and to get in touch with BorgaCarbon or write their views in the log book that will be left in the site office in case of any breaches.

Necessary actions will be taken in case of any breaches about the environmental issues.

E. 2. Discussion on continuous input / grievance mechanism



Discuss the Continuous input / grievance mechanism expression method and details, as discussed with local stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	Log Book	A log book is available at the Ormanli village headman's office and all the stakeholders have been informed about the presence of this log book at the stakeholder meeting, where they can write their comments and concerns during all phases of the project.
Telephone access	0216 414 99 27	Phone number of Borga Carbon Consultancy has been announced at the stakeholder meeting for comments and concerns of the stakeholders during all phases of the project.
Internet/email access	gozde@borgacarbon.com	Email of Borga Carbon Consultancy and website of the project owner company has been announced for the stakeholders to state their opinions as well as access information about the project.
Nominated Independent Mediator (optional)		

All issues identified during the crediting period through any of the Methods shall have a mitigation measure in place. The identified issue should be discussed in the revised Passport and the corresponding mitigation measure should be added to sustainability monitoring plan



SECTION F. DESCRPTION OF THE DESIGN OF THE STAKEHOLDER FEEDBACK ROUND

The stakeholder feedback round will begin as soon as the land surveys are complete. The Turkish versions of the LSC Report, PDD and the Passport will be sent to all stakeholders and the village headmen. In addition to this, the copies of these reports will also be sent to the site office. The stakeholders will be allowed to analyze them whenever they find it necessary. Besides, the project developers from the consulting company BorgaCarbon will visit the project area from time to time and will ask the stakeholders views about the project. These visits will not be official but will give us the opportunity to collect the stakeholders' opinions.



ANNEX 1. ORIGINAL PARTICIPANTS LIST



ANNEX 2. ORIGINAL EVALUATION FORMS