## 2013



WIND FARMS
SOLAR PV

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## Introduction

EDP Renewables is a world leader in the renewable energy sector and is the world's fourth largest wind energy company. The EDP Group is EDP Renewables' major shareholder. Besides its leadership position on the Iberian Peninsula, EDP Group also holds a significant position in the Brazilian electricity sector.

Among other countries, like UK, USA, France, Belgium, Italy, Poland, etc EDP Renováveis (further referred to as EDPR) develops and operates wind farms in Romania.

One of the main strategic initiatives defined in EDPR's growth plan entering new markets and new technologies. In this regard, in 2012 EDPR took the imitative to enter the solar PV market in Romania and in 2013 put into operation 6 photovoltaic plants.

Currently, EDPR has in Romnaia 6 wind farms that are under operation: Pestera, Cernavoda, Sarichioi, Vutcani, Cobadin and Albesti (Vutcani extension).

EDPR was granted with financial support from the EBRD and other banks of International Finance Corporation. The financial involvement of the banks was preceded with the Environmental and Social Due Diligence (ESDD) and elaboration of ESIA documentation.

- In 2010 an Environmental and Social Due Diligence was carried out for Pestera and Cernavoda WFs according with EBRD and IFC requirements
- In 2012 an Environmental and Social Due Diligence was carried out for Sarichioi and Vutcani WFs according with EBRD requirements
- In 2012 an Environmental and Social Due Diligence was carried out for 8 solar PV Plants according with EBRD requirements, from which 6 were granted with financial support.

WSP Environmental UK Ltd (WSPE) has been commissioned by EDPR to undertake top level Environmental and Social Due Diligences (ESDDs) for the investments addressed above.

This report has been prepared in order to present to the Banks the status of the project and EHS issues as well as the level of implementation of SEP and ESAP during 2013 year. Following the Bank's expectations, this report presents:

- Information on the status of the projects, any changes to the projects as well as information on environmental performance, mainly compliance with the contractual specifications as well as National and EU environmental standards
- Information on compliance with the ESAP and on any new projects or changes to planned investment
- Information on post-construction monitoring results
- Summary of any material changes in law significantly affecting **Environmental or Social Matters**

Main chapters of this report are:

- I. Projects details
- II. Contact authorised representative
- III. Summary of compliance evaluation
  - II. 1 Compliance with EMMP requirements
  - II. 2 Compliance with ESAP requirements
  - II. 3 Compliance with SEP requirements
  - II. 4 Compliance with applicable requirements of the Performance Standards
  - II. 5 Compliance with applicable S&E law
  - II. 6 Major environmental and social achievements
  - II. 7 Major challenges and issues for the Company
- IV. Compliance with ESAP and EMMP
- V. Compliance with IFC Performance standards on Social and Environmental Sustainability and applicable EU and Romanian Laws
  - IV. 1 PS 1. Social and Environment Assessment and Management System
  - IV. 2 PS2. Labour and working conditions
  - IV. 3 PS3. Pollution Prevention and Abatement
  - IV. 4 PS4. Community, Health, Safety and Security
  - IV. 5 PS5. Land Acquisition and Involuntary Settlement
  - IV. 6 PS6. Bird Monitoring and turbine shutdown system

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## I. Projects details

#### I.1. Location of Solar PV Projects

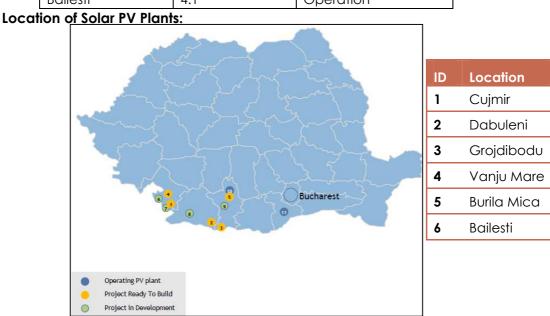
In 2012 EDP R Romania planned to construct and operate eight solar photovoltaic parks ("PV plants") in southern and southwest Romania, specifically in Mehedinti (four plants), Dolj (two plants), and Olt (two plants) counties.

2013 year is bringing EDPR Romania into operational PV Plants market with 6 facilities constructed and put into operation. The total operational capacity of PV Plants is **50.38 MW** with individual plants ranging from 4.1MW to 12MW, as presented in the table below.

EDPR has approached the European Bank for Reconstruction and Development ("EBRD," or "the Bank") for financing. The EBRD has determined the project qualifies as **Category B** under **Appendix 1 to the Bank's 2008 Environmental and Social Policy.** The Bank requires the services of a consultant to assist with Environmental and Social Due Diligence (ESDD) of the Project, including all eight solar PV plants. The benchmark for the assessment will be the EBRD's 2008 Environmental and Social Policy and associated Performance Requirements.

A summary of the capacity of each PV Plant in operation is presented as follows.

PV Plant	Capacity (MW)	Status 2013
Cujmir	12	Operation
Dabuleni	7.5	Operation
Grojdibodu	9.93	Operation
Vanju Mare	9.35	Operation
Burila Mica	7.5	Operation
Bailesti	4.1	Operation

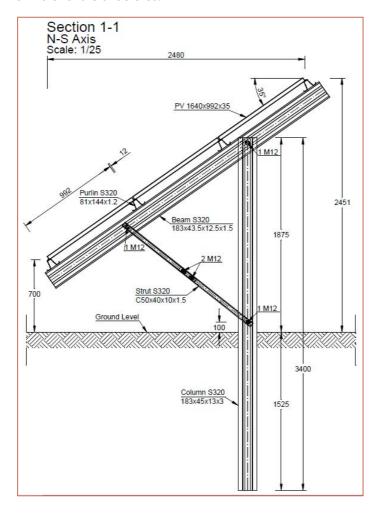


The sites are located in rural areas and the terrain is generally flat. There are very few trees and shrubs apart from those found around the boundaries of certain sites.

#### **Description of Equipment and Infrastructure**

The assumed photovoltaic module model is STP245-20/WD – 245 Wp produced by Suntech and the modules will be constructed in rows of seven to 30 blocks of 21 panels (seven modules in series and three landscape oriented). Each row shall be connected to a separate inverter off 500 or 1000 kVA. Distance between the rows will be 10 m (9 m on the Vanju Mare Site). The panels are set at a fixed tilt of 350 and are static. The panels will be screwed into metal structures and will, therefore, be easily removable. The set-up of the structures is shown below.

#### Set-up of the Photovoltaic Structures.



#### I.2. CUJMIR 12 MW PV Plant: specific environmental issues

TThe site is loc

irrigation channel is located adjacent to the northern boundary of the site. Access to the site is via an un-named local road which connects to the DN56A (National Road).



Location of Culmir Photovoltaic Plant, Mehedinti County

#### Landscape and Visual Impact

The landscape on and in the general area of the site comprises open, former agricultural land, which has become overgrown with grass and scrub. The nearest residential properties to the site are located approximately 2.59 km to the east in Cujmir village). An extensive tree belt of trees lies on the western boundary of the village resulting in views to the site from the village being very limited. There are no direct views of the site from any county or national roads. Given the existing site conditions and the distance and existence of a visual screen between the village and the site, it is considered that the landscape and visual impact of the proposed solar farm is negligible.

#### **Ecology**

The closest ecologically designated areas to the site are SCI and SPA to the location of the solar park is ROSCI0299 Dunărea la Gârla Mare – Maglavit SCI and ROSPA0046 Gruia – Gârla Mare which are located approximately 5.25 km from the south-west.

During the site visit, no protected/red book species were encountered on the site. A small flocks of Common Starlings (Sturnus vulgaris) observed crossing over the site. The constant flat terrain formerly used for agriculture with no shading, along with its location near the road, is unlikely to provide nesting, feeding or resting conditions for protected bird species. Therefore, solar panels should provide no impact on local bird species.

#### **Archaeology and Cultural Heritage**

As part of the Environmental Permitting process, the Cultural Departments of the local authority was consulted in relation to any aspects of cultural heritage in the proximity of the sites. No sites or features of interest were identified as part of this process. During the site visits no above-ground features were identified.

#### **Security and Lighting**

During the construction phase security lighting was present on the construction compound. This will be directionally-controlled into the compound to minimise any potential impacts on local ecological or human receptors as a result of light spill or glare.

When operational, it is proposed that security at the Cujmir site will be managed remotely and that motion detection sensors, CCTV and lighting will be installed on and adjacent to a three metre high perimeter fence.

#### Drainage, Surface Water Run-Off and Flooding

No water features were identified on the site. The nearest water feature to the site is a disused irrigation channel located adjacent to the northern boundary of the development.

## I.3. Dabuleni 7.5 MW PV Plant: specific environmental issues

The site is located approximately 8 km to the north-west of the village of Dăbuleni and 20 km to the north of the River Danube in Dolj County. The overall area of the site is 24.1 ha (241,486 m2) and comprises of three generally flat, former agricultural fields. A disused irrigation channel and pumping station are located adjacent to the eastern boundary of the site. Access to the site is via an un-named local road which connects to the DJ542 (Country Road).



#### Landscape and Visual Impact

The site comprises three former agricultural field bordered on all sides by existing tree lines. The nearest residential property to the site is located approximately 8 km to the east and has no views of the development. The PV arrays to be erected on the site will be static thereby limiting potential glint and glare impacts and there are no airports in close proximity to the site. Given the location of the site and the lack of any visual receptors, it is considered that the landscape and visual impact of the proposed solar farm is negligible.

#### **Ecology**

The closest SCI to the location of the solar park is ROSCI0045 Coridorul Jiului, located approximately 11 km west of the site, while the closest SPA is ROSPA0023 Confluența Jiu-Dunăre, located approximately 13.4 km to the west.

During the site visits, no protected/red book species were encountered. Three common buzzards (Buteo buteo) were observed gliding in circles at high altitude above the area, as they were heading south for migration. Protected species that may cross the area are most likely migratory species that usually travel for long distances at high altitude and have few stops. The constant flat terrain formerly used for agriculture with no shading, is unlikely to provide nesting, feeding or resting conditions for protected bird species. Therefore, solar panels should not provide any impact on local bird species.

#### **Archaeology and Cultural Heritage**

As part of the Environmental Permitting process, the Cultural Departments of the local authority was consulted in relation to any aspects of cultural heritage in the proximity of the sites. No sites or features of interest were identified as part of this process. During the site visits no above-ground features were identified.

#### **Security and Lighting**

During the construction phase security lighting was present on the construction compound. This will be directionally-controlled into the compound to minimise any potential impacts on local ecological receptors as a result of light spill.

#### Drainage, Surface Water Run-Off and Flooding

No water features were identified on the site. The nearest water feature to the site is a disused irrigation channel located adjacent to the eastern boundary of the development.

#### I.4. Grojdibodu 9.93 MW PV Plant: specific environmental issues

The site is located approximately 1.25 km to the north-west of the village of Grojdibodu and 2 km to the north of the River Danube in Olt County. The overall area of the site is 31.7 ha (317,800 m2) and comprises of former agricultural fields. The northern and western boundaries of the site are delineated by rows of trees and a disused irrigation channel is located adjacent to the northern boundary. Access to the site is via an un-named local road which connects to the DN54A (Country Road).



#### Landscape and Visual Impact

The landscape on and in the general area of the site comprises of open, former agricultural land. The nearest residential properties to the site are located approximately 1.2 km to the east in Grojdibodu village. The northern and western boundaries of the site are defined by trees. The fields on the intervening land between the site and the village are also tree-lined. Given the distance and existence of a visual screening provided by the tree-lines between the village and the site, it is considered that the landscape and visual impact of the proposed solar farm is negligible.

#### **Ecology**

The closest SCI to the location of the solar park is ROSCI0376 Râul OIt între Mărunței și Turnu Măgurele, located approximately 10,4 km to the north-west, while the closest SPA is ROSPA0135 Nisipurile de la Dăbuleni located at approximately 3,15 km to the south-west

Among bird species for which the site ROSPA0135 Nisipurile de la Dăbuleni (located at approximately 3,15 kilometers far) was designated, there are 9 protected species that prefer the open field – meadow habitat: White Stork (Ciconia ciconia), Red-footed Falcon (Falco vespertinus), Barred Warbler (Sylvia nisoria), Tawny Pipit (Anthus campestris), European Nightjar (Caprimulgus europaeus), European Roller (Coracias garrulus), Lesser Grey Shrike (Lanius minor), Ortolan Bunting (Emberiza hortulana) and Red-backed Shrike (Lanius collurio). All these species are migratory bird species and occur only in warm seasons. Due to the small surface of the solar park and north positioning from the protected area, it is unlikely that it provides any impact such as habitat loss or feeding/resting area for any protected bird species.

During the site visit, no protected/red book species were encountered. One Common Kestrel (Falco tinnunculus), a number of Rooks (Corvus frugilegus) and Western Jackdaws (Corvus monedula) were observed in the area. The constant flat terrain shouldn't provide any impact on bird species that may occur on the site.

#### **Archaeology and Cultural Heritage**

As part of the Environmental Permitting process, the Cultural Departments of the local authority was consulted in relation to any aspects of cultural heritage in the proximity of the sites. No sites or features of interest were identified as part of this process. During the site visits no above-ground features were identified.

#### **Security and Lighting**

During the construction phase security lighting was present on the construction compound. This will be directionally-controlled into the compound to minimise any potential impacts on local ecological or human receptors as a result of light spill or glare.

#### Drainage, Surface Water Run-Off and Flooding

No water features were identified on the site.

### 1.5. Vanju Mare 9.36 MW PV Plant: specific environmental issues

The site is located approximately 2 km to the south-west of the village of Bucura and 2 km to the east of the River Danube in Mehedinti County. The overall area of the site is 23.4 ha (234,052 m2) and comprises of former agricultural fields. An earth embankment is located on the south-western boundary of the site beyond which is a small stream. Access to the site is via a track road which connects to the Dj562 (Country Road).



#### Landscape and Visual Impact

The landscape on and in the general area of the site comprises of open, former agricultural land, which has become overgrown with grass and scrub. The nearest residential properties to the site are located approximately 1.94 km to the north-east in the village of Bucura. There are intermittent stands of trees along the south-west border of the village allowing limited views directly to site. Given the existing condition of the site and the distance and existence of a visual screen between the village and the site, it is considered that the landscape and visual impact of the proposed solar farm is negligible.

#### **Ecology**

The closest SCI to the location of the solar park is ROSCI0299 Vânju Mare, located approximately 0.85 km to the north-east, while the closest SPA is ROSPA0011 Blahnita and is located approximately 7.2 km to the east.

During the site visit, no protected/red book species were encountered. Several White Wagtails (Motacilla alba) were observed at the edge of the site, as they were heading south for fall migration. Some small flock of Common Starlings (Sturnus vulgaris) and Rooks (Corvus frugilegus) were encountered at distances over 1 km of the emplacement. The constant flat terrain formerly used for agriculture with no shading, along with its location near the road, is unlikely to provide nesting, feeding or resting conditions for protected bird species. Therefore, solar panels should provide no impact on local bird species.

#### **Archaeology and Cultural Heritage**

As part of the Environmental Permitting process, the Cultural Departments of the local authority was consulted in relation to any aspects of cultural heritage in the proximity of the sites. No sites or features of interest were identified as part of this process. During the site visits no above-ground features were identified.

#### Security and Lighting

During the construction phase security lighting was present on the construction compound. This will be directionally-controlled into the compound to minimise any potential impacts on local ecological receptors as a result of light spill.

#### Drainage, Surface Water Run-Off and Flooding

No water features were identified on the site. The nearest water feature to the site is a stream located adjacent to the south-western boundary of the development.

#### I.6. Burila Mica 7.5 MW PV Plant: specific environmental issues

The site is located approximately 1 km to the south-east of the village of Burila Mica and 3 km to the north-east of the River Danube in Mehedinti County. The overall area of the site is 22.7 ha (227,394 m2) and comprises of former agricultural fields. An earth embankment is located on the northern boundary of the site beyond which is a disused irrigation channel. A block of woodland is located adjacent to the south-western corner of the site. Access to the site is via a track road which connects to an un-named road connecting the villages of Burila Mica and Gogosu.



#### Landscape and Visual Impact

The landscape on and in the general area of the site comprises of open, former agricultural land, which has become overgrown with grass and scrub. The nearest residential properties to the site are located approximately 0.74 km to the north-west in Burila Mica. The disused irrigation channel which runs parallel to the northern boundary of the site is approximately 3m higher in elevation than both the site and the residential property and significantly limits the views of the site from this are. Given the existing condition of the site and the distance and existence of a visual screen between the village and the site, it is considered that the landscape and visual impact of the proposed solar farm is negligible.

#### **Ecology**

The closest SCI to the location of the solar park is ROSCI0306 Jiana. Burila Mică solar park is located in ROSPA0011 Blahnita. The present site is located on dry flat land, formerly used for agriculture and it has a considerable distance to the nearest water body or wetland. From all the species for which ROSPA0011 Blahniţa was desgnated for, only two of them may occur on the present emplacement: Marsh Harrier (Circus aeruginosus) and European Roller (Coracias garrulus).

Due to site survey, no red book/protected species were encountered. The small surface of the solar, as well as it's distance from any water bodies represents no threat to bird species that may cross the emplacement.

#### **Archaeology and Cultural Heritage**

As part of the Environmental Permitting process, the Cultural Departments of the local authority was consulted in relation to any aspects of cultural heritage in the proximity of the sites. No sites or features of interest were identified as part of this process. During the site visits no above-ground features were identified.

#### **Security and Lighting**

During the construction phase security lighting was present on the construction compound. This will be directionally-controlled into the compound to minimise any potential impacts on local ecological or human receptors as a result of light spill or glare.

#### Drainage, Surface Water Run-Off and Flooding

No water features were identified on the site. The nearest water feature to the site is a disused irrigation channel is located adjacent to the northern boundary of the development.

#### 1.7. Bailesti 4.1 MW PV Plant: specific environmental issues

The site is located approximately 1km to the east of the village of Builesti and 17 km to the north of the River Danube in Dolj County. The overall area of the site is 14.2 ha (144,203 m2) and comprises of former agricultural fields. A railway line runs parallel and adjacent to the southern boundary and a small holding including brick-built barn/stable is located adjacent to the south-west corner of the site. Access to the site is via a track road which connects to the Dj561A, which connects Bailesti and Giurgita. The nearest residential property to the site is located approximately 0.9 km to the west.



#### Landscape and Visual Impact

The landscape on and in the immediate area of the site comprises of open, former agricultural land, which has become overgrown with grass and scrub and on which there is evidence of fly-tipping. The general character of the area surrounding the site is industrial and there are disused and operation facilities located in close proximity to the eastern and western boundaries. The nearest residential properties to the site are located approximately 0.9 km to the southwest in Bailesti. Views to the site from these properties are partially screened by existing industrial facilities and a belt of trees in the intervening land. Given the

existing condition of the site, the general industrial character of the surrounding area, and the distance to the nearest residential receptor, it is considered that the landscape and visual impact of the proposed solar farm is negligible.

#### **Ecology**

The closest SCI to the solar park is ROSCI0202 Silvostepa Olteniei, located at approximately 12.5 km to the north-east, while the closest SPA is ROSPA0074 Maglavit located approximately 22 km the west.

During the site visit, no protected/red book species were encountered on or in close proximity to the site. Some small flocks of Crested Larks (Galerida cristata) and Common Starlings (Sturnus vulgaris) were observed crossing over the site. The constant flat terrain formerly used for agriculture with no shading, along with its location near the road, is unlikely to provide nesting, feeding or resting conditions for protected bird species. Therefore, solar panels would also have a zero impact on local bird species.

#### **Archaeology and Cultural Heritage**

As part of the Environmental Permitting process, the Cultural Departments of the local authority was consulted in relation to any aspects of cultural heritage in the proximity of the sites. No sites or features of interest were identified as part of this process. During the site visits no above-ground features were identified.

#### **Security and Lighting**

During the construction phase security lighting will be present on the construction compound. This will be directionally-controlled into the compound to minimise any potential impacts on local ecological or human receptors as a result of light spill or glare.

#### Drainage, Surface Water Run-Off and Flooding

No water features were identified on the site.

#### I.8. Status of solar PV Plants in 2013

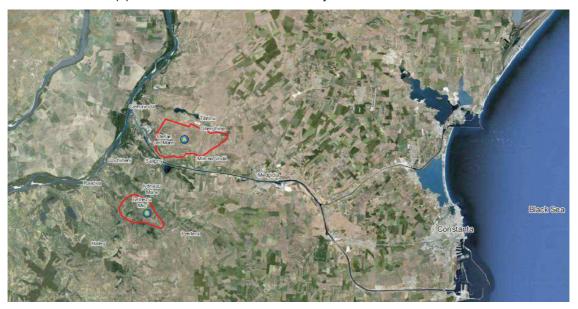
Year 2013 is the first operational year for 6 solar PV plants. The start of operation dates are presented below:

SOLAR PV Plant	2013 status	Start of operation date:
Cujmir	In operation	March 2013
Dabuleni	In operation	December 2012
Grojdibodu	In operation	February 2013
Vanju Mare	In operation	April 2013
Burila Mica	In operation	August 2013
Bailesti	In operation	August 2013

# I.9. Pestera (90 MW) and Cernavoda I-II (139MW) Wind Farms - Operation

The Project sites are located in the Constanta County in the south-west region of Romania, approximately 33km (Pestera) and 45km (Cernavoda) respectively west of Constanta on the Black Sea coast. Both sites are located in rural areas and are located more than 600m from the closest residential properties.

The distance between the Pestera and Cernavoda sites is approximately 7km at the nearest point and approximately 15 km from the centre of each site. Figure 1 shows the approximate location of the Projects.



Pestera and Cernavoda WFs Sites Location (Source: Google Maps)

The site at Pestera is located approximately 2.5km south-west of Pestera town and 1km south of Ivrinezu Mic and to the south east of Rasova. The site is accessed via the DJ223b to the west and the DJ222 to the east. The eastern part of the site is located near the Irvinezului Valley and the Movila Lui Lipan. The Danube to Black Sea Navigable Canal, a tributary of the River Danube is located approximately 2km to the north of the site, with the River Danube being approximately 10km to the west. The Pestera site is approximately 38km west of the Black Sea coast.

The site at Cernavoda is located approximately 1km south west of Tibrinu and approximately 4km east of the town of Cernavoda. Access to the site is via the DJ225 county road and then via the existing roads associated with general activities in the area.

To the north of the Cernavoda site are Lake Tibrinu (including a fish farm), the villages of Tibrinu and Gherghina and the boundary of the Cernavoda administrative area. The village of Stefan cel Mare is located to the east and to the west is the boundary of the settlement of Micea Voda. The areas of Faclia and the outskirts of Mircea Voda and Saligny are present to the south. The Danube to Black Sea Navigable Canal is located approximately 5km to the south of the site, and the River Danube itself is located approximately 8km to the west. The Cernavoda site is located approximately 50km east of the Black Sea coast.

#### 2013 status of Pestera and Cernavoda I-II Wind Farms

**Pestera** wind farm is composed from 30 wind turbines (VESTAS V90 3.0 MW) providing a total installed capacity of **90MW** and **Cernavoda** wind farm of 46 wind turbines (also VESTAS V90 3.0 MW) providing a total installed capacity of **138 MW**.

Year 2013 was third operational year of both wind farms. The start of operation dates are presented below:

	Start of operation date:
Pestera WF	October 2010
Cernavoda I WF	February 2011
Cernavoda II WF	September 2011

#### **Summary Pestera WF stages:**

- a) The civil works of Pestera Wind Farm were finished in September 2010
- **b) Connection** to the national grid was allowed by Transelectrica (National Grid Operator) and established in October 2010, with the condition of finishing the works needed in Medgidia Sud and Rasova substations until March 2011.
- Connection works consisting in additional works executed in Enel facilities (Rasova substation) and Transelectrica facilities (Medgidia Sud Substation) were executed according with the connection permits in force (issued by Enel and Translectrica) in January 2011. Communication works were required to ensure proper communication between Pestera substation and National Grid Dispatcher (DEN).
- d) Tests of wind turbines started immediately after the connection to the grid (October 2010). Special tests required by Transelectrica according to their Operational Procedure started in January 2010.

#### **Summary Cernavoda WF stages:**

- e) The civil works have finished in Cernavoda I and II Wind Farm in December 2010.
- **Connection** to the national grid of Cernavoda I WF was in February 2011 and of Cernavoda II WF in September 2011
- g) Connection works consisting in additional works executed in Enel and Transelectrica facilities (Ecluza 110 kV, Tortomanu 110 kV, Mircea Voda 110 kV, Mircea Voda Nord and Medgidia Nord substations) were executed according with the connection permits in force (issued by Enel and Transelectrica Communication works were required to ensure proper communication between Cernavoda substation and National Grid Center.
- h) Tests of wind turbines Special tests required by Transelectrica according to their Operational Procedure started in March 2011.

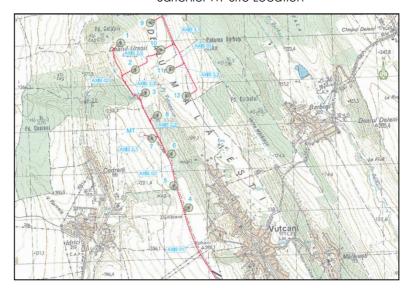
## I.10. Sarichioi (33MW) and Vutcani (24MW) Wind Farms - Operation

**Sarichioi WF** (33 MW) is located in Sarichioi WF, Tulcea County. The site is in rural area and situated more than 2 km N-E from Agighiol village. The access is made from DJ222-km 0=023.

**Vutcani WF** (24 MW) is located in Vutcani commune, Vaslui County. The site is situated 1 km East of Vutcani commune and 3,5 km West from Rosiesti Commune. The access is made from DJ 224b.



Sarichioi WF Site Location



Vutcani WF Site Location

#### 2013 status of Sarichioi and Vutcani WFs - operation:

**Sarichioi WF** is composed from 11 wind turbines (turbine model VESTAS V90 3.0 MW), providing a total installed capacity of **33 MW** and **Vutcani WF** of 12 wind turbines (VESTAS V90 2.0 MW) providing a total installed capacity of **24 MW**.

- i) The civil works of Sarichioi and Vutcani WFs have finished in February 2012
- j) Connection works for Vutcani WF consisting in additional works executed in **EON** facilities (Husi substation) and Transelectrica facilities (Munteni Substation) are executed according with the connection permits in force (issued by EON and Transelectrica) and were finished in March 2012. Communication works were required to ensure proper communication to National Grid Dispatcher (DEN).

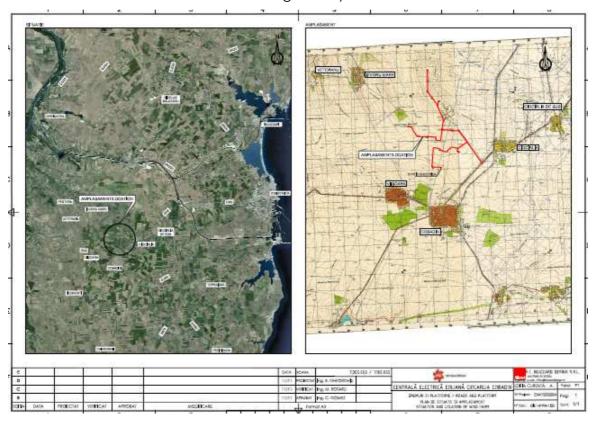
- **k)** Connection works for Sarichioi WF consisting in additional works executed in **Enel** facilities (Zebil substation) and Transelectrica facilities (Tulcea Vest Substation) are going to be executed according with the connection permits in force (issued by Enel and Transelectrica) and were finished in March 2012.
- 1) Tests of wind turbines of both wind farms are going to be started immediately after the connection to the grid. Special tests required by Transelectrica according to their Operational Procedure will be performed.

Year 2013 was second operational year of both wind farms. The start of operation dates are presented below:

	Start of operation date:
Sarichioi WF	August 2012
Vutcani WF	August 2012

# I.11. Cobadin (26 MW) and Vutcani Extension (28MW) Wind Farms - Operation

The **Cobadin** wind farm is located within Dobrogea area, and is approximately 3 km from Ciocarlia and Cobadin localities, as shown on Figure below. These localities are rural in character and are situated along water courses, roads and farmland. The access is made using County Road DJ3.



Location of the Cobadin Wind Farm

The Site covers an area of ~200 ha and is on land which is privately owned by EDPR. The land has limited agricultural value and is used for crop production, including wheat. Within the Site there are no forested areas or rare/sensitive plant species. Agricultural land use is not colonised other than by grasses and plants which are fast growing and tolerant to the environmental conditions. Water resources are limited, with no irrigation systems in place.

#### **Ecology**

The **Cobadin** wind farm is not located within the boundary of any protected areas, including Natura 2000 sites such as Special Protected Areas (SPAs), Sites of Community Importance (SCIs) and International Bird Areas (IBAs).

The distances of Cobadin WF to Natura 2000 areas are:

- ROSCI0071 Dumbraveni-Valea Urluia-Lacul Vederosa: 11 km from WTG 6
- ROSCI0353 Pestera Deleni: 7 km from WTG 1; 0.5 km from WTG 7, 8 and 9
- ROSCI0083 Fantanita Murfatlar 10.79 km from WTG 13
- ROSCI0398 Straja Cumpana 16.7 km from WTG 13
- ROSPA0061 Lacul Techirghiol 26 km from WTG 6
- ROSPA0001 Adamclisi 12 km from WTG 1



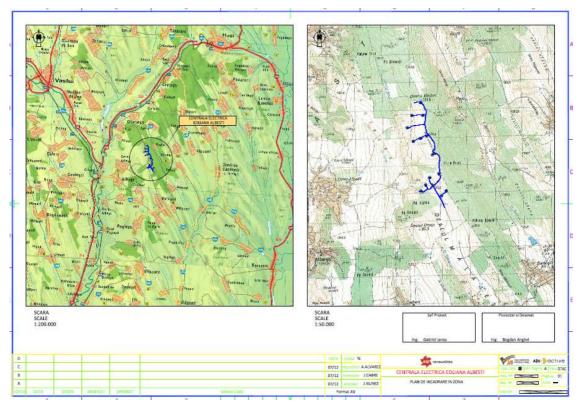
The **Vutcani Extension** wind farm is located within Moldova area, and is approximately 4.7 km from Albesti, 4 km from Oltenesti, 11 km from Costesti, 7 km from Codreni, and 5.5 km from Vutcani localities, as shown on Figure below. These localities are rural in character and are situated along water courses, roads and farmland. The access is made using county road DJ224b and links with national road DN28b between lasi-Barlad and Vutcani.

The Site covers an area of ~83 ha and is on land which is privately owned by EDPR. The land has limited agricultural value and is used for crop production, including wheat. Within the Site there are no forested areas or rare/sensitive plant species. Agricultural land use is not colonised other than by grasses and plants which are fast growing and tolerant to the environmental conditions. Water resources are limited, with no irrigation systems in place.

The **Vutcani Extension** wind farm is not located within the boundary of any protected areas, including Natura 2000 sites such as Special Protected Areas (SPAs), Sites of Community Importance (SCIs) and International Bird Areas (IBAs).

The nearest Natura 2000 area is ROSCI 0213 raul Prut situated at approximately 30 km distance from Vutcani Extension WF. Raul Prut SCI supports species such as otter, mouse-eared bat and European ground squirrel.

The Vutcani Extension wind farm is not located within the boundary of any protected areas, including Natura 2000 sites such as SPAs, SCIs or International Bird Areas (IBAs).



#### 2013 status of new projects Cobadin and Vutcani Extension – first operational year:

The Cobadin Wind Farm comprises 13 wind turbines (turbine model VESTAS V90 2.0MW), providing a total power of 26MW. Each wind turbine consists of a hollow steel tower with a generator nacelle which houses and protects the main components of the rotor blades, gear box, transformer and control systems. The turbines each have a total height of 150 m (comprising 105 m tower and 45 m rotor blade above the tower height). The turbines are connected via 33kV underground cables and junction stations which are connected to a transformer station within the wind farm that is in turn connected to the nearest Enel Dobrogea Facilities

The 13 2MW wind turbines associated with the Cobadin Wind Farm have already been constructed. The wind farm was connected to Enel Distribution Company on 30.01.2013. **The wind become fully operational on May 2013**, after finishing mandatory compliance tests. The procedure for obtaining the environmental authorization (EA) was started. Estimative issuance date of EA: Mid of April 2013.

The Vutcani Extension wind farm comprises 14 wind turbines (turbine model VESTAS V100 2.0 MW), providing a total power of 28 MW. Each wind turbine consists of a hollow steel tower with a generator nacelle which houses and protects the main components of the rotor blades, gear box, transformer and control systems. The turbines each have a total height of 145 m (comprising 95 m

tower and 50 m rotor blade above the tower height). The turbines are connected, through 20kV underground cables into existing Vutcani substation. The evacuation infrastructure into EON distribution network is common for both wind farms: Vutcani and Vutcani Extension (Albesti). **The wind become fully operational on June 2013.** 

Year **2013** was first operational year of both wind farms. The start of operation dates are presented below:

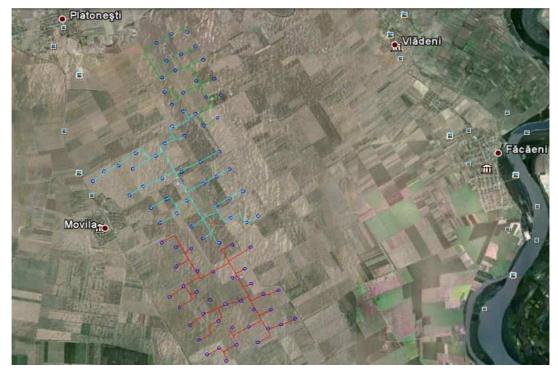
	Start of operation date:
Cobadin WF	May 2013
Vutcani Extension (Albesti)WF	June 2013

## I.12. Facaeni (264MW) Wind Farm - Construction

The **Facaeni** Wind Power Plant is situated in the county of Ialomita, on the territory of the communes Mihail Kogalniceanu, Vladeni, Facaeni, Movila and Bordusani (county of Ialomita). The placement is situated in the south eastern part of Romania, at approximately 130 km from Bucharest, adjacent to the Ialomita commune.

The territory is characterized by the presence of low-lying areas, alternating with small hills, with a height that does not exceed 78 m. Population density in the area is low and there is little housing near the objective.

Access to the site is achieved from Bucharest on Highway A2 to Fetesti, after which we follow national road DN3B to the locality of Vladeni, and from here, access to the substation is achieved using wind farm main access road. The terrain on which the power plant is situated is arable land.

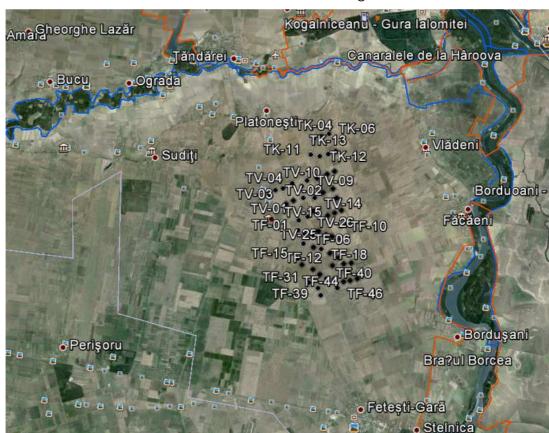


The area on which the project is located is the property of SC Ialomita Power SRL. The total area is ~1380 ha, located in the unincorporated area of the communes Facaesti, Vladeni and M. Kogalniceanu, in the county of Ialomita.

#### **Ecology**

The distances of Facaeni WF to Natura 2000 areas are:

- ROSCI0278 Bordusani-Borcea: 6.25 km from wtg TF49
- ROSPA0012 Bratul Borcea: 8 km from wtg TF46
- ROSPA0017 Canarele de la Harsova 11.77 km from wtg TK06
- ROSPA0120 Kogalniceanu-Gura Ialomitei 5.6 km from wtg TK06
- ROSCI0290 Coridorul Ialomitei 9.8 km from wtg TK04



The 400 kV HVL of Facaeni WF (~16km) connecting 33/110/400 kV Facaeni substation to TSE Gura Ialomitei substation crosses 4 protected area Natura 2000:

- 6,41 km of ROSPA0120 Kogalniceanu Gura Ialomitei
- 1,82 km of ROSCI0278 Bordusani Borcea
- 1,14 km of ROSCI0290 Coridorul Ialomitei
- 1,1 km of ROSPA0017 Canarele de la Harsova

## II. Contact authorised representative

Authorised representatives to be contacted by IFC, EBRD and other Lenders on the AMR:

Name: Laura Lazar

Manager

Tel: 0040-725929884 Name: Florentina Fasie Tel: 0040-212010890 Email: lauralazar@edpr.com Title: Environmental Specialist Email: lauralazar@edpr.com

Title: Project Manager/EMS

## III. Summary of compliance evaluation

### III.1 Compliance with ESAP, EMMP and SEP requirements

EDPR succeeded to implement and respect all measures foreseen for the 6 wind farms and 6 solar PV Plants developed in Romania that are currently under operation.

The financial involvement of the banks was preceded with the Environmental and Social Due Diligence (ESDD) and elaboration of ESIA documentation.

- In 2010 an Environmental and Social Due Diligence was carried out for Pestera and Cernavoda WFs according with EBRD and IFC requirements
- In 2012 an Environmental and Social Due Diligence was carried out for Sarichioi and Vutcani WFs according with EBRD requirements
- In 2012 an Environmental and Social Due Diligence was carried out for the solar PV Plants according with EBRD requirements

More details are described in:

- Chapter IV.1 Compliance with ESAP.
- Chapter III.2 Compliance with EMMP
- Chapter III.4. Information on SEP implementation

The **SEP** was elaborated in order to formalize communication of EDPR Romania with the project stakeholders. Following the SEP requirements, EDPR Romania maintained internal and external stakeholders dialogue. The internal dialogue was based on routine exchange of information between different organizational units of the Company and individuals involved in the project development. The email exchange, organization of periodical meetings and notifications posted on the information boards were commonly used to assure the flow of information between the employees.

The external communication was focused on building a good understanding of the projects among the local communities and competent authorities.

# III.2. Compliance with applicable requirements of the Performance Standards

Information regarding compliance with following performance standards are presented in **Chapter V**:

- PS1. Social and Environment Assessment and Management System
- PS2. Labour and working conditions
- PS3. Pollution Prevention and Abatement
- PS4. Community, Health, Safety and Security
- PS5. Land Acquisition and Involuntary Settlement
- PS6. Bird Monitoring and turbine shutdown system

## III.3. Compliance with applicable S&E law

EDPR Renewables Romania acts in accordance with all applicable Romanian regulations and laws.

During the construction phases of new wind farms developed in 2013: Facaeni WF – Phase I 132 MW, the company paid zero penalties to Local Authorities. No court trials against the company were instructed because of the construction damages.

Mehedinti OH&S Inspectorate applied a fine to Burila Mica site due to start of the works before the notified date: the breach was observed during the visit of the OH&S Inspectorate one day before the notified start date.

No other material non-compliances with environmental, social and H&S regulations or law appeared in 2013.

Details regarding applicable S&E Law are presented in **ChapterIV.3. PS3. Pollution Prevention and Abatement, PS 3 (i).** 

#### III.4. Major environmental and social achievements

#### III.4.1. Memberships

EDPR Romania is a member of **RWEA – Romanian Wind Energy Association** since 2010 where EDPR is playing an important role supporting the development of renewable energy.

EDPR holds a position in the Board of Directors of the Romanian Wind Energy Association. The person appointed as a representative of EDPR in 2013 is Mr. David Talavan Luque.

#### **Involvement of EDPR:**

EDPR is an active member supporting the association in several fields of activity

- financial support for the internal budget of RWEA including events organization
- decisional support for the Board of Directors
- input for legislative framework, active role in the Task Force group established for proposing amendments to legislation
- participation in all events organized by RWEA.

EDPR Romania (EDPR RO PV Company) is a member of **RPIA** – **Romanian Photovoltaic Industry Association** since 2012. **EDPR** holds a position in the Board of Directors, the person appointed as a representative of EDPR in 2013 is Mr. David Talavan Luque.

#### Involvement of EDPR:

- Attending and actively participating at all board meetings to further the success of RPIA and to support RPIA's mission and goals;
- Assuming responsibilities for specific projects by volunteering, such as serving on Board committees, serving as liaisons to other organizations and authorities, representing the association at meetings, or preparing reports and statements;
- Chairing committees and/or task forces as requested by BoD Chairman;

- Representing RPIA at industry events, as agreed in the BoD;
- Promoting RPIA at every opportunity and representing the best interests of RPIA at all times;
- Regularly attending and actively participating in RPIA programs.

#### III.4.2. Recognition awards:

#### Global reporting Initiative (GRI):

Reporting on sustainability performance is an important way to manage the EDPR impact on sustainable development, environmental and social conditions.

By taking a proactive role to collect, analyze, and report important steps taken by the company to reduce potential business risk, EDPR promotes Transparency and Accountability. Putting information on the public domain allows stakeholders to track the company's performance on broad themes – such as environmental performance - or a particular issue - such as labor conditions on sites.

KPMG has confirmed the A+ GRI rating for EDPR 2012 Annual Report. GRI Standards are the most recognized benchmark for companies to report on their sustainability performance, and A+ is the top rate.

More details regarding recognition awards of EDPR for 2013 are available in the Company Annual Report published on company website.

#### Dow Jones Sustainability Index:

EDPR is focused on continuously improving its performance in Sustainability, and this is highlighted in its declaration of Vision and Mission, as a way to create value to our shareholders and to the society. As a leader in the renewable sector, EDPR plays a key role in EDP Group, as leader among Utilities on the Dow Jones Sustainability Index in 2013.

#### III.4.3. EMS ISO 14001 Certification

In 2013 EDPR implemented for Cobadin and Vutcani Extension WFs the EMS ISO 14001 and maintained EMS system certified for Pestera, Cernavoda, Sarichioi and Vutcani WFs. First 4 solar PV plants put into operation in 2013: Cujmir, Vanju Mare, Grojdibodu and Dabuleni PV Plants were also certified with EMS ISO 14001.

The certification was obtained in December 2013 and was issued by Lloyd's Register EMEA. According to this evaluation, during operation there were no registered un-compliances with the Romanian legislation in force. Due to this fact and because no complaints were received from local communities and no penalties were paid to competent authorities, no compensatory measures were taken during operation of these wind farms.

#### III.4.4. Indirect economic impacts:

#### III.4.4.1. Infrastructure investments in public or private roads during 2013:

The Wind Farm construction comprises the construction of new roads used for the access to each wind turbine and rehabilitation of existing roads in order to allow the transportation of heavy equipment to the site during construction works. The construction process of new facilities, wind farms or PV plants in Romania is requiring investments in public or private roads infrastructure, consisting in:

- A. The construction of new roads used for the access to each wind turbine and
- B. Rehabilitation of existing local roads.
- **A.** In all **6 wind farms currently under operation**, EDPR allows access to local inhabitants to use all new constructed and rehabilitated roads, facilitating in this way development of local agricultural activities. The platforms that were used for wind turbines installation are used by local inhabitants as temporary parking places for equipment used in agricultural activities.

New internal roads for wind turbines access required following investments:

2010				2011				
New roads constructed	Peste	ra WF		roda I-II VF	Sarichioi WF		Vutcani WF	
in 2010 and	Oper	ation	Ope	ration	Ope	ration	Oper	ation
2011	km	€K	km	€K	km	€K	km	€K
	26.82	3078	40	3702	17	1073	11	1000

			2012		201	3	
New roads	Cob	adin WF	Albe	esti WF	Faco	ıeni WF	
constructed in 2012 and	Operation		Operation		Construction		
2013	km	€K		€K	km	€K	
			km				
	15.2	1300	8.3	1111	55	1300	

Access to Solar PV Plants requires investment in access roads. Details regarding lengths of new access roads and necessary investment are presented in the table below:

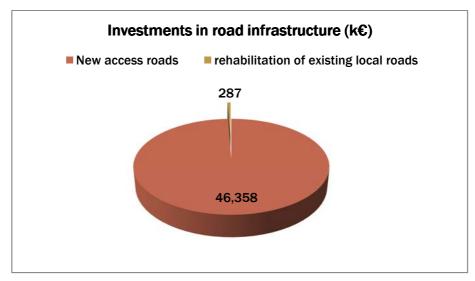
_	2012										2013			
New roads constructed	Cujr	nir PV	Dabu	ıbuleni PV Grojdobodu Vanju Ma PV PV			e Bailesti PV			Mica V				
In 2012 and	Const	ruction	Const	ruction	Const	ruction	Const	ruction	Const	ruction	Const	ruction		
2013	km	€K	km	€K	km	€K	km	€K	Km	€K	Km	€K		
	3.3	0.200	1.2	0.079	2.,6	0.240	0.,85	0.015	0.25	17.52	0.30	15.74		

As showed in the tables above in total EDPR Romania constructed 181.82 km of new roads with an investment of 46358 €k.

- **B.** During 2013, EDPR invested in **rehabilitation of existing local roads for public use**, inside the localities where wind farms were constructed:
  - 0,25 km rehabilitation of existing road, in Bailesti locality (Bailesti PV plant)

- 0,30 km rehabilitation of existing road in Gogosu commune (Burila Mica PV plant)
- For the construction of Facaeni WF Phase 1: 132 MW was necessary the rehabilitation with asphalt of 3.5 km of National Road DN3B in order to allow transportation of heavy equipment (wind turbines components) to the site during construction works.

The total investment in existing local roads (~4 km) for public use made in 2013 is: 287.26 k €.



#### III.4.4.2. Infrastructure investments in electric energy utility upgrades:

In 2013 for the connection of Facaeni WF and Bailesti and Burila Mica PV Plants to the distribution networks, EDP Romania has made following investments:

		2013			_	T
Electric energy utility	Facaeni	Bail	esti PV	Burila Mica PV		
updates	U.M.	€K	U.M.	€K	U.M.	€K
Construction of new 400 kV HVL	17km	2,846	-	-	-	-
Construction of new 400 kV UHVL	3	1,868	-	-	-	-
Construction of new 110 kV HVL	9,4	2,005	-	-	-	-
Construction of new 20 kV HVL	-	-	-	-	-	-
Improvement of existing 110 kV HVL	-	-	-	-	-	-
Rehabilitation of existing 400 kV substations (1)	1 (Gura lalomitei)	3,300	-	-	-	-
Rehabilitation of existing 20 kV substations (1)	-	-	1	90,86	1	138,83
New built IN/OUT Substation	- -	-	-	-	-	-
Total:		10,019		90,86		138,83

The total investment for electric energy upgrades was 10,249 €K.

#### III.4.4.3. Taxes contribution:

By taking into consideration the Beneficiary of paid taxes we can see main 3 categories:

- a) Taxes paid to local councils (communes where wind farms/photovoltaic plants are being developed)
  - Land tax
  - Wind Farm tax (for every operational investment a tax is being paid annually)

These 2 taxes are paid to the Local Council of the communes where the plants are located. These taxes are representing a contribution that EDPR is having to increasing local budget of local communities where WFs were developed.

An increased local budget represent increased facilities for local population like: infrastructure updates, new social and educational programmes etc.

b) Other land Taxes paid to OCPI, ANIF, ANCPI – for changing the land category use (from agricultural to construction use), for cadastral maps, etc.

ANIF – National Authority for Land Reclamation, OCPI – National Office for Cadastrial and Land Booking and Department for Agricultural Development), ANCPI – National Authority of Cadastral Plans

In 2013 EDPR made following	payments.	. Please see	table below:
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TAXES PAID TO LOCAL AUTHORITIES IN 2013				
PROJECT		Land	Wind farm / PV	OCPI, ANIF, ANCPI
Cernavoda		15.50	407.02	0
Pestera		5.89	234.90	0
Vutcani		4.10	87.75	0
Sarichioi		2.33	66.86	0
Cobadin		3.38	58.60	0
Albesti		0.53	57.81	0
Facaeni		11.53	-	92
	SUBTOTAL WIND	43.26	912.94	92
Cujmir		0	15.54	0
Grojdibodu		0	38.77	0
Dabuleni		0	0.02	0
Vanju Mare		0	25.65	0
Bailesti		0	11.03	0
Burila Mica		0	13.55	0
	SUBTOTAL SOLAR	0	104.56	0
	TOTAL €K	43	1,017	92

- c) Taxes paid to County Councils (the county where the plant is situated)
  - 1% of the total construction value is paid to the authority who issued the building permit.
- d) Taxes paid to other public institutions represented by one County Office

 Taxes paid to ISC- State Inspectorate in Construction (representing 0,8% of total construction value)

The following table is showing the taxes paid in 2013 for the projects constructed last year in Romania:

PROJECT	TAXES PAID TO LOCAL AUTHORITIES	
	Local Councils €K	Inspectorate in construction €K
Facaeni WF	565	52
SUBTOTAL WIND	565	52
Cujmir Photovoltaic Plant	55	5
Dabuleni Photovoltaic Plant	35	4
Grojdibodu Photovoltaic Plant	41	33
Vanju Mare Photovoltaic Plant	43	4
Bailesti Photovoltaic Plant	20	2
Burila Mica Photovoltaic Plant	35	4
SUBTOTAL SOLAR	229	52
TOTAL €K	794	104

## III.4.4.4. Education and public awareness activities with regard to green energy for local communities:

The main objective of these activities was to improve the local community knowledge on green energy on EDPR operational wind farms.

During 2013 several visits to Pestera WFs were organized for children of public schools of Cernavoda, Pestera and Medgidia localities.

EDPR O&M personnel presented information regarding wind energy to 3 groups of children and teachers from 3 schools who visited the wind farm and electrical substation.



In order to sustain educational activities outside the school and public awareness, brochures and presentation materials were distributed to every visitor and to Local Councils of Pestera, Cernavoda, Mircea Voda, Saligny, Sarichioi, Vutcani, Albesti and Cobadin.

The amount spent in 2013 for presentation materials was 5 €k.

## "Green education" programme:

It is a program of school allowances for children that study in local areas where EDPR Romania is developing/constructing wind farms and whose families have not economical resources.

In 2013 EDPR Romania granted 18 school allowances to children from Vladeni, Facaeni, M. Koganiceanu, Albesti and Vutcani localities, areas where EDPR is developing WFs, 6 allowances for each of the following categories:

- 6 Compulsory Education a lump sum allowance of 500 € each
- 6 Secondary Education a lump sum allowance of 1.000 € each
- 6 University a lump sum allowance of 2.000 € each

The program budget was 27 €k.

#### III.4.4.5. Support to Local Councils for social, sports, sanitary or public utility activities:

During 2013, EDPR Romania contributed to local budget of the localities where is present in order to help local community in improving cultural, educational, sportive, sanitary and social services, or other services for community interest like Public illumination, etc.

Each Local Council has established which of the mentioned activities had priority for local community. The total contribution in 2013 was 29,7 €K.

#### III.4.4.6. Participation in local/ national fairs, conventions, social events

In November 2013 EDPR Romania representatives participated to Ialomita County Council Conference about Facăeni WF, an event organized between the 11-14 of November 2013. This forum has brought many quality debates and a very pleasant networking during the side events.

A quick review of the subjects of the conference is presented below:

- Facăeni WF construction had an important social contribution by creating more than 300 new jobs during 2013 period
- Direct support to local communities: rehabilitation of existing local infrastructures, social benefits for children, development of local economic sector during construction of Facaeni WF, compensations paid for affected crops to local landowners,
- Friendly environmental investments: insignificant environmental impact, environmental monitoring of construction works, CO2 saving due to electricity production from renewable energy (wind), monitoring programs for biodiversity inside designated protected areas performed during construction

A brochure was distributed to local authorities and press invited to this conference

#### III.4.4.7. Donation to "Save the Children" Association

Every year, including 2013, EDPR Romania is contribution to Save the Children Association with 10 €K.

Save the Children is the world's leading independent organization for children, very active in Romania in supporting medical care and education programme for children in need.

### III.5. Major challenges and issues for the Company

In 2013 Cobadin, Vutcani Extension (Albesti) WFs and 4 solar PV Plants were certified with Environmental Management System (EMS) ISO 14001:2004 by Lloyds Register.

Main challenges encountered in 2013 by EDP Renewables Romania are related to EMS implementation:

- One of the challenges was understanding the real meaning of EMS system: a tool for environmental management
- Understanding the importance of communication between all departments directly involved in the EMS (Operation& Maintenance, Engineering & Construction and Environment & Sustainability, Asset and project Managers) and all external stakeholders
- To apply all EMS requirements from the construction stage of new wind farms to be ready to be certified starting operation
- Setting a system dedicated to communication with external stakeholders, including complains
- Performing environmental analysis of projects in development or construction phase with regard to:
  - Assessment of environmental aspects
  - Compliance with legislative and other requirements
  - Setting objectives and targets for 2013
  - Resources (third party support, internal changes at the organization, trainings...)
  - Identification of NC (non-conformities), CA (corrective actions) and PA (prevention actions)
- Internal and external audits

## IV. Compliance with ESAP and EMMP - 2013 year

#### IV.1. Information on ESAP implementation – 2013 year

The actions set in ESAP are based on the findings of the environmental and social assessment for the project. This has been communicated to third parties and is the basis of the Lenders agreeing to finance the project. Table below presents implementation status of:

- ESAP Pestera and Cernavoda WFs issued in April 2010
- ESAP Sarichioi and Vutcani WFs issued in July 2012

- ESAP PV plants issued in November 2012
- Corporate ESAP wind farms projects issued in November 2012

As part of this ESDD Assessment, EDPR's recently agreed existing corporate Environmental and Social Action Plan (ESAP) has been evaluated and modifications have been added as necessary to include Project-specific requirements that are recommended to be implemented based on the findings of the audit and include the key mitigation measures that are listed above.

No.	Actions set in ESAP	Implementation during 2013	Further actions	
	Pestera and Cernavoda I-II Wind Farms: Sarichioi and Vutcani Wind Farms: PV Plants:			
1.	Implementation of the Environmental  Management and  Monitoring Plan ("EMMP")	An EMMP was implemented during construction/operation of 6 wind farms and 6 solar PV Plants	The actions foreseen in the EMMP for operational period will be further implemented in 2014.	
		Please see <b>Section IV.2</b> regarding the EMMP implementation and the measures developed in 2013.		
2.	2. The Company will appoint an independent ornithological expert to provide independent expert advice on ornithological aspects of the Project and develop criteria/thresholds for ordering shutdown. The IOE will be appointed by the Company on a 3 year basis.	Specialised companies were hired for biodiversity monitoring of Pestera, Cernavoda, Cobadin, Sarichioi, Vutcani	Monitoring activities will continue during 2014, except for:  - Pestera and Cernavoda WFs: 2013 was the third monitoring year for.	
		and Vutcani Extension (Albesti) WFs.  For Burila Mica PV Plant a monitoring has neeb started in September 2013 in order to comply with the measures forseen in the ESPA or PV Plants. This condition derives from the fact that this PV Plant is located within protected area boundaries.		
		The experts' team in charge comprises an ornithological expert, member of Romanian Ornithological Society.		
		The monitoring period was established to be continuous in order to cover all key periods, such as birds migration.		
3.	The Company will shut down wind turbines on the basis of written Notice to	During 2013 no written notices were received from IOR appointed for the 6 operational wind farms was received.	The IOR will continue its activity in 2014.	
	Close issued by the IOE.	The monitoring results didn't showed any negative impact.		
4.	Within 2 years of the operation of both farms, undertake a bird collision assessment, in line with recognized international best practice and based on a model as advised by the IOE, and discuss with key stakeholders, inclusive of SOR and regulators.	Collision Risk Analysis for Pestera and Cernavoda WFs based on Scottish National Heritage Model were developed showing data for years 2011, 2012 and 2013. The reports are published on company website.	In <b>2014</b> a Collision Risk Assessment will be done for Cobadin WF.	
5.	Undertake a health and safety risk assessment of all	Procedure OHSP-ROM/11 - Hazard Identification, Risk Assessment and		

No.	Actions set in ESAP	Implementation during 2013	Further actions
	staff job functions and activities, and implement health and safety action plan covering control measures and work instructions as required.	Determining of Controls within the OHS Management System is implemented. Actions identified as during this process as needed to control the hazards are included in the OH&S Management Programme.	
6.	Develop labour and social policies and incorporate into contractual arrangements with employees and contractors – to include terms of employment, skills, dismissal, discrimination, harassment, violations, human rights, forced and child labour, wages and social leave/benefits, health & safety and bribery and corruption.	All these aspects are covered by Internal Regulation Document, Employment contract and Employee Handbook.	-
	Corporate Project Management, Environmental, Health and Safety management:		
1.1	Development and implementation of a corporate Stakeholder Engagement Plan (SEP) in line with EBRD and IFC PR 10 and PS 8 at corporate level	Please see <b>Section IV.4</b> regarding the SEP implementation and the measures developed during 2013.	The actions foreseen in SEP related to operational period of the wind farms will be further implemented in 2014.
1.2	Maintain a corporate Environmental Manager for EDP Romania	The Environmental Manager for EDPR Romania supervised the monitoring programmes, the key environmental indicators reporting every 3 months though an internal tool SIS (Sustainability Information System), the reporting to EPA according with conditions set in the environmental authorisations and legislation in force.	The Environmental Manager and OH&S Manager for EDPR Romania will continue to develop these activities in 2014.
		In 2013 EMS ISO 14001 was implemented and certified to all 6 operational wind farms and 4 operational PV Plants.  OH&S Manager employed with EDP	
		Renewables Romania since August 2012	
1.3	Develop and implement an Environmental, Health and Safety Management System (e.g.,Implement EDP Corporate EHS Management System standards) prior to commencement of operations.  EHS Management system	Part of the implemented Environmental Management System EMS ISO 14001 EDPR are the following procedures:  - EMS-EU_GP 00001 Identification and assessment of environmental aspects_v00  - EMS-EU_GP 00004 Competence, training and awareness_v00  - EMS-EU_GP 00007 Operational control, monitoring and measurement_v00	In 2014 EDPR Romania intends to with SR OHSAS 18001:2008 and ISO 14001 Facaeni WF, Bailesti PV and Burila Mica PV.
	certification by 2012 (voluntary).	<ul> <li>EMS-EU_GP 00008 Emergency preparedness and response_v00</li> </ul>	

No.	Actions set in ESAP	Implementation during 2013	Further actions
		<ul> <li>EMS-EU_GP 00009 Non- conformities, corrective actions and preventive actions_v00</li> </ul>	
		Part of these procedures is to communicate and obtain agreement from all companies hired in operational activities to comply with EDPR norms and regulations, besides the legislative ones.	
		The implementation of the OH&S Management System started in second quarter of 2013 with the target of having certified 378 MW. The certification audit took place in November (phase 1 audit) and December (phase 2 audit) 2013, after which LRQA granted the certification of the management system. The inclusion in the OHSAS 18001 certificate of the new facilities expected with the most recent surveillance audit.	
1.4	Require contractors to comply with all national environmental and health and safety laws, EBRD and IFC PRs and PSs as well as with any provisions of the EIAs, EMMP, construction consents and other relevant permits.  Ensure contractors and staff have:  1. An emergency procedure developed.  2. Implemented HSE training of staff.  3. Access to personal protective equipment and	All contract signed with contractors hired in the construction and operation have stipulated the obligation of complying with all national environmental, healthy and safety laws in force. In addition to this, the requirements stated in all permits are part of the signed contracts.  In order for EDP Renewables Romania to assure the implementation of Health and Safety laws, it was foreseen to hire a Health and Safety Coordinator during the construction works. His task was to cheek and require to all contractors and subcontractors involved in the construction works to comply with the legislative constrains in force.  All contractors involved in construction and operation have implemented H&S Plans that were previously approved by	-
	use such equipment.	EDPR Romania.  All contractors submit on monthly basis data regarding their H&S performance: man-hours, number of workers performing tasks in EDPR facilities, incident/accidents. As according to procedure OHSP-ROM/06 - OHS Contractor Requirements, contractors submit to EDPR proof of training of their workers with risk assessment, specific instructions, emergency response, content of MSDSs of the chemicals used; also part of the information submitted by contractors to EDPR it is represented by the documents to demonstrate the	

No.	Actions set in ESAP	Implementation during 2013	Further actions
		contractors' workers performing tasks in our facilities have appropriate competence and they are fit for the job.	
		For all new construction sites, project manager, as per requirements of GD 300/2006 regarding minimum health and safety requirements for construction sites, assigned a competent person as OH&S Coordinator whose role was to deliver and give support in implementation of the Site OH&S Management Plan, harmonise the H&S Plans of contractors with Site OH&S Management Plan and to ensure the provision of the later and legal requirements are met on the sites.	
		As for the sites in operation, the requirements to comply with relevant legislation in the matter of health, safety and emergency response are clearly stated in contracts and Works Agreements. The works Agreements set clearly states the exact legal acts required to be complied with by contractors during the course of the contract performance.	
1.5	Adopt pre-acquisition EHS due diligence procedures and for new (including Greenfield) projects.	A due diligence was conducted for the PV projects constructed in 2012/2013 by external companies (KPMG,WSP Group, Garrat Hassan).	All measures implemented in first operational year of Pestera and Cernavoda I-II will be further implemented to new operational facilities in 2014.
		As established for Pestera and Cernavoda I-II WFs, the EHS procedures were implemented during construction works of Facaeni Wf and 6 PV Plants:	
		-Construction Environmental Management Plan was elaborated and sent to all constructors involved.	
		-Monitoring of avifauna and reporting to competent EPA during construction works of new projects was performed in Facaeni WF.	
		-Every contract signed with external companies have provisions regarding EDPR procedures, compliance with legislative EHS framework in force.	
1.6	Make general environmental information on project and the company publicly available.	As part of the procedure developed for obtaining the Environmental Authorisations, it was mandatory by the legislation in force to make public announcements regarding all prepared documentation. The documentation was showing the environmental information during the construction period and planed measures for the operational period.	This annual monitoring report will be published on our company website.  www.edpr.com/suatain ability

No.	Actions set in ESAP	Implementation during 2013	Further actions
Г		Biodiversity monitoring reports and noise measurements were made publicly by submission to Local EPAs. Interested public can consult these reports at EPA headquarters and EDPR website.	
		Furthermore for the 6 solar PV Plant a panel with general environmental information is placed at the entrance in the PV Plant.	
1. 7	Develop and implement an occupational health and safety (OHS) plan to guide all activities on project sites during site preparation, construction, and operation. Also require contractor plan/compliance. Requirements to include (but not be limited to):	Site OH&S Coordinators developed the Site OH&S Management Plans for each of the construction sites. Each Contractor developed their own OH&S Plan that, with the support of OH&S Coordinator, is in line with the provision of the Site's OH&S Management Plan.	1
	- Allocation of responsibilities among EDPR, EPC contractor(s), subcontractors.		
	- Job- and task-specific hazard analysis and controls for all activities		
	- Provision of PPE, requirements for use of PPE, and enforcement of PPE use		
	- Safety training for all personnel in their language, covering hazards and safety protocols of their jobs		
	- Review and approval of contractors' OHS plans, which must meet same standards as EDPR plan		
	- Oversight of contractor OHS implementation, including mandatory reporting		
	- Recording incident statistics, including total work hours, lost time incidents, major injuries/fatalities, etc.		
	New projects:		
II. 1	Commission external Environmental and Social Due Diligence Assessments according to implemented	External comnies were hired to conduct/certify or monitor the implementation EMS and OH&S system for the 6 operational WFs and 4	In 2014 2 operational PV plants (Bailesti and Burila Mica) and Facaeni WF will be subject of EMS

No.	Actions set in ESAP	Implementation during 2013	Further actions
	EHS due diligence procedures.	operational PV Plants.	14001 and OH&S management system certification.
II. 2	Undertake initial ornithological and baseline environmental screening of projects during initial wind survey assessments.  Avoid environmentally sensitive areas, such as designated Natura 2000 areas under the EU Birds Directive.	For projects constructed in 2013: Facaeni WF and 6 solar PV Plants, EIA procedures were followed prior to construction. Part of this study was to undertake a biodiversity survey.  Selection of sites for the new projects was done considering avoidance of Natura 2000 sites.  All conditions imposed by Local EPAs in the environmental agreements were fully complied.	-
II. 3	Complete detailed stakeholder mapping for each project.	Meetings with SOR and Eco_Pontica NGO were held regarding Sarichioi WF. Having in view all their recommendations and Tulcea EPA point of view an Avifauna Monitoring Plan was established and agreed for the first 5 operational years of Sarichioi WF. During DD of PV Plants local authorities were consulted and a SEP was issued.	-
II. 4	Develop EIAs for new wind farms according with relevant national, EU and international guidelines.	EIA Romanian legislation in force is 100% aligned with EIA EU Directives. EIA procedures for obtaining environmental agreements for new projects were mandatory.  EIA procedure was followed in	-
		2012/2013 for Facaeni WF and 6 PV Plants: Cujmir, Grojdibodu, Vanju Mare, Dabuleni, Bailesti and Burila Mica.	
		A due diligence for the solar PV Projects was conducted in 2012, according with EBRD requirements.	
II. 5	Assess cumulative impacts with other wind farms or developments in the projects area of influence as defined in IFC and EBRD PS and PR.	In the avifauna monitoring campaign that will be conducted during operational years, cumulative impact with other wind farms will be assessed.	-
II. 6	Prepare and disclose Non Technical Summaries (NTS) of the EIAs	A NTS was elaborated for each project during EIA procedure followed for obtaining the environmental agreement.	-

No.	Actions set in ESAP	Implementation during 2013	Further actions
II. 7	Include EHS management requirements in contracts, including for EPC contractors	As established for Pestera and Cernavoda I-II WFs, the EHS procedures were implemented during construction works of all wind and PV plants.	These measures will be implemented to further developed projects.
		All contract have clauses regarding the obligation of the contractor to observe and comply with all applicable H&S legal requirements. All contractors received a copy of the Safety Policy of EDP Group.	
II. 8	Prepare and implement internal and external Emergency Plans,	Was implemented for Sarichioi and Vutcani WFs as a requirement of EMS ISO 14001 system, as soon as the WFs become operational.	-
	and Occupational Health and Safety Plans for construction.	Fire fighting Plans were delivered and submitted to local Emergency Services for approval. Based on these plans, each of the local emergency services will update their own fire fighting strategies taking into consideration the facilities described into the fire fighting plans, distance and itinerary to facilities. The fire fighting plans are subject to tests in the periodical fire fighting drills.	
III. 1	Provide annual reports on the Environmental, Social, Health and Safety (ESHS) to the	An Annual Report was prepared in January 2014 and published on company website.  www.edpr.com/suatainability	This Annual Environmental Report for 2013 will be published on our company website.
	ebround if and other shareholders.  A general summary of environmental and social issues to be provided on the web site.		www.edpr.com/suatain ability
III. 2	Set up and operate grievance forums: information offices, hot lines, etc. to enable	The access of public during the construction works of Facaeni WF and 6 solar PVs was allowed on site by designated EDPR personnel.	-
	meaningful public consultation and information process	EDPR Romania had conducted several visits of local inhabitants and students to wind farms under operation with the aim of sustaining local social and educational activities.	
		Grievance mechanism included in Internal Regulation Document and Code of Ethics.	

#### IV.2. Information on EMMP implementation – 2013 year

EMMP contains a set of mitigation and enhancement measures that EDP Renewables Romania will implement during various stages within the lifetime of the 4 operational wind farms, considered as Chategry A by Lenders. The EMMP focuses on avoiding environmental and social impacts and where this is not possible appropriate mitigation measures are identified to minimize or reduce potential impacts to acceptable levels.

This chapter presents information for EMMP issued in April 2010 that contains measures for all projects regardless the stage: development/construction or operation. The measures set for Pestera and Cernavoda WFs were implemented in Sarcihioi, Vutcani, Cobadin and Vutcani extension projects.

For the solar PV plants during the due diligence conducted in 2012, the ESAP issued does not contain the obligation of EMMP issuance. The actions to be complied are set in ESAP.

#### 2013 implementation status of EMMP is presented below:

a) Actions required to achieve compliance with National Romanian Environmental, Health and Safety legal requirements and EU environmental standards:

N 0.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
1. 1	Undertake site specific bird and bat surveys during and after construction	IFC Performance Standard  EBRD PR 6  Requirement of Environmental Agreement (including environmental monitoring programme)	Specialised companies were hired for biodiversity monitoring of Pestera, Cernavoda, Cobadin, Sarichioi, Vutcani and Vutcani Extension (Albesti) WFs.  For Burila Mica PV Plant a monitoring has neeb started in September 2013 in order to comply with the measures forseen in the ESPA or PV Plants. This condition derives from the fact that this PV Plant is located within protected area boundaries.  The scope of monitoring was to assess the impact of construction works and operation activities on birds and bats and to identify the measures for improvements.  For birds monitoring a video surveillance system was installed in each operational wind farm. The data are recorded on external hard-disk.	Monitoring activities will continue during 2014, except for Pestera and Cernavoda WFs: 2013 was the third monitoring year for.

N 0.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
1. 2	Establish a protocol / approach for monitoring of ecological impacts during construction and operation	IFC Performance Standard  EBRD PR 6  Requirement of Environmental Agreement (including environmental monitoring programme)	Monitoring of construction works with propose of minimizing the environmental impact and compliance with the conditions set in the Environmental Agreements was undertaken during construction period of Facaeni WF and 6 solar PV Plants, by an independent company. Be-weekly reports were sent to EDPR and to all main contractors.	-
	Undertake monitoring of effectiveness of ecological offsetting measures (these may include financial contributions towards long-term ecological management of a protected area, funding initiatives to enhance ecological awareness, funding research into the ecological impacts of wind farms)— if applicable, depended on the results of ecological monitoring (see 1.1 above)	IFC Performance Standard EBRD PR 6  Requirement of Environmental Agreement (including environmental monitoring programme)	Not applicable. The results of undertaken avifauna monitoring during construction works didn't show any adverse impacts that needed further studies.	-
1. 4	Undertake noise monitoring at the site perimeter during operation	Best practice Government Decision no. 321/2005 (requirement of Environmental Permit)	It was mandatory to conduct noise measurements near residential areas in order to comply with Environmental Authorisations and to verify compliance with Romanian Standard 10009/1988.  Following activities were conducted in 2013 in order to elaborate a Noise Measurements Report for all 6 operational WFs and	Same actions are foreseen in the environment al authorisations for all operational years.

N o.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
			6 operational PV plants.  a) Elaboration of Noise Maps for 6 operational wind farms; the 6 PV plants did not required this measure. b) Determination of optimal measurement points for noise assessment on site c) Site visits d) Noise measurements on the points identified by laboratory analysis e) Data assessment of measured noise levels in an Certified Laboratory RENAR f) Elaboration of noise bulletins g) Elaboration of final noise assessment report and submission to Constanta EPA.	
			According with measurements done, the provisions of STAS 1009/1988 are fulfilled. Near the residential areas the maximum allowable limit of 45 dB was not exceeded.	
1. 5	Develop a Construction Waste Management Plan	Romanian Legislation EU directives	A Construction Environmental Management Plan ( <b>CEMP</b> ) was developed and distributed for implementation to all constructors hired for the Facaeni WF and 6 solar PV Plants construction in 2013.  CEMP is containing specific	-
			measures for the management and reporting of produced waste management (construction waste, domestic type waste, recyclables, hazardous waste). CEMO was distributed to all main contractors involved in the construction process.	
1. 6	Implement the construction waste management plan and maintain records for annual environmental audits	Romanian Legislation and EU Directives Environmental Permit	In September 2013 an external environmental audit was conducted by Lloyds Register Company.  According with GD 856/2002 non-hazardous and hazardous waste quantities produced in 2013 were	An annual environment al audit will be conducted by an external company for

N o.		Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
			reported in January 2014 at: - Constanta EPA for both Pestera and Cernavoda I-II WFs.	all operational wind farms.
			<ul><li>Tulcea EPA for both Sarichioi WF.</li><li>Vaslui EPA for Vutcani WF and Vutcani extension WF.</li></ul>	Waste reporting to EPA is mandatory
			- Mehedinti EPA for Burila Mica, Vanju Mare and Cujmir PV Plants	every year as required by
			- Olt EPA for Grojdibodu PV plant	Romanian legislation in
			- Dolj EPA for Bailesti and Dabuleni PV Plants	force.
	Continue the Ecological monitoring during the entire construction works and for at least one year following commissioning to provide a more complete baseline of the sites conditions and to verify the conclusions of the EIA Reports	Environmental agreement	See point I.1.	The monitoring will continue in 2014.
1. 8	monitor implementation of Contractors'	Romanian Legislation (e.g. Law 319/2006 on Health and Safety at Work) and EU Directives EBRD PR2	contractors' activity is periodically	In 2014 EDP Romania intends to certify new operational wind farms and PV Plants with SR OHSAS 18001:2008.

N o.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
	adoption of safe working practices and use of personal protective equipment where required.		Main contractors have the obligation by contract to comply with national legislation and EDPR internal procedures regarding safety and welfare facilities for workers involved in the construction processes (in 2013 6 solar PV and Facaeni WF were in construction	
I. 9	Monitor provision of temporary accommodation for construction workers to ensure it complies with the requirements of EBRD PR2 and legal requirements.	Romanian Legislation (e.g. Law 319/2006 on Health and Safety at Work) and EU Directives EBRD PR2 Environmental Permit	In addition, EDPR had closed technical assistance contracts and hired OH&S Site Coordinators for each facility under construction that supervised and managed site activities with respect to OH&S. The OH&S Site Coordinators delivered and monitored the implementation of the Site OH&S Management Plans that include, as per legal requirements, temporary accommodation facilities. The OH&S Site Coordinator reported to EDPR Project Manager and kept direct contact with EDPR OH&S Manager.	

#### b) Procedures for environmental and social assessment of the wind farms in line with best international practice

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
2.1	Provide information on public access	Best practice	The access of public during the construction works was allowed with the acceptance of main constructor or EDPR representative on site. Personnel was available at site organisation office.  During operation EDP Romania allow visits of children from local community in order to support educational activities regarding renewable energies.  No complains were registered related to access.	In 2014 EDP Romania will continue supporting social and educational activities for local inhabitants and interested public.

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
2.2	Undertake vocational education / training where practicable during construction	Best practice	30% of hired personnel by contracted companies is from local communities.  For all 6 operational wind farms and 6 operational PV Plants Local Companies (Elcomex, General Electric, Pet Communications, Efacec) were contracted for substations operations. Other local companies were contracted for services: waste and wastewater management, security, snow removal services, maintenance, etc.	Same services will be subcontracted in 2014.
2.3	Undertake preparation and implementation of a Construction Environmental Management Plan	Best practice Would provide a mechanism to assist in implementation of conditions of the Environmental Permit	A Construction Environmental Management Plan (CEMP) was developed and distributed for implementation to all constructors hired for Facaeni WF and 6 solar PV Plants construction in 2013.	-

- c) Actions required to contain/remediate past environmental damage and assessment of costs and/or further investigations;
  Not applicable.
- d) Actions to improve environmental, social and health and safety management, monitoring and performance of the wind farms in accordance with good international industry practice.

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
4.1	Implement a management system to address the environmental and health and safety issues related to the Project. Integrate the management systems with the rest of the EDP Group.	Best practice	In December 2013 Cobadin, Vutcani extension WFs and 4 solar PV Plants: Cujmir, Vanju Mare, Grojdibodu and Dabuleni were certified by Lloyds with environmental management system ISO 14001, contributing in this way to compliance with this action.  OHSP-ROM/11 - Hazard Identification, Risk Assessment and Determining of Controls procedure part of the OH&S Management System (certified in December 2013) establishes EDPR's methodology on OH&S risk	Annual EMS audits performed by Lloyds.  EMS 14001 and OH&S Management System (according to OHSAS 18001:2007) will be implemented and certified

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
			identification, evaluation and control.	in 2014 for Facaeni and solar Bailesti & Burila Mica PV Plants.
4.2	Develop a corporate annual EHS report and disclose on the internet. Disclose information to the Lenders to show compliance with the EMMP and current status of EHS issues	EBRD PR10	A Corporate Annual report for 2013 is issued every year by EDPR Group, available at: <a href="http://www.edpr.com/sustainability/documents-library-and-publications/">http://www.edpr.com/sustainability/documents-library-and-publications/</a>	-
4.3		Best practice EBRD PR 1	An EMS Responsible in EDPR Romania was assigned since 2011 and since 2012 a H%S Manager.  All requirements of EBRD PR 1 are part of the implemented EMS System.	-
4.4	Undertake further consultation with local community during construction and operation	Principle 6 of the Equator Principles and IFC Standard / EBRD PR1 European Best Practice Guidelines for Wind Energy Development	During 2013 several visits to Pestera and Cernavoda I-II WFs were organised for children of public schools of Pestera, Mircea Voda, Saligny and Constanta localities.  EDPR O&M personnel presented information regarding wind energy to groups of children and teachers who visited the wind farms and electrical substations.  In order to sustain educational activities outside the school and public awareness, brochures and presentation materials were distributed to every visitor and to Local Councils of Pestera, Cernavoda, Cobadin, Mircea Voda, Saligny, Sarichioi and Vutcani.  During 2013, EDPR Romania contributed to local budget of the localities where is present (Pestera, Saligny, Mircea Voda, Sarichioi, Mihail Kogalniceanu, Vutcani, Albesti, Facaeni) in order to help local	-
			community in improving cultural, educational, sportive, sanitary and social services, or other services for community interest like Public	

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
			illumination, etc.	
4.5	Implement SEP that includes annual social and environmental reporting during construction and operation of the Project.	Best practice EBRD PR10	See Section III.4. Information on SEP implementation.	-
4.6	Creation of a stakeholder register and register of external communications (including with the public and regulatory authorities)	Best practice EBRD PR10	Part of the Environmental Management System EMS ISO 14001 EDPR implemented following procedures:  • EMS-EU_GP 00005 Communication_v00 with the scope to establish the ways for internal and external communication relating to environmental aspects and the EMS • EMS-EU_GP 00006 Control of documents and records_v00 defines the process followed by EDPR EU to develop, approve, review, distribute, archive and manage documents and records arising from the EMS	Mentioned procedures will be followed in 2014.
4.7	Implement and publicise EDPR's grievance management system in accordance with EBRD PR10	Best practice EBRD PR10	The forms were available at site construction and on: <a href="http://www.edpr.com/sustainability/documents-library-and-publications/">http://www.edpr.com/sustainability/documents-library-and-publications/</a>	-
4.8	Undertake a regular environmental audit (every year) of the wind farm	Best practice	An EMS audit performed by Lloyds Register was conducted in September 2013. As a result the wind farms were certified with EMS ISO 14001.	
4.9	Monitor subcontractors' compliance with EDPR and EBRD health and safety policies and procedures  Creation of a register of near-misses and	Best practice EBRD PR2	Task undertaken by H&S Coordinator hired by EDPR Romania during construction works All contractors hired in operation and maintenance activities have implemented H&S Plans that were previously approved by EDPR Romania and have designated a H&S responsible.	-

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2013	Further actions
	accidents (including by subcontractors)		A Grievance Mechanism Register and a Work Accident Record was distributed to all contractors and subcontractor for implementation.	
			All facilities were subject to safety inspections and safety audits that covered legal and other requirements.	
4.10	Monitor the removal temporary construction access roads, construction compounds and other areas following completion of construction and their restoration to encourage revegetation over time	Best practice EBRD PR6	The restoration of sites and revegetation of the land affected during 2013 construction activities (Facaeni WF and 6 solar PV Plants) was monitored within the Construction Monitoring program.  Please see description of Environmental Construction Monitoring campaigns.	-

#### **Environmental Construction Monitoring (ECM) and CEMP:**

The purpose of the **Environmental Construction Monitoring** performed in 2013 with the means of external companies was to assure compliance with environmental laws and regulations in force and EDPR procedures.

These monitoring campaigns for each of EDPR wind farms focused on the provisions of **EAs** (Environmental Agreement) and **EMMPs** (Environmental Management and Monitoring Management Plan). Moreover, the monitoring aimed to assess onsite environmental situation.

Compliance with the conditions set in the EAs was essential in the process of obtaining the Environmental Authorisations, needed for operation.

The **EMMPs**-Environmental Management and Monitoring Plan foresee the following actions:

- establish a protocol for monitoring of ecological impacts during construction and operation
- develop a construction waste management plan identifying methods to reduce waste generation and reuse and recycle wastes in preference to disposal
- implementing the construction waste management plan and maintain records for annual environmental audits
- Monitor the removal temporary construction access roads, construction compounds and other areas following completion of construction and their restoration to encourage re-vegetation over time

#### Applied methodology for ECM:

The methodology applied for Environmental Construction consisted in the activities listed in the table below. In addition, the table is containing the actions undertaken in order to fulfil with each proposed activity.

No.	Activities	Actions
1.	Defining the framework  - Identification of all relevant aspects in order to reach the proposed objectives	<ul> <li>Meetings with all involved Constructors and Subconstructors</li> <li>Defining the necessary information for EMC and identification of data suppliers</li> <li>Elaboration of initial report for each wind farm showing the methodology propose for EMC</li> </ul>
2.	Data collection	<ul> <li>Assessment of construction works</li> <li>Study of all relevant documents: technical projects, EMMP, EIA, etc.</li> </ul>
3.	Monitoring activities	In order to monitor how the construction works are respecting with all requirements of permits and plans, site visits were undertaken weekly. During site visits following aspects were assessed:
		<ul> <li>Place for storing the construction materials and hazardous materials;</li> <li>Waste collection and storage generated during construction;</li> <li>Site organisation;</li> <li>Signalling of construction activities;</li> <li>Checking the compliance of traffic program;</li> <li>Methodology of removal, storage and transport of vegetal soil layer;</li> <li>Methodology of storage and transport of soil resulted from excavation</li> </ul>
4.	Compliance with the provisions of EMMP	<ul> <li>Elaboration of Waste Management Plan</li> <li>Elaboration of Construction Environmental Management Plan</li> </ul>

A copy of CEMP for all EDPR Romania Wind Farms can be found at:

http://www.edpr.com/sustainability/documents-library-and-publications/

During 2012 and 2013 6 PV plants were constructed: **Cujmir, Dabuleni, Grojdibodu, Vanju Mare, Bailesti and Burila Mica**. The photovoltaic panels for each park were delivered by Suntech Power Holdings Co. The connection works in the CEZ Distribution company were executed by Elteco SRL.

All contractors are informed about **EDPR EHSS requirements** during the tender process and their past environmental, health and safety performance is considered during evaluation of bids. A Construction Environmental Management Plan (EMP) and Waste Management Procedure specific to construction of the PV Plants are delivered to all contractors. All contractors are required to inform their subcontractors and personnel of EDPR's EHSS requirements as part of the terms and conditions of their turn-key contracts.

In line with ISO 14001 and ESAP requirements EDPR carry out environmental monitoring of contractor performance to ensure compliance with applicable legislation.

In addition, compliance with national legislation is also carried out by a local institution, **Environmental Guard.** If non-compliances are identified, penalties can be enforced. It was reported that no penalties have been enforced.

#### IV.3. Information on SEP implementation – 2013 year

The key objective of **SEP** is to inform identified stakeholders regarding the potential impacts of the projects.

A formalized Grievance Mechanism has been developed and implemented by the company to cover:

- construction period of Facaeni WF
- construction and operational period of 6 solar PV Plants
- operational period of: Pestera, Cernavoda, Sarichioi, Vutcani, Cobadin and Vutcani Extension (Albesti) WFs

Beside the grievance mechanism, as part of H&S requirements of Governmental decision 1425/2006, a Record of Work Accidents was distributed to all our contractors and subcontractors in 2013. The engagement of implementing these two mechanisms was decided by minutes signed by each contractor and EDPR Romania. The H&S Coordinator of EDPR Romania checked the implementation of this mechanism.

#### The Types of Information to be disclosed:

Part of the Environmental Management System EMS ISO 14001, EDPR Romania implemented in 2013 following procedures:

- EMS-EU\_GP 00005 Communication\_v00 with the scope to establish the ways for internal and external communication relating to environmental aspects and the EMS
- EMS-EU\_GP 00006 Control of documents and records\_v00 defines the process followed by EDPR EU to develop, approve, review, distribute, archive and manage documents and records arising from the EMS

The objectives of external communications are to provide continuous engagement with targeted audiences to inform about the company activities, including company performance, company development and investment plans and their implementation.

The **methods of communication** used by EDPR are summarised in the following:

- Publication for public review of the Stakeholder Engagement Plan, Nontechnical Summary and Environmental and Social Action Plan;
- Meetings with regulatory bodies;
- Public meetings;
- Announcements in local media;
- Provision of general information on notice-boards at key public locations;
   and

Publication of project information on the company website http://www.edpr.com/sustainability/documents-library-and-publications/

#### Actions set in SEP and implemented during 2013:

No.	Actions set in SEP	Type of information disclosed	Forms of communications	Stakeholder Groups informed
1.	Publication of ESIA Disclosure Package for Sarichioi and Vutcani WFs.	<ul> <li>Stakeholder Engagement Plan,</li> <li>Non- Technical Summary,</li> <li>full ESIA documentation and</li> <li>Environmental and Social Action Plan</li> </ul>	Disclosure: March 2012 Internet: - Company website and Emails Local newspapers:  http://www.curierulnation al.ro/Economie/2012-12-13/BERD+finanteaza+cu+50+mil.+euro+doua+parc uri+eoliene+	-Tulcea and Vaslui EPAs  -Vutcani, Sarichioi and M, Kogalniceanu LCs  -SOR Romanian Ornithology Society  - biodiversity Department of Ministry of Environment
2	Publication of ESIA Disclosure Package for EDPR Solar	- SEP-Stakeholder Engagement Plan, - ESAP Environmental and Social Action –Plan - ESDD Report	http://www.ebrd.com/p ages/project/psd/2012/lo cal_translations/44428.pd f http://www.ebrd.com/p ages/project/psd/2012/4 4428.shtml	-Mehedinti, Olt and Dolj EPAs  -Cujmir, Burila Mica, Vanju Mare, Bailesti, Dabuleni, Grojdobodu localities  -SOR Romanian Ornithology Society  - biodiversity Department of Ministry of Environment
3	Funding approval for the development of the Sarichioi and Vutcani Wind farms.	When funding has been arranged, an announcement of full decision to develop the plant and the coverage of the implications (social / employment / EIA etc) will be confirmed to stakeholders.	http://www.ebrd.com/p ages/project/eia/43647.s html http://www.constructiibur sa.ro/berd-finanteaza- parcurile-eoliene-de-la- vutcani-si-sarichioi- 18291&s=investitii&articol =18291&editie_preceden ta=2012-12-14.html	All interested Stakeholders
4	Funding approval for the 6 solar PV Plants.		http://www.energyworld. ro/2014/03/28/edp- renovaveis-investeste-20- mil-euro-intr-un-proiect- de-energie-solara-in- romania/ http://business- review.eu/featured/edp-	All interested Stakeholders

No.	Actions set in SEP	Type of information disclosed	Forms of communications	Stakeholder Groups informed
			renovaveis-secures-eur- 30-mln-of-financing-for- six-solar-farms-in- romania/	
5.	Announcem ent of construction programme to local residents	Details of propose construction programme including proposed work on local roads and transportation programme for major components (road closures).	<ul> <li>Announcements at Headquarters of Facaeni, Vladeni Local Councils</li> <li>Information Panel containing construction, duration, contractors was /is available at access road in WF construction works site and on 6 solar PV Plants</li> </ul>	Local residents
6.	Announcem ent of the Cobadin and Vutcani Extension Wind Farm commissionin g and start-up	Formal notification of operation of the wind farm.	http://www.zf.ro/compan ii/edp-renovaveis-a-mai- terminat-un-parc-eolian- de-peste-100-mil-euro- padurea-de-turbine-a- portughezilor-numara- acum-76-de-moristi- 8862720 https://ro.stiri.yahoo.com /primul-proiect-energie- solar-finan-berd-n-rom-	All interested Stakeholders
7.	Announcem ents on maintenance activities which may impact on local residents	Information regarding the project (construction and operation), assessed environmental impact	Public announcements of the request for environmental authorisations in local newspapers for:  - Vutcani extension WF  - 6 solar PV	All interested Stakeholders
8.	Employees	Internal meetings, employees and managers.	Monthly coordination Meetings with all departments involved: Engineering, Environment & Sustainability, Operation& Maintenance, Assets and Projects Managers.	Internal meetings, employees and managers.  As part of the OH&S Management System implementation, safety commission took place as according to provision of the OH&S Management System

# V. Compliance with IFC Performance Standards on Social and Environmental Sustainability and applicable EU and Romanian Laws

#### V.1 PS1. Social and Environment Assessment and Management System

## PS1 (i) Please provide an updated summary description of the EHS Management System of the Company:

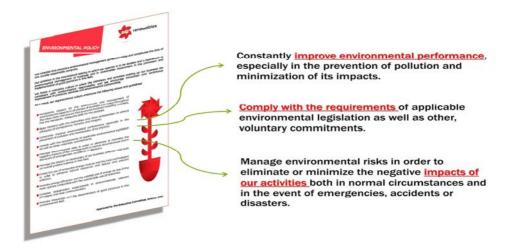
EDPR has implemented an **Environmental Management System (EMS) based on ISO 14001:2004** for the operation and maintenance of their operational wind farms (Pestera (certified in 2011), Cernavoda (certified in 2011), Sarichioi and Vutcani (certified in 2012), Cobadin WF, Cujmir PV, Vanju Mare PV, Grojdibodu PV and Dabuleni PV (certified in 2013).

For 2014 the intention is to implement EMS ISO 14001 in Bailesti PV, Burila Mica PV and Facaeni WF. Completion of this is added to the ESAP as specific measure to be implemented during 2014. A list of all procedures is contained in the EMS Manual; these will be followed at all stages of the projects.

#### **Environmental Policy:**

Environmental Policy was approved in January 2011 by EDPR Executive Committee for all countries were EDPR wind farms are present, including in Romania. Environmental Policy was sent to all identified stakeholders for Pestera and Cernavoda WFs.

- EDPR EU's top management has defined the Environmental Policy and ensures that, within the defined scope of the EMS:
- It's appropriate to the nature, scale and environmental impacts of its activities, products and services;
- It includes a commitment to continual improvement and prevention of pollution;
- It includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects;
- It provides the framework for setting and reviewing environmental objectives and targets;
- It's documented, implemented and maintained;
- It's communicated to all persons working for or on behalf of the organization; and
- It's available to the public.



#### Organisational Chart and Reporting Lines:

The EDPR EMS organisational chart is presented below. For Romania it was appointed an EMS Manager, responsible for the implementation of the system to the operational wind farms.

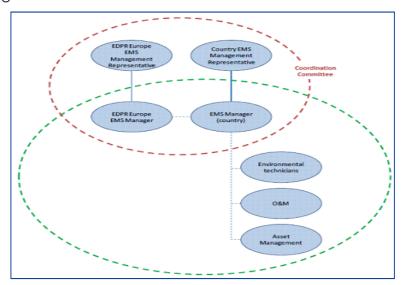
Responsibilities regarding EMS requirements and reporting to EMS Manager were added to job descriptions of all employees from Romania.

The EMS Manager from Romania has the obligation to report to Europe EMS Manager and to Country Management representative.

An EMS Manager has been appointed for Romania (Laura Lazar). The EMS Manager reports to the Europe EMS Manager (Angela Toledo) and to the Country Management Representative.

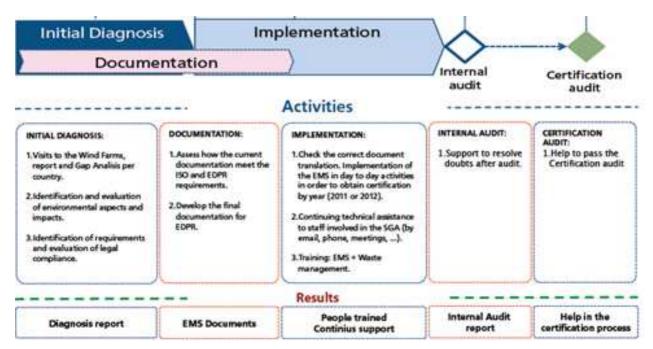
Responsibilities regarding EMS requirements and reporting to the EMS Manager have been added to the job descriptions of all employees in Romania.

The EMS organisational chart is:



#### Phases and results of EMS Implementation in 2013:

EDPR contracted ABS Consultancy Company to help in the implementation of ISO 14001:2004. ABS activities are presented in following figure:



List of procedures, forms of EMS ISO 14001 implemented in 2011, 2012 and 2013:

The list of documents part of the EMS system implemented for operational wind farms and PV Plants is enclosed in the table below:

CODE	DOCUMENT	SCOPE	SECTION OF ISO 14001:2004 STANDARD
EMS-EU_M- 00001	EMS Manual_v00	The Manual describes all the basic features of the Environmental Management System, and more particularly its organization, structure, responsibilities, procedures, processes and resources	4.1. General requirements
	EDPR Environmental Policy		4.2. Environmental Policy
General Proc	edures:		
EMS-EU_GP 00001	Identification and assessment of environmental aspects_v00	The aim of this procedure is to establish the process of identification and assessment of environmental aspects of EDPR EU, and determine those aspects that have or can have significant impacts on the environment	4.3.1. Environmental aspects
EMS-EU_GP 00002	Identification of requirements. Evaluation of compliance_v00	Identify, evaluate, record and report the environmental legal requirements applicable to the activities and locations within the scope of the Environmental Management System	4.3.2. Legal and other requirements; 4.5.2. Evaluation of compliance
EMS-EU_GP 00003	Objectives and targets_v00	To define the process to establish the environmental objectives and targets, and its monitoring	4.3.3. Objectives, targets and programmes

CODE	DOCUMENT	SCOPE	SECTION OF ISO 14001:2004 STANDARD
EXPR- EU_EMS-GEN 00004	Competence, training and awareness_v01	To define the process to ensure the availability of resources for the fulfilment of EMS requirements; to ensure that any person(s) working for the organization or on its behalf is (are) competent on the basis of appropriate education, training or experience, as well as to identify training needs and take actions to meet them	4.4.1. Resources, roles, responsibility and authority 4.4.2. Competence, training and awareness
EMS-EU_GP 00005	Communication_v00	To establish the ways for internal and external communication relating to environmental aspects and the EMS	4.4.3. Communication
EMS-EU_GP 00006	Control of documents and records_v00	Defines the process followed by EDPR EU to develop, approve, review, distribute, archive and manage documents and records arising from the EMS	4.4.5. Control of documents 4.5.4. Control of records
EMS-EU_GP 00007	Operational control, monitoring and measurement_v00	To define the process used by EDPR EU to establish operational control, monitoring and measurement of the environmental aspects considered significant	4.4.6. Operational control
EMS-EU_GP 00008	Emergency preparedness and response_v00	To define the process to identify, record and respond to environmental near-miss situations and accidents or emergency situations	4.4.7. Emergency preparedness and response
EMS-EU_GP 00009	Non-conformities, corrective actions and preventive actions_v00	To define how to detect, process and record real and potential non-conformities (NC), corrective actions (CA) and preventive actions (PA)	4.5.3. Nonconformity, corrective action and preventive action
EMS-EU_GP 00010	Internal Audits_v00	To establish the process of planning, implementation and record of the internal audits of the EMS	4.4.5. Internal audit
EXPR- EU_EMS-GEN 00011	Management review_v01	To define the process of the Management Review	4.6. Management review
EXPR- EU_EMS-GEN 00012	Management of environmental complaints_v00	To define the process to identify, record and respond to the environmental complaints of the stakeholders affected by the Organization, ensuring that the essential requirements for its effective control and management are in place.	4.4.3. Communication 4.3.1. Environmental aspects
EXPR- EU_EMS-GEN 00013	Management of equipments with GHG&ODS_v00	To define the methodology to follow in order to manage the equipment containing Ozone Depleting Substances (ODS) and/or Greenhouse Gases (GHG), ensuring its effective control	4.4.6. Operational control 4.4.7. Emergency preparedness and response
Specific proce	edures - O&M_SOLAR PV		
EXPR- GLB_TSO&M- SPV-00023	O&M Procedures for PV Vegetation Control	Vegetation control	4.4.6. Operational control
EXPR- GLB_TSO&M-	O&M Procedures for PV Waste	PV Waste management and module recycling	4.4.6. Operational control

CODE	DOCUMENT	SCOPE	SECTION OF ISO 14001:2004 STANDARD
SPV-00024	management and module recycling		
EXPR- GLB_TSO&M- SPV-00025	O&M Procedures for PV Water management for module cleaning	PV Water management for module cleaning	4.4.6. Operational control
Forms:			
EMS-EU_F 00001	Identification and assessment of environmental aspects_v00	Comply with EMS-EU_GP 00001	4.3.1. Environmental aspects
EMS-EU_F 00002	Program of Objectives and Targets_v00	Comply with EMS-EU_GP 00003	4.3.3. Objectives, targets and programmes
TMP- EU_EMS-GEN 00003	Environmental Training Needs_v01	Comply with EMS-EU_GP 00004	<ul><li>4.4.1. Resources, roles, responsibility and authority 4.4.2.</li><li>Competence, training and awarness</li></ul>
EMS-EU_F 00004	Comunications index_v00	Comply with EMS-EU_GP 00005	4.4.3. Communication
EMS-EU_F- 00005	EMS Documentation List_v00	Comply with EMS-EU_GP 00006	4.4.5. Control of documents 4.5.4. Control of records
EMS-EU_F- 00006	Distribution Control EMS documentation_v00	Comply with EMS-EU_GP 00006	4.4.5. Control of documents 4.5.4. Control of records
EMS-EU_F- 00007	Env Monitoring & Measurement Program_v00	Comply with EMS-EU_GP 00007	4.4.6. Operational control
EMS-EU_F- 00008	Env Monitoring & Measurement Generators_v00	Comply with EMS-EU_GP 00007	4.4.6. Operational control
EMS-EU_F 00009	Environmental Monitoring Subcontractors_v00	Comply with EMS-EU_GP 00007	4.4.6. Operational control
EMS-EU_F- 00010	Environmental requirements for subcontractors_v01	Comply with EMS-EU_GP 00007	4.4.6. Operational control
EMS-EU_F- 00011	Environmental Near- miss_Emergency report_v00	Comply with EMS-EU_GP 00008	4.4.7. Emergency preparedness and response
EMS-EU_F- 00012	Environmental Near- miss_Emergency verification plan_v00	Comply with EMS-EU_GP 00008	4.4.7. Emergency preparedness and response
EMS-EU_F- 00013	NC, CA & PA_v00	Comply with EMS-EU_GP 00009	4.5.3. Nonconformity, corrective action and preventive action
EMS-EU_F- 00014	NC List_v00	Comply with EMS-EU_GP 00009	4.5.3. Nonconformity, corrective action and preventive action
EMS-EU-F- 00015	Audit Program_v00	Comply with EMS-EU_GP 00010	4.4.5. Internal audit
EMS-EU-F- 00016	Public Grievance Form	Comply with EXPR-EU_EMS-GEN 00012	4.4.3. Communication 4.3.1. Environmental aspects

#### Certification EMS ISO 14001 of Sarichioi and Vutcani WFs:

In 2011 for Pestera and Cernavoda WFs was implemented EMS ISO 14001. The certification was obtained in December 2011.

In October 2012 Sarichioi and Vutcani WFs were certified with EMS 14001 by Lloyds.

In December 2013 Cobadin WF, Cujmir PV, Vanju Mare PV, Grojdibodu PV and Dabuleni PV were certified with EMS 14001 by Lloyds. The **certificates obtained from Lloyds Register Company** are presented in the followings:



#### **CERTIFICATE SCHEDULE**

#### EDP Renewables EUROPE, S.L. Calle Serrano Galvache 56 Centro Empresarial Parque Norte 28033 Madrid Spain

J&Z Wind Farms Sp. z o. o. Wind farm Zgorzelec Gmina Sulików

Operation and maintenance management of wind farm.

#### Romania

Vaslui County

Vaslui County

SC Pestera Wind Farm S.A Wind farm Pestera Constanta County Operation and maintenance management of wind farm.

SC Cernavoda Power, S.A. Wind farms Cernavoda I & II Constanta County Operation and maintenance management of wind farm.

SC EDP Renewables Romania, S.R.L. Wind farm Sarichioi Tulcea County

Operation and maintenance management of wind farm.

SC EDP Renewables Romania, S.R.L. Wind farm Vutcani

Operation and maintenance management of wind farm.

SC EDP Renewables Romania S.R.L. Wind farm Cobadin Constanta County

Operation and maintenance management of wind farm.

SC Sibioara Wind Farm S.R.L. Wind farm Albesti (Vutcani Extension)

Operation and maintenance management of wind farm

SC Vanju Mare Solar S.R.L. Photovoltaic solar plant Vanju Mare Mehedinti County

Operation and maintenance management of photovoltaic solar plant.

SC Cujmir Solar S.R.L. Photovoltaic solar plant Cujmir Mehedinti County

Operation and maintenance management of photovoltaic solar plant.

Page 19 of 20



Approval Certificate No: LIS6010748

This document is subject to the provision below

Av. D. Carlos I, 44 – 6°, 1200-649 Lisbon, Portugal. Registration number 110/910920

For and on behalf of 71 Fenchurch Street, London EC3M 48S, United Kingdom.

This approval is carried out in accordance with the LRQA assessment and certification procedures and monitored by LRQA.

The use of the UKAS Accreditation Mark indicates Accreditation in respect of those activities covered by the Accreditation Certificate Number 001

Lloyd's Register Group Limited, its affiliates and subsidiaries, including Lloyd's Register Quality Assurance Limited (LRQA), and their respective officers, employees or agents are, inclinidually and collectively, referred to in this clause of Lloyd's Register assumes no responsibility and shall not be fable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or however provided, unless that person has signed a contract to the third residency of the terms of any or inclination or advice in this document of however provided, unless that person has regional accordance it child the residency of mile terms and conditions as to us in that case are and in that case are represented byte for the terms and conditions as to us in that contract and in that case are represented byte for the terms and conditions as to us in that contract and in that case are represented byte for the terms and conditions as to us in that contract and in that case are provided byte for the terms and conditions as to us in that contract and in that case are provided byte for the terms and conditions as to us in that contract and in that case are provided byte for the terms and conditions as to us in that contract and in that case are provided byte or the terms and conditions as the contract and conditions as the contract and the contract are provided.



#### CERTIFICATE SCHEDULE

#### EDP Renewables EUROPE, S.L. Calle Serrano Galvache 56 Centro Empresarial Parque Norte 28033 Madrid Spain

SC Potelu Solar S.R.L. Photovoltaic solar plant Dabuleni Dolj County

SC Studina Solar S.R.L. Photovoltaic solar plant Grojdibodu Olt County

Belgium Greenwind, S.A. Wind farm Cerfontaine Senzeilles

Greenwind, S.A. Wind farm Chimay Chimay

Greenwind, S.A. Wind farm Froidchapelle Froidchapelle

Italy Villa Castelli Wind S.R.L. Wind farm Villa Castelli BR - Puglia

Pietragalla Eolico S.R.L. Wind farm Pietragalla PZ - Basilicata

Approval Certificate No: LIS6010748 Operation and maintenance management of photovoltaic solar plant.

Operation and maintenance management of photovoltaic solar plant.

Operation and maintenance management of wind

Operation and maintenance management of wind farm.

Operation and maintenance management of wind farm.

Operation and maintenance management of wind farm.

Operation and maintenance management of wind farm

Original Approval: 17 December 2010

Current Certificate: 17 December 2013

Certificate Expiry: 16 December 2016

Page 20 of 20



Approval Certificate No: LIS6010748

This document is subject to the provision below

Av. D. Carlos I, 44 – 6°, 1200-649 Lisbon, Portugal. Registration number 110/910920

For and on behalf of 71 Fenchurch Street, London EC3M 4BS, United Kingdom.

This approval is carried out in accordance with the LIQA assessment and certification procedures and monitored by LIQA.

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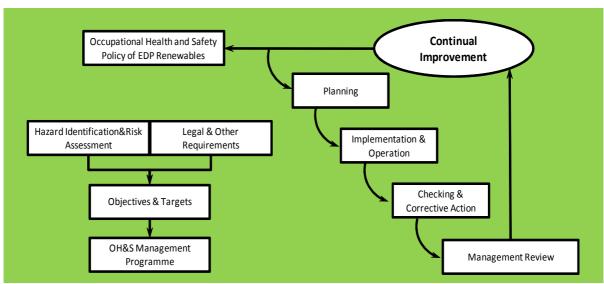
#### OH&S Management System 18001:2007:

The implementation of the OH&S Management System started in EDP Renewables Romania in April 2013 with the aim of having all operational facilities included in the certificate by end of 2013, summing approximately 378 MW installed capacity. The certification audit was conducted by Lloyd's Register Quality Assurance (LRQA) in two phases (phase 1 in November, phase 2 in December) after which concluded that the OH&S Management System comply with requirements of OHSAS 18001:2007 and issued the certificate. The certified scope is "Activities including and associated with operation and maintenance management of wind farms and photovoltaic parks" and covers the following locations:

- EDPR's headquarters in Bucharest
- Cernavoda WF
- Pestera WF
- Sarichioi WF
- Cobadin WF
- Vutcani WF
- Albesti WF
- Grojdibodu PV Plant
- Dabuleni PV Plant
- Cujmir PV Plant
- Vanju Mare PV Plant

The OH&S Management System includes the OH&S Manual plus 11 procedures covering all requirements of OHSAS 18001:2007. The new facilities, namely Facaeni WF, Bailesti PV Plant and Burila Mica PV Plant, shall be included in the certificate with the first surveillance audit in 2014.

The image below describes the structure of the OH&S Management System implemented in EDPR Romania.



Occupational Health and Safety Policy of EDP Renewables was approved by Executive Committee on May 28th, 2013 for the entire EDP Renewables Group of

Companies, including the operations in Romania. The Policy is posted in all facilities belonging to EDPR and sent to contractors.

The Occupational Health and Safety Policy fulfil the requirements of the OHSAS 18001 in terms of ensuring that the Policy within the defined scope of the OH&S Management System:

- is appropriate to the nature and scale of EDPR's OH&S risks;
- includes a commitment to prevention of injury and ill health and continual improvement in OH&S management and OH&S performance;
- includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes that relate to its OH&S hazards;
- provides the framework for setting and reviewing OH&S objectives;
- is documented, implemented and maintained;
- is communicated to all persons working under the control of the organization with the intent that they are made aware of their individual OH&S obligations;
- is available to interested parties; and
- is reviewed periodically to ensure that it remains relevant and appropriate to the organization.

As regarding the setup in Health&Safety, in 2012 an OH&S Manager was employed with EDP Renewables Romania whose main responsibilities are those related to implementation, maintenance and operation of the OH&S Management System, reporting to EU Onshore OH&S Manager. OH&S Manager offers support to Country Manager in undertaking his duties as Management Representative.

Roles and responsibilities of EDPR employees with regard to health & safety are stated in individual employment contract, job description and internal regulation document.

### Structure of the OH&S Management System implemented in EDP Renewables Romania

The documentation of the OH&S Management System has as reference the documentation set at European level, having regard of the particularities derived from type of activities developed in Romania (EDPR currently operates PV Plants in Romania only), setup and structure of the organization and specific legal requirements. The table below describes the correspondence between the clauses of OHSAS 18001:2007 and the documentation of the OH&S Management System.

Clau _ se	OHSAS	Code	Name	Purpose
4.1	General requirements	OHSM-ROM	OHS Manual	The Occupational Health and Safety Management System described in this Manual and the associated procedures meet the requirements of OHSAS 18001:2007, the Health and Safety rules and regulations and the standards of EDP RENEWABLES. It also provides the basis for a decisive boost to the integration of OH&S within the management of the company.
4.2	OH&S Policy		Occupation	

Clau se	OHSAS	Code	Name	Purpose
			al Health and Safety Policy	
4.3	Planning			
4.3.1	Hazard identification , risk assessment and determining controls	OHSP- ROM/11	Hazard identification, risk assessment and determining of controls	To establish EDPR methodology on OHS risk identification, evaluation and control.
4.3.2	Legal and other requirements	OHSP- ROM/02	Legal Requiremen ts	To define the methodology used by the Health and Safety Department and the OH&S Manager Romania to identify and maintain an updated register with the legal and other OH&S requirements to which the organization subscribes.
4.3.3	Objectives and programme( s)	OHSM-ROM	OH&S Manual – Section 7	
4.4	Implementatio	n and operatio	n	
4.4.1	Resources, roles, responsibility, accountabili ty and authority	OHSM-ROM	OH&S Manual – Section 9	
4.4.2	Competenc e, training and awareness	OHSP- ROM/04	Competenc e, training and awareness	To define competence, training and information needs of staff on occupational health and safety issues.  Also provides the methodology to ensure the implementation of the training actions and the subsequent evaluation as an indicator of their effectiveness.
4.4.3	Communicat ion, participation and consultation	OHSP- ROM/03	Consultation , participatio n and communica tion	<ul> <li>This procedure is to describe the channels of consultation and participation of employees regarding the aspects of occupational health and safety, and specifically defining:</li> <li>Internal communications relating to occupational health and safety between the different managers, departments, and hierarchical levels.</li> <li>External communications, voluntary and mandatory, (in response to legal requirements) with parties outside EDPR.</li> </ul>
4.4.4	Documentati on	OHSM-ROM	OH&S Manual – Section 5	
4.4.5	Control of documents	OHSP- ROM/01	Document Control	To establish measures to ensure that the in force documentation of the OH&S Management System:  • Has an uniform structure, format and style, so that the activities described are perfectly defined.  • Is approved, reviewed and updated properly, preventing the unintended use of obsolete editions.  • Is distributed and used in its current edition

Clau se	OHSAS	Code	Name	Purpose
				and are kept perfectly updated. To establish measures to identify, store, approve, archive issue, and remove records that are generated, as well as of the internal and external documentation related to their implementation.
4.4.6	Operational control	OHSM-ROM	OH&S Manual – Section 12	
4.4.7	Emergency preparednes s and response	TI-ROM/00- 02	Emergency preparedne ss and response	<ul> <li>The provisions of the Technical Instruction establish the method and responsibilities for:</li> <li>Identification of potential for emergency situations with consequences on health and safety of workers.</li> <li>Establishing and applying control measures to prevent emergencies.</li> <li>Ensure adequate response capacity for emergencies, in order to prevent or mitigate the adverse OH&amp;S consequences.</li> </ul>
4.5	Checking			
4.5.1	Performance measuremen t and monitoring	OHSP- ROM/05 OHSP- ROM/06	OHS Inspection Personal Protective Equipment and working Clothes	
		ROM/07	OHS Contractor Requiremen ts	
4.5.2	Evaluation of compliance	OHSP- ROM/02	Legal Requiremen ts	To define the methodology used by the Health and Safety Department and the OH&S Manager Romania to identify and maintain an updated register with the legal and other OH&S requirements to which the organization subscribes.
4.5.3	Incident invest	igation, noncor	nformity, correc	tive action and preventive action
4.5.3 .1	Incident investigation	OHSP- ROM/08	Incident Notification and Investigation	To define the operation methodology for reporting and investigating incidents, communicate them to interested parties as well as doing the statistical control of incidents, both of company's employees and partner companies.
4.5.3	Nonconformi ty, corrective and preventive action	OHSP- ROM/09	Nonconform ities	<ul> <li>To establish the OHS actions in the terms of:</li> <li>Management of nonconformities</li> <li>Appropriate corrective and preventive actions.</li> </ul>
4.5.4	Control of records	OHSP- ROM/01	Document Control	<ul> <li>To establish measures to ensure that the in force documentation of the OH&amp;S Management System:</li> <li>Has an uniform structure, format and style, so that the activities described are perfectly defined.</li> <li>Is approved, reviewed and updated properly, preventing the unintended use of obsolete editions.</li> <li>Is distributed and used in its current edition and are kept perfectly updated.</li> </ul>

Clau se	OHSAS	Code	Name	Purpose
				To establish measures to identify, store, approve, archive issue, and remove records that are generated, as well as of the internal and external documentation related to their implementation.
4.5.5	Internal audit	OHSP- ROM/10	Internal Audit	To establish the planning, performing and closing of the OHS Management System internal audits'. To define the way the audit results are reported and their associated records are kept
4.6	Managemen t review	OHSM-ROM	OH&S Manual – Section 18	



#### CERTIFICATE OF APPROVAL

This is to certify that the Occupational Health & Safety Management System of:

#### EDP RENEWABLES ROMANIA S.R.L. 6 Maria Rosetti St., 3 Floor, 2 District, Bucharest Romania

has been approved by Lloyd's Register Quality Assurance to the following Management System Standards:

#### OHSAS 18001:2007

The Occupational Health & Safety Management System is applicable to:

## Activities including and associated with operation and maintenance management of wind farm and photovoltaic park.

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

Approval

Certificate No: BUC6018490

Original Approval: 15 January 2014

Current Certificate: 15 January 2014

Certificate Expiry: 14 January 2017

Issued by: Lloyd's Register (Romania) S.R.L.

For and on behalf of Lloyd's Register Quality Assurance Limited.



All Janville Assense, 1277.6, 2 District, Rischardet

For and on behalf of LRQA, 71 Ferniturch Street, London ESSM 455 United Kingdom
This approve is carred out in apposition with the ICPA In smentand confliction procedures and monitored by IMA.

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#### CERTIFICATE SCHEDULE

#### EDP RENEWABLES ROMANIA SRL 6 Maria Rosetti St., 3 Floor, 2 District, Bucharest Romania

#### **Head Office**

#### Activities

6 Maria Rosetti St., 3 Floor 2 District, Bucharest

Activities including and associated with operation and maintenance management of wind farm and photovoltaic park.

#### Locations

#### **Activities**

Wind farm Cernavoda, Cernavoda, Constanta County

Activities including and associated with operation and maintenance management of wind farm.

Wind farm Pestera, Pestera, Constanta County

Activities including and associated with operation and maintenance management of wind farm.

Wind farm Sarichioi, Sarichioi, Tulcea Activities including and associated with County

operation and maintenance management of wind farm.

Wind farm Cobadin, Cobadin, Constanta County

Activities including and associated with operation and maintenance management of wind farm.

Wind farm Vutcani, Vutcani, Vaslui County

Activities including and associated with operation and maintenance management of wind farm.

Page 1 of 2



Approval Cerificate No: BUC6018490 Approval Cerrificate No. Biologic Issay

31 Iancului Avenue, 021716, 2 District, Bucharest

For and on behalf of LRQA, 71 Fenchurch Street, London EC3M 485 United Kingdom

This approval is carried out in accordance with the LRQA assessment and certification procedures and monitored by UNIQS.

The use of the LRAS Accreatation Mark indicates. Accreditation in respect of those activities covered by the ACMS VILIGE CENTRALE number 001



#### CERTIFICATE SCHEDULE

#### EDP RENEWABLES ROMANIA SRL 6 Maria Rosetti St., 3 Floor, 2 District, Bucharest Romania

#### Locations

#### **Activities**

Wind farm Albesti, Albesti, Vaslui County

Activities including and associated with operation and maintenance management

of wind farm.

Photovoltaic park Grojdibodu, Grojdibodu, Olt County

Activities including and associated with operation and maintenance management

of photovoltaic park.

Dolj County

Photovoltaic park Dabuleni, Dabuleni, Activities including and associated with operation and maintenance management

of photovoltaic park.

Photovoltaic park Cujmir, Cujmir,

Mehedinti County

Activities including and associated with operation and maintenance management

of photovoltaic park.

Photovoltaic park Vainju Mare, Vinju

Mare, Mehedinti County

Activities including and associated with operation and maintenance management

of photovoltaic park.

Approval

Certificate No: BUC6018490

Original Approval: 15 January 2014

Current Certificate: 15 January 2014

Certificate Expiry: 14 January 2017

Page 2 of 2



31 Iancului Avenue, 021716, 2 District, Bucharest For and on behalf of LRQA, 71 Fenchurch Street, London EC3M 485 United Kingdom.
The approval a carried cut in accordance with the IRQA assessment and certification procedures and monitored by IRQA.
The issued the UKAS Accreditation Mark indicates Accreditation in respect of those activities covered by the Accreditation Certificate Number 601.

## PS1 (ii) Please provide a summary of S&E training that employees and contractors received during the reporting year.

#### EMS ISO 14001:2004:

For implementing EMS ISO 14001:2004 the services of a Consultancy Company were contracted: ABS Consulting. A training regarding EMS requirements was provided to EDPR employees: EMS Manager, Asset Manager and Wind Farm Operation Manager.

Following procedures from EMS system required training of operational personnel:

- According with EMS-EU\_GP 00004 Competence, training and awareness procedure, part of EMS system implemented in 2013 EMS Manager Romania identified, proposed and analyzed the training needs (associated with the EMS and the environmental aspects) of the employees involved in the EMS. These training needs are recorded in form EMS-EU/F-00003 Environmental Training Program as a proposed training plan for the country. The Training Program was communicated to all employees and evidences of these communications were kept.
- Procedure EMS-EU\_GP 00007 Operational control, monitoring and measurement\_v00 foresees a chapter regarding subcontractors and service providers control. In this regard the person responsible for each subcontractor/service provider must inform all subcontractors/service providers working at the wind farms about the environmental requirements of the EDPR EU EMS through the form EMS-EU/F-00010 "Environmental requirements for subcontractors". The evidence of this communication through the return of this form signed and stamped was kept. Moreover, all contracts signed include requirements regarding the compliance with EHS applicable legislation.
- Procedure EMS-EU\_GP 00008 Emergency preparedness and response\_v00 includes the task of EMS Manager to provide a training to operational personnel regarding:
  - the patters of performance against near-miss and emergency situations
  - how to identify and report a near-miss.

#### OH&S Management System 18001:2007:

As regarding **Occupational Health and Safety**, EDPR has implemented and certified within the organization of a management system to comply with the requirements of **OHSAS 18001**.

Training regarding OH&S may be split in three main categories:

- Internal training. OH&S training delivered internally to EDPR's employees consisted of the safety and emergency induction, on-the-job and periodical training and OH&S Management System and OHSAS 18001 Requirements.
- External Training. External training was delivered to personnel whose risk assessment indicated this training as a control measure in order to reduce the risk level to an acceptable level. External training covered use of lifting equipment, rescue from height, work at height and operations in electrical installations.

• **Training of contractors.** This training consisted of the safety induction and safe working methods established delivered by WF/PV Plants Managers to contractors' personnel when attending EDPR facilities.

The table below describes the trainings performed during 2013:

Training	Scope	EDPR /Contractor Employees	Persons trained	Training time (man- hours)	Cost (US\$)
OH&S Management System	Training on requirements of OHSAS 18001:2007 and procedures of OH&S Management System	EDPR	8	64	0
Induction	OH&S and emergency response	EDPR	4	64	0
On-the-job	OH&S and emergency response	EDPR	4	64	0
Fire fighting	Fire theory, fire propagation, types of extinguishing media, use of different types of fire extinguishers	EDPR	6	9	0
Periodical training	Manual handling, VDEs, ergonomics, hazards & management of risk, earthquakes, general emergency response	EDPR	19	71.5	0
Work at height	Working at height/rescue from height and nacelle delivered by Miller/Honeywell	EDPR	9	144	5300
Protection of electrical power system	Training delivered by ABB	EDPR	5	120	6200
Use of service lifts and cranes	Training delivered under the scope of formal certification as competent users of lifting equipment	EDPR	3	48	Under the scope of service contract
Safety induction	Training for works in EDPR facilities; in total, there were 162 training sessions and 77 contractors involved	Contractors	563	Not estimated.	0
Environmental emergency response (including drills)	Provided by EMS Manager	Employees EDPR Romania	8	4	-
Environmental Management System (the standard ISO 14001)	Provided by Certified Company for ISO 14001 training	Employees EDPR Romania	8	4	Under the scope of service contract
SALEM - environmental legislation tool	Provided by NOVOTEC	Employees EDPR Romania	1	2	Included in EDP Group cost
Environmental Management System in Europe EDPR	Provided by Laura Lazar	Employees EDPR Romania	9	8	-
SIS tool	Provided by EMS Manager	Employees	8	4	-

Training	Scope	EDPR /Contractor Employees	Persons trained	Training time (man- hours)	Cost (US\$)
		EDPR Romania			
Update on Environmental Legislation and EMS requirements	Provided by EMS Manager	Employees EDPR Romania	8	3	-
Waste Management	Provided by EMS Manager	O&M Managers	8	3	-
Operational Control and Emergency preparedness and response	Provided by EMS Manager	Contractors	4	4	-

## PS1 (iii) If the Company publicly reported on overall S&E performance (eg sustainability report), please provide how it was done (Global Reporting Initiative)

**EDPR Group** is publishing every year an integrated report describing the company's performance with respect to the three pillars of sustainability: economic, environmental and social.

Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development.



The reports are published on company website: www.edpr.com

#### **GLOBAL REPORTING INITIATIVE (GRI):**

EDPR is committed to follow the **G3 guidelines** of the Global Reporting Initiative (**GRI**) for Sustainability Reporting.

The GRI directives define a set of indicators and recommendations to create a global standard for disclosing information concerning the three sustainability pillars: economic, environmental and social performance. A company's adherence to these directives means that it concurs with the concept and practices of sustainability.

The GRI framework defines a list of principles to help organizations ensure that the content of the report is balanced and accurate. EDPR applied these principles as the basis for 2013 Annual Reports.

#### **GRI APPLICATION LEVEL:**

Following the GRI Guidelines, the reports for 2010, 2011, 2012 and 2013 have been externally assured by KPMG, certifying the **A+ application level** self-declared by EDPR.

More details can be found in EDPR Annual Report for 2013 published on company website.

#### V.2. PS2. Labor and working conditions

PS2 (i) If the company received complains through internal grievance mechanism for workers or through national regulatory agency/courts, please provide a summary of those.

There have been no complaints during 2013 associated with the construction of the 6 photovoltaic plants or Facaeni, Albesti & Albesti (Vutcani Extension) WFs to date. It was also reported that there are no on-going litigation or disputes in the areas of health, safety, employee relations, community relations or the environment.

A grievance mechanism was implemented as part of EDPR's operational wind farm Environmental and Social Action Plan (ESAP).

PS2 (ii) Please provide a summary whether the Company complied with national law in allowing workers to form and join workers organisations without retaliation or discrimination. Please provide a summary table of workers organisations with numbers of member workers relative to total employees.

All the workers hired by EDPR Contractors and direct employees of EDPR are having individual working contracts in line with Romanian legislation and Work Code republished in 2011. EDPR's "General Contracting Conditions" are mandatory and are attached to every contract to be signed by Contractors. These include provisions relating to the occupational health and safety and employment and social obligations.

The legal minimum working age is 18 years old and it is understood that there are policies in place to cover the employment of young persons.

The workers right to form and join workers' organisations is subject to Law no 54/2003. At the time of writing no workers' organisations had been registered by employees of EDPR or their contractors. It was reported that there have been no strikes or other collective disputes related to labour and working conditions.

EDPR have a Code of Ethics in place which applies to permanent or temporary employees, proxies, external auditors or to any other person that may supply services to EDPR, either permanently or occasionally. It covers legislation and ethics; conduct in the workplace; human rights and equal opportunities; integrity; relationship with clients and suppliers; environmental and sustainability and disciplinary action.

The act regulating safety on construction sites is Governmental Decision 300/2006 that transposes 92/57/CEE Directive and states the following:

- Thirty days before starting the works, the site manager must submit to local OH&S Administration a notification that contains information on the site; this notification is posted on the site and maintained up-to-date;
- The site manager or beneficiary of the project must assign a site safety coordinator - the minimum qualifications needed for such a coordinator are established in the decision;
- The safety site coordinator delivers a site safety management plan that must to be delivered to all subcontractors or individual workers, which in turn deliver their own safety management plan in accordance with actions established in the site safety management plan. Each safety management plan is to be delivered to safety site coordinator for approval within 30 days from contracting the works;
- The site safety management plan is to be continuously updated during the development of the site;
- A coordination register is to be prepared by the site safety coordinator who must keep this register for five years after the termination of works. It must be readily accessible and made available to site manager or representatives of authorities whenever requested;
- The site safety coordinator must maintain an amendments file to include any changes from initial stage of the works and submit this file to beneficiary at the termination of the works;
- Each subcontractor must assign a safety representative who will attend the coordination meetings with the site safety coordinator;
- All general legal requirements on safety apply, such as consultation and participation of workers, training, risk assessment etc.

## PS2 (iii) If the company undertook any voluntary retrenchment during the reporting year, please provide retrenchment data including a copy of the retrenchment action plan.

No retrenchment action plan was elaborated for 2013 and implemented.

## PS2 (iv) Please state whether the Company remained complaint with the Child Labor and Forced Labor requirements of the performance standard.

Romanian legislation specifically forbids forced labor and labor of children under 18 (from 16 to 18 with written agreement of parents); EDPR Romania fully complies with these requirements.

The contracts established between EDPR Romania and different service providers provide clauses regarding full compliance of contractors with applicable regulation.

Safety Plans delivered for construction sites (both Solar PVs and Wind Farms) provide requirements regarding child labor. In addition to that, inspections were carried out on two Solar PV construction sites by local OH&S Inspectorate in relation with compliance with legal requirements regarding employment. Neither of the inspections found breaches in the legal requirements regarding employment.

PS2 (v) Please provide occupational health and safety performance data of the company using the table below and analyse the effectiveness of the actions being taken for improvement.

Occupational Health and Safety performance of the Company:

Indicators:		Category	2010	2011	2012	2013
Total number of workforce		Employees	13	18	32	31
		Contractors	8601)	9801)	13001)	395()
Total number of Man Hour	В	Employees	18,984	26,608	37,471	58,560
Worked		Contractors	322,616	392,000	465,626	781,479
Total number of facilities	С	Employees	0	0	0	0
		Contractors	0	0	0	0
Total number of lost time	D	Employees	0	0	111)	0
accidents		Contractors	0	0	0	1
Total Lost Time accidents	Е	Employees	0	0	ן ן ן (	0
(Man-Day)		Contractors	0	0	0	43 <sup>()</sup>
Lost Day Rate	E/	Employees	0	0	2.93   )	0
	В	Contractors	0	0	0	0.55   )
Fatality Rate	C	Employees	0	0	0	0
	/B	Contractors	0	0	0	0

I) the total number of workers comprises the contractor's subcontractors workers

#### **INDIRECT EMPLOYMENT / NEW JOBS in 2013:**

A high percentage of the employees working for providing services to EDPR Romania come from localities where wind farms / PV Plants are located, contributing to the local economic development.

II) one traffic accident recorded on the way to work from home in 2013, which according to Romanian legislation is recorded as "work related accident"

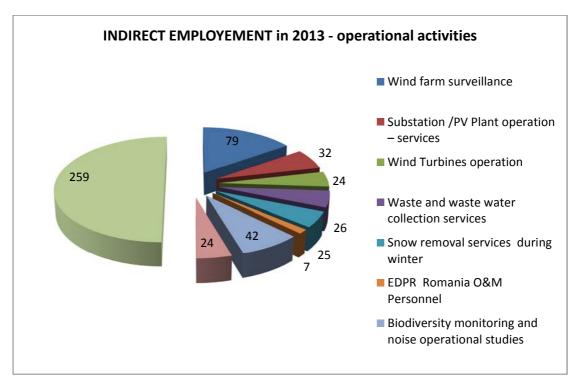
III) reported to 10,000 workers

IV) mean value of workers

V) one traffic accident recorded on contractor on the way to the site in 2013

For operational activities developed in 2013 for the six operational wind farms and 6 operational PV Plants personnel was hired from local communities, as presented in the table below:

Operational activities:	Pestera WF	Cernavoda I-II WF	Sarichioi WF	Vutcani WF	Albesti WF	Cobadin WF	Cujmir PV	Vanju Mare PV	Burila Mica PV	Grojdibodu PV	Dabuleni PV	Bailesti PV
Wind farm surveillance	9	12	6	7	7	6	4	6	6	4	6	6
Substation /PV Plant operation – services	4	4	4		4	4	2	2	2	2	2	2
Wind Turbines operation	4	4	4	4	4	4	n/a	n/a	n/a	n/a	n/a	n/a
Waste and waste water collection services	4	4	2		2	2	2	2	2	2	2	2
Snow removal services during winter	3	2	2	2	2	2	2	2	2	2	2	2
EDPR Romania O&M Personnel	1	1	1		1	1		1			1	
Biodiversity monitoring and noise operational studies	5	5	5	5	5	5	2	2	2	2	2	2
EMS system: ISO 14001 certified	2	2	2	2	2	2	2	2	2	2	2	2
Total	32	34	26	27	20	26	15	16	16	15	16	16
Total general	259											



During **2013** for construction activities of Facaeni WFs, EDPR Romania subcontracted works to different companies that hired personnel from local communities, as presented in following table:

Construction activities:	Facaeni WF
Roads, platforms and foundations construction (2 min contractors)	93
Substation construction – 33/110/400 kV Facaeni	58
Substation construction – 33/110 kV Movila	38
High Voltage line construction – 400 kV	50
Underground high voltage line construction – 110 kV	27
Wind turbines installation	34
Total	300

#### V.3. PS3. Pollution Prevention and Abatement

IFC Standard 3 / EBRD PR3: Pollution Prevention and Abatement

#### PS 3 (i) Please provide summaries of:

## (i) Compliance with relevant Romanian environmental standards including how they are being improved from previous years:

No major pollution risks have been identified. A Construction Environmental Management Plan (EMP) and a Waste Management in Construction Plan have been developed and all contractors are contractually obliged to adhere to all procedures set out within these documents.

It has been estimated that there will be potential greenhouse gas savings of up to **45 kt CO2-e/yr** from the PV plants compared with power generation using fossil fuels.

The environmental authorization is defined as the technical and legal document establishing the operational terms and parameters for existing activities as well as for new ones.

The environmental authorisations for the 6 operational wind farms and 6 operational PV plants are published on EDP Renewables website.

The validity of the environmental authorisations is 10 (ten) years starting with the issuance date. The environmental authorizations will be suspended in case of failure to comply with the provisions stipulated therein.

Mandatory reporting was performed in 2013 to Environmental Protection Agencies as foreseen in the environmental authorizations of the 6 operational wind farms and 6 operational PV plants.

## (ii) Any complaints or violation notice related to pollution, if received, and (iii) any incident of non-violation or accidental release of pollutants if any.

No complains or violation notices related to pollution were received by EDPR Romania in 2013.

The EMS ISO 14001 has established to procedures in order to respond in case of incidents and accidental pollutions:

- EMS-EU\_GP 00008 Emergency preparedness and response\_v00
- EMS-EU\_GP 00009 Non-conformities, corrective actions and preventive actions\_v00

# PS 3 (ii) Please provide quantities of both hazardous and non-hazardous waste generation, recovery and reuse, treatment/destruction/disposal and summarise how the Company is working towards improvement. Please also define in detail how waste from any temporary construction/employee housing is being managed and disposed.

All 6 operational wind farms and 6 operational PV plants are endowed with a **Clean Point** for the temporary storage of produced hazardous and non-hazardous waste.

The clean point is constructed on a concrete platform foreseen with a roof and proper fencing. Bins for selective collection of hazardous and nonhazardous waste are placed and labelled according with the collected type of waste.

EDPR has closed contracts with authorized agents for the collection of generated hazardous and nonhazardous waste and domestic wastewater.

#### Summary of waste management by the Company:

Type of waste	Item	Generatio n (kg/year)	Recovery &Reuse (kg/year)	Treatment /Destructi on/Dispos al (kg/year)	Recycling Rate (%)
		Α	В	C=A-B	D=B/A(%)

Type of waste	ltem	Generatio n (kg/year)	Recovery &Reuse (kg/year)	Treatment /Destructi on/Dispos al (kg/year)	Recycling Rate (%)
Non- hazardous	Mixed municipal waste (LER 20 03 01)	2,233	0	2,233	0%
waste	Paper and cardboard (LER 20 01 01)	608.5	377	232	62%
	Metals (LER 20 01 40)	85.7	57	29	67%
	Plastics (LER 20 01 39)	520.8	277	244	53%
	Biodegradable waste (LER 20 02 01)	2132.9	0	2,133	0%
	Septic tank sludge (LER 20 03 04)	1100	0	1,100	0%
Hazardous waste	Waste printing toner other than those mentioned in 08 03 17 (LER 08 03 18)	47.5	0	48	0%
	Mineral based non- chlorinated hydraulic oils (LER 13 01 10*)	0	0	0	-
	Synthetic hydraulic oils (LER 13 01 11*)	0	0	0	-
	Mineral-based non- chlorinated engine, gear and lubricating oils (LER 13 02 05*)	64.5	0	65	0%
	Mineral-based non- chlorinated insulating and heat transmission oils (LER 13 03 07*)	0	0	0	-
	Packaging containing residues of or contaminated by dangerous substances (LER 15 01 10*)	50	0	50	0%
	Oil filters (LER 16 01 07*)	22	0	22	0%
	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances (LER 15 02 02*)	180	0	180	0%
	Gases in pressure containers (including halons) containing dangerous substances (LER 16 05 04*)	0	0	0	-
	Lead batteries (LER 16 06 01*)	140.1	0	140	0%
	Ni-Cd batteries (LER 16 06 02*)	0	0	0	-

Type of waste	ltem	Generatio n (kg/year)	Recovery &Reuse (kg/year)	Treatment /Destructi on/Dispos al (kg/year)	Recycling Rate (%)
	Mercury-containing batteries (LER 16 06 03*)	0.3	0	0	0%
	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 (LER 17 09 04)	0	0	0	-
	Fluorescent tubes and other mercury-containing waste (LER 20 01 21*)	0	0	0	-
	Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12 (LER 16 02 13*)	100	0	100	-
	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries (LER 20 01 33*)	12	0	12	-

#### PS 3 (iii) Whilst this is a carbon friendly project that may generate carbon credits, please provide an approximate measurement of total GHG emissions from the project

Wind energy does not emit any greenhouse gases. The calculations on just how much CO<sub>2</sub> could be saved by wind energy is based on an assumption for the carbon intensity of the global electricity sector, i.e. the typical amount of CO<sub>2</sub> emitted by producing one kWh of power.

According with EIB publication "Electricity Emission Factors Review, 2009" Romania's emissions were estimated at 0.553 t/MWh, as an average value for the carbon dioxide reduction to be obtained from wind generation.

	Energy produced	CO2 emissions
	MWh	t
Pestera WF	181,883	10,058
Sarichioi WF	73,783	4,080
Vutcani WF	60,851	3,365
Cernavoda 1 WF	137,258	7,590
Cernavoda 2 WF	137,787	7,620

Cobadin WF	62,204	3,440
Albesti WF	38,625	2,136
Dabuleni PV	9,522	527
Grojdibodu PV	11,793	652
Cujmir 1 PV	5,621	311
Cujmir 2 PV	6,383	353
Vanju Mare PV	9,648	534
Burila Mica PV	1,942	107
Bailesti PV	1,318	73
Total		40,845

#### V.4. PS 4 AMBIENT NOISE:

Noise limits in Romania are established in several standards and laws:

#### • Ministry of Health Order

The Romanian legislation, **OM 536/1997**, establishes that maximum noise levels for residential areas is 50 dB(A) for day period and 40 dB(A) (noise rating level NR=35) for night, measured at three meters in front of the facade and at a height of 1,50 meters.

In practice this law is used by Health Protection Authority for measuring the noise levels inside the residences.

#### • Ministry of Environment Order

**OM 152/558/1119/532** from 2008 establishes the noise limits for the different noise sources (roads, railway, airport and industry) that are mentioned in 2002/49/END.

In practice, for emitting the environmental permit, EPA uses **STAS 10009-88**, a technical standard that establishes that maximum noise levels for industrial areas is 65 dB(A), measured at three meters meters away from the boundary (property limit) of the industrial site. The recommended locations of measurement points for verifying the compliance with the limits are defined in STAS 6161/3-82.

For residences, STAS 10009-88 states that the measurement point should be chosen at 2 meters in front of facade and at a height starting from 1.30 meters and at every three floors above, where applicable. The noise limit permitted is 50 dB(A) for daytime and 40 dB(A) for night time.

In **2013** noise measurements were done for all 6 operational WFs and 6 operational PV Plants.

#### Ambient noise – maximum values measured in 2013:

	Unit	IFC environmental guidelines	EU/Host Country standards	Result of monitoring	Compliance
Residential, institutional, educational:  Day time	dBA	55	50	24-45	Yes

Night time		45	40	44-47	Yes
Industrial, Commercial:	dBA				
Day time		70	70	n/a	Yes
Night time		70	70	n/a	Yes
Distance from the site boundary to the closest noise receptors	m	areas: >700 m		institutional, nmercial area	educational s:

All the measurements were conducted with a sound level meter type Blue Solo Metravib. For the mandatory calibrations, we used a acoustic calibrator type 0.1 dB Metravib France.

## PS 4 (ii) If the Company has Emergency Preparedness and Response Plans that require community participation and readiness, please provide un update of implementation and a summary of issues encountered.

EDPR implemented in all operational wind farms an Emergency Preparedness and Response Plan according with requirements of EMS Procedure EMS-EU\_GP 00008 Emergency preparedness and response\_v00.

The participation of community is not required.

In 2013 no emergency situations were registered. There have been made simulation for different situations: fire, trafo leakages.

#### IV.5. PS5. Land Acquisition and Involuntary Settlement

## PS 5 (i) Did the Company acquired any new land or new right-of-way that required compensation to land owners or land users during the reporting Year?

Land acquisition for WFs was consistent with PS5 and based on a willing buyer basis. The land for the solar PV plants is rented.

#### IV.6. PS6. Bird Monitoring and turbine shutdown system

#### (i) Independent Ornithological Experts (IOE) Report

IOE Annual Reports for 2013 reporting year regarding operational WFs are published on company website:

http://www.edpr.com/sustainability/documents-library-and-publications/

## (ii) Please provide detailed summaries of all bird monitoring data, brdstrikes, shutdown orders as per requirements of ESAP and EMMP.

An **ecological assessment** was undertaken as part of the EIA Reports prepared for the sites and this information has been supplemented with further ecological assessment.

A **video monitoring system** was installed in all 6 operational wind farms. Data is recorded on external hard disk.



#### Information regarding avifauna monitoring programs:

The conclusions of 2013 monitoring programs of avifauna, flora and habitats for Cernavoda I-II and Pestera WFs are:

- The site of Cernavodă I-II and Pestera Wind Farms includes, mainly, agricultural crops, with small insertions of surfaces with ruderal vegetation, the area being crossed by access roads to the wind turbines;
- The vegetal associations which are typical to agro-ecosystems and include ruderal species, with a limited number of flora species are predominant. Identified associations does not contain conservation reliant plant species, included in the Romanian or European Red Lists, Annexes to Bern Convention or the Habitats Directive, the vegetation being composed of common species;
- Weed vegetation mixed with other ruderal species grows at the edge of the access roads, irrigation ditches etc.

- Installation in the area of the wind turbines does not create major imbalances in the agroecosystems within the area, already affected by the anthropic impact;
- The terrestrial vertebrate and invertebrate fauna within the site area of Cernavodă I-II and Pestera Wind Farms is represented, mainly, by common species which are frequently found in highly anthropized ecosystems. Their presence in the area is an outcome of the way in which the lands are used:
- As regards the entomofauna, we specify the followings: if the current system of land use is kept, it will maintain a favourable conservation status:
- Herpetofauna is represented by common species for anthropized ecosystems, within the area, there is no risk of disappearance of the identified species, which are resistant to the anthropic impact, being adapted to the new environmental conditions;
- Mammal fauna of the study area is characterized, mainly, by the presence of common species specific to steppe areas and agroecosystems;
- As regards the monitoring of the avifauna of the wind farms area and its proximity, 83 species of birds have been identified in Cernavoda WF area and 64 species in Pestera WF area, out of which 16 migratory species and 17 nesting species;
- The bird species which nest in the area of the wind farms (agricultural crops, ruderal vegetation) are in general common species, typical to such habitats, and their presence in the area proves the fact that they are not negatively affected by the activity specific to the operation of the wind farms;
- As regards the avifauna migration, one of the important corridors in Dobrogea area is located on the seashore of the Black Sea and along the Danube coastline lakes (Ciochia, V. 1984), at considerable distances to the Cernavodă I-II and Pestera Wind Farms, where, in general, the seabirds migrate (ducks, geese, shorebirds etc.). For the rest of the migratory species, the wind farms location does not represent an area which is favourable to shelter, rest or feed for a long period (for example, the landscape is less attractive, including monoculture crops, high aridity, reduced humidity, low percent of natural steppe vegetation, forests/tree plantations);
- An intense migration of the large species was not registered in the area
  of the wind farms and its proximity (birds of prey, storks etc.). The noticed
  presences (Circus cyaneus, Buteo rufinus, Ciconia ciconia) were
  represented by singular specimens, in transit;
- As regards the impact on the avifauna, during the period of performing the monitoring January-December 2013 in the area of the wind farms, no dead specimens of birds have been identified and reported which could have resulted from the possible collisions of birds with the moving blades of the wind turbines or with the tower (pillar) of the wind power plants.

### The conclusions of 2013 monitoring programs of avifauna, flora and habitats for Vutcani WFs are:4

- In March 2013, it was ascertained that the area of the wind farm was traversed, during the spring migration, by 600-1200 specimens of stork (Ciconia ciconia). This fact can lead to the conclusion that the area is part of a flyway. It remains to be established whether this route is primary or secondary.
- During the monitoring of the avifauna, between August 2013 March 2014, there were NO species of dead birds and/or injured by the blades of the operating turbines were recorded.

## The conclusions of 2013 monitoring programs of avifauna, flora and habitats for Sarichioi WFs are:

The impact of the 870 m overhead powerline that crosses ROSPA0032 Deniz – Tepe on the species indicated in the Natura 2000 Standard Form for which the important birds area was designated was assessed as insignificant, due to the following reasons:

 No electrocuted birds were identified. The study of the behaviour of the species identified in the survey indicated that they were not disturbed by the presence of the overhead powerline and they flew either above the power lines, or beneath them, even during foggy days.



Flock of starlings in the Deniz-Tepe overhead powerline area

- The maximum height of the high voltage poles is of 32 m, which does not make them an obstacle in the flying path of the birds using the area looking for food.
- Electrical conductors (4 in number) are placed at a distance of 5.5 m from each other, which eliminates the risk of collision and/or electrocution.
- No big birds were seen within the wind farm using the area to find food.

• After the completion of the works for the construction of the wind farm the area is no longer affected by the presence of people and equipments, and the nesting birds have resumed their activity - e.g. Specimen of Burhinus oedicnemus – the Eurasian Stone-curlew.

Regarding the Additional Measures for the Protection and Conservation of Birds on the route of the 110 kV overhead powerline Sarichioi Station and Zebil Nord Station included in the Approval no. 152/20.12.2011 issued by the Eco Pontica Foundation, custodian of the Natura 2000 Deniz Stepe site, we hereby declare:

#### Measure no. 1 Marking the lines with visual signaling devices every 50 m

- According to the technical norms in force, the beacons are mounted only at overcrossings of national roads
- The Bird Life Romania recommendation is to mount beacons on the overhead powerline between the \$39 pole and the Zebil North power station
- One beacon was mounted half the distance between the 2 poles of the overhead powerline
- The term for the installation of the beacons was the end of the months April May 2013 (beginning of the migration period for birds): MET



Mounted warning beacon

Measure no. 2 Placing metallic boxes as artificial nests for The Saker Falcon (Falco cherrug) on each high voltage poles within and in the vicinity of the protected area

- Bird Life Romania provided the technical specifications for the artificial nests by e-mail
- Bird Life Romania recommends placing these nests on the main line pole in the upper third
- It has been established that the nests be mounted on the S39-S46 overhead powerline route: MET



Artificial nest mounted on the pile

We specify that NO Falco cherrug specimen was seen using the mounted nests.

#### Measure no. 3 Mounting antistork devices

• The measure was stipulated in the project of the overhead powerline and was carried into effect during the construction: MET.

## Measure no. 4 Eliminating the electrocution hazard at the poles within the protected area

• Each overhead powerline pole is provided with an earthing system, which eliminates the electrocution risk: MET.

## Measure no. 5 Starting the monitoring of the overhead powerline from its putting into operation over a period of 36 months

- EDPR and SC Eco Green Consulting SRL shall submit Eco Pontica and Bird Life Romania a Monitoring Plan for 36 month that shall include a description of the work methodology and a suggestion regarding the frequency of the field travels: MET.
- POSTCONSTRUCTION MONITORING IS IN PROCESS.

Regarding the supervised flora and fauna we hereby state that there were no phenomena leading to its degradation.

The conclusions of 2013 monitoring programs of avifauna, flora and habitats for Facaeni WF construction period are:

- In July 2013 started the monitoring campaign of construction works of 400kV HVL. The monitoring ended in December 2013.
- During the monitoring of the avifauna there were NO species of dead birds and/or injured by the blades of the operating turbines were recorded.

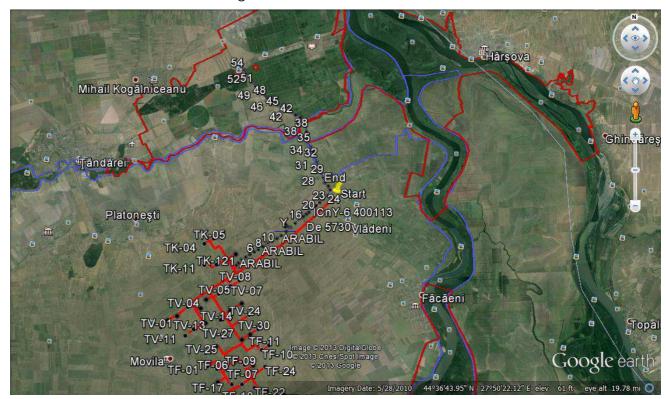
Additional works to 400 kV HEL of Facaeni WF (~16 km) connecting 33/110/400 kV Facaeni SET to TSE Gura lalomitei SET were imposed by Environmental Agreement no 1/14.01.2013 issued by Ialomita EPA for Connection of Facaeni WF.

The 400kV HVL crosses 4 protected areas Natura 2000:

- 6,41 km of ROSPA0120 Kogalniceanu Gura Ialomitei
- 1,82 km of ROSCI0278 Bordusani Borcea
- 1,14 km of ROSCI0290 Coridorul Ialomitei
- 1,1 km of ROSPA0017 Canarele de la Harsova

#### Mitigation measures for bird's protection foreseen in EA no 1/14.01.2013:

- HVL pylons height ~ 50 m in order to present birds collision
- **installing of** plastic rods **on top of insulators** in order to prevent birds sitting near/under voltage elements
- **installing of artificial nests on the high voltage pillars** in the part that is crossing Natura 2000 areas, starting with pillar **\$29** until pillar **\$52**. The artificial nests are constructed following recommendations of SOR (Romanian Ornithological Society).
- mounting of signaling and warning devised on cables
- avifauna monitoring



#### (iii) What changes, if any are being proposed to the EMMP?

No changes are proposed to the measures foreseen in EMMP.

(iv) Please provide a <u>Collision Risk Analysis</u> confirming the project is not resulting in incremental mortality in excess of thresholds based on the Scottish National Heritage Model or other model as applicable.

The Collision Risk Analysis for Pestera and Cernavoda WFs elaborated for 2013 monitoring are published on the EDPR website:

http://www.edpr.com/sustainability/documents-library-and-publications/

## (v) Please provide a summary of agricultural crop management in the area of the wind farms.

The land required for developed WFs has been purchased from individual land owners by EDPR. No compulsory purchase was required for the developments and there will be no loss of livelihood or attendant economic losses associated with the developments.

Initially the category of land was "agricultural use". The surfaces affected by construction (foundations and platforms of wind turbines, access roads, substations) had to be declared to competent authorities in order to change the land category in "construction use".

In this regard, several steps were followed: obtaining urbanism certificates, declarations to ANIF – National Authority for Land Reclamation, OCPI – National Office for Cadastrial and Land Booking and Department for Agricultural Development). The taxes paid to these institutions are detailed in Chapter B of this document.

The agricultural land outside the operational footprints will be given by EDPR to local residents for continued agricultural use.

#### Size of land affected by construction works:

In the tables below are listed the surfaces affected by constructions in Romania:

Affected surfaces by constructions:	UM	Pestera WF (30 WTG)	Cernavoda WF (46 WTG)	Sarichioi WF (11 WTG)	Vułcani WF (12 WTG)
Technological platforms	ha	2.4	3.68	0.44	0.72
Foundation of wind turbines	ha	1.2	1.84	0.24	0.39
Access roads	ha	2,00	1.61	0.74	0.55
Substations	ha	0.42	0.6	0.17	0.2
Subtotal :	ha	4,02	7.73	1.59	1.86

Affected surfaces by constructions:	UM	Cobadin WF (13WTG)	Vutcani Extension WF (14 WTG)
Technological platforms	ha	1.04	1.12
Foundation of wind turbines	ha	0.42	0.45
Access roads	ha	0.60	0.35
Substations	ha	0.2	0
Subtotal :	ha	3.3	1.92

PV Plant	Affected land	UM
Cujmir	8.21	ha
Vanju Mare	6.39	ha
Dabuleni	5.92	ha
Grojdibodu	8.11	ha
Bailesti	14.38	ha
Burila Mica	22.74	ha

EDPR Romania allowed local inhabitants to use the land plots for agricultural activities, except the parcels used for wind farms constructions, contributing in this way to the increase of benefits to local communities.

In 2013, EDPR Romania has not implemented any agricultural crop programme.

(vi) Please summarise general environmental performance related to operational and/or construction performance (as appropriate) of the Wind Farms, including a summary of environmental key performance indicators.

In order to have an increased social and environmental performance EDPR utilizes a reporting tool internally titled: Sustainable Development Reporting Platform (SIS tool).



**Environmental Key Performance Indicators** related to 2013 operational year are reported every 3 months to SIS tool. The key indicators with SIS codification system are presented in following table.

Indicators regarding generated waste quantities are presented in **Section PS 3 (ii) Summary of waste management by the Company.** 

Environmental Key Performance Indicators	Value	Unit
IA - 03 - Environmental management system		
IA-03.01.S : Number of production facilities certified (ISO 14001)	10	no
IA-03.03.S: Installed Capacity with environmental certification (ISO 14001)	378	MW
IA-35.3.S : List of facilities to maintain/achieve certification in the following period (2013)	521	MW

Environmental Key Performance Indicators	Value	Unit
IA - 14 - Water consumption and use		
IA-14.05.1.S : Water withdrawal from well	31	m³
IA-14.08.S : Amount of water coming from other private entities	73	m <sup>3</sup>
IA-14.12.S : Consumption of water for human use	104	$m^3$
IA - 18 - Biodiversity		<u>m³</u>
IA-18.03.S : Land management area inside protected areas	22.92	ha
IA - 26 - Energy Efficiency		
IA-26.3.S : Backfeed Power	3381	MWh
IA - 16 - Efluentes Líquidos		
IA-16.24.S : Domestic wastewater sent to municipal treatment	61	m³
IA - 17 - Spills and near miss		
IA-17.02.S : Recorded significant spills volume	0	m³
IA-17.03.S-3 : N° of Recorded significant spills	0	no
IA-17.04.S : N° of environmental near miss	0	no
IA-13.02.S : SF6 emissions	0	kg
IA - 22 - Noise		
IA-22.01.S : No. of facilities where noise measurements were	12	no
IA-22.02.S : Measures to minimize noise	-	-
IA - 19 - Compliance/Incidents or Fines		
IA-19.1.S: Number of environmental infraction	0	no
IA-19.2.S: Number of environmental crime	0	no
IA-19.4.S : Environmental fines	0	EUR
IA-19.5.S : Environmental crime	0	EUR
IA-19.7.S : Environmental compensation	0	EUR
IA-19.8.S : Number of started processes sanctioning	0	no
IA-19.9.S : Number of pending processes sanctioning	0	no
IA-19.10.S : Number of resolved processes sanctioning	0	no

#### Corrective measures during construction of Facaeni WF and PV Plants:

Represent environmental related activities during construction aimed to reduce the environmental impact and to assure compliance with legislation in force and best environmental practices.

Before starting the construction works, a **CEMP** - Construction Environmental Management Plan was distributed to all main contractors and subcontractors. The key objective was to ensure that EDPR and all its Contractors and Subcontractors are committed to the philosophies of good site practice and safe working conditions.

The **EMMP**-Environmental Management and Monitoring Plan foresee the following actions that are in line with conditions foreseen in the Environmental Agreements:

- establish a protocol for monitoring of ecological impacts during construction and operation
- develop a construction waste management plan identifying methods to reduce waste generation and reuse and recycle wastes in preference to disposal
- implementing the construction waste management plan and maintain records for annual environmental audits
- Monitor the removal temporary construction access roads, construction compounds and other areas following completion of construction and their restoration to encourage re-vegetation over time

In order to assist and verify the implementation of all corrective measures mentioned above, environmental construction monitoring was conducted by site visits.

The methodology applied for Environmental Construction Monitoring consisted in the activities listed in the table below. In addition, the table is containing the actions undertaken in order to comply with each proposed activity.

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No.	Activities	Actions		
1.	Identification of all relevant aspects in order to reach the proposed objectives	<ul><li>Meetings with all involved Constructors and Sub-constructors</li><li>Elaboration of initial report for each wind farm</li></ul>		
2.	Data collection	<ul> <li>Assessment of construction works</li> <li>Study of all relevant documents: technical projects, EMMP, EIA, etc.</li> </ul>		
3.	Monitoring activities	In order to monitor how the construction works are respecting with all requirements of permits and plans, site visits were undertaken weekly. During site visits following aspects were assessed:		
		<ul> <li>Place for storing the construction materials and hazardous materials;</li> <li>Waste collection and storage generated during construction;</li> <li>Site organization;</li> <li>Signaling of construction activities;</li> <li>Checking the compliance of traffic program;</li> <li>Methodology of removal, storage and transport of vegetal soil layer;</li> <li>Methodology of storage and transport of soil resulted from excavation</li> </ul>		

- **4.** Compliance with the provisions of Environmental Agreement
- **4.** Compliance with the provisions of Elaboration of **Waste Management Plan** 
  - Elaboration of Construction Environmental Management Plan

Examples of how the corrective works were done are presented below:





Costs for corrective actions during the construction (Examples: handling of natural soil, morphological restitution, hydroseeding, management of waste during construction, watering of mud roads, etc)

In order to assist and verify the implementation of all corrective measures mentioned above, environmental construction monitoring was conducted by site visits.

NUMBER OF ENVIRONMENTAL STUDIES - CONSTRUCTION 2013					
Romania	Environmental Monitoring Plans	Noise Studies	Specific fauna & flora studies	Other environmental studies (landscape, etc)	Cultural Monitoring Plans
Facaeni WF	1	1	1	1	
Burila Mica PV Plant	1				
Bailesti PV Plant	1				
TOTAL	3	1	1	1	0

NUMBER OF ENVIRONMENTAL STUDIES OPERATION					
Facility	Environmental Monitoring Plans	Noise Studies	Specific fauna & flora studies	Other environmental studies (landscape, etc)	
Pestera		1	1		
Cernavoda		1	1		
Sarichioi		1	1		
Vutcani	1	1	1		
Cobadin WF		1	1		
Vutcani Extension(Albesti) WF	1	1	1		
Facaeni WF					
Cujmir PV Plant	1	1			
Dabuleni PV Plant	1	1			

Grojdibodu PV Plant	1	1		
Vanju Mare PV Plant	1	1		
Burila Mica PV Plant	1	1	1	
Bailesti PV Plant	1	1		
TOTAL	8	12	7	0