

# ANNUAL MONITORING REPORT 2014

# **EDPR ROMANIA**

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# Table of content

To	able of content	2
Ir	ntroduction	4
I.	Projects details	6
	I.1. Location of Solar PV Projects	6
	I.2. CUJMIR 12 MW PV Plant: specific environmental issues	7
	I.3. Dabuleni 7.5 MW PV Plant: specific environmental issues	9
	I.4. Grojdibodu 9.93 MW PV Plant: specific environmental issues10	0
	I.5. Vanju Mare 9.36 MW PV Plant: specific environmental issues1	1
	I.6. Burila Mica 7.5 MW PV Plant: specific environmental issues1	3
	I.7. Bailesti 4.1 MW PV Plant: specific environmental issues14	4
	I.8. Status of solar PV Plants in 20141	5
	I.9. Pestera (90 MW) and Cernavoda I-II (139MW) Wind Farms - Operation10	6
	I.10. Sarichioi (33MW) and Vutcani (24MW) Wind Farms - Operation1	7
	I.11. Cobadin (26 MW) and Vutcani Extension (28MW) Wind Farms - Operation19	9
	I.12. Facaeni Wind Farm – First Phase 132 MW – Operation22	2
II	. Contact authorised representative24	4
II	I. Summary of compliance evaluation24	4
	III.1 Compliance with ESAP, EMMP and SEP requirements24	4
	III.2. Compliance with applicable requirements of the Performance Standards2	5
	III.3. Compliance with applicable S&E law2	5
	III.4. Major environmental and social achievements2	5
	III.5. Major challenges and issues for the Company3:	1
N	/. Compliance with ESAP and EMMP – 2014 year	3
	IV.1. Information on ESAP implementation – 2014 year	3
	IV.2. Information on EMMP implementation – 2014 year40	0

IV.3. Information on SEP implementation – 2014 year	49
V. Compliance with IFC Performance Standards on Social and Environmental Sustainability and applicable EU and Romanian Laws	51
V.1 PS1. Social and Environment Assessment and Management System	51
V.2. PS2. Labor and working conditions	71
V.3. PS3. Pollution Prevention and Abatement	75
V.4. PS 4 AMBIENT NOISE:	79
IV.5. PS5. Land Acquisition and Involuntary Settlement	80
IV.6. PS6. Bird Monitoring and turbine shutdown system	80



## 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 and PV plants 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 in the solar PV market in Romania and in 2013 put into operation 6 photovoltaic plants.

An important achievement of EDPR Romania was the project Facaeni WF that in 2014 was finalized and put into operation with 132 MW - the first phase of the wind farm.

Currently, EDPR has in Romania 7 wind farms that are under operation: Pestera, Cernavoda, Sarichioi, Vutcani, Cobadin, Albesti (Vutcani extension) and Facaeni and 6 PV plants: Cujmir, Vanju Mare, Dabuleni, Grojdibodu, Bailesti and Burila Mica.

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 2014 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. <u>Projects details</u>

# 6

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

In 2012 EDPR 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.

2014 year is the second operational year of the 6 solar PVs.

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 capa	icity of each	PV Plant in	operation	is presented	l as follows
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PV Plant	Capacity (MW)	Status 2014
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

#### Location of Solar PV Plants:



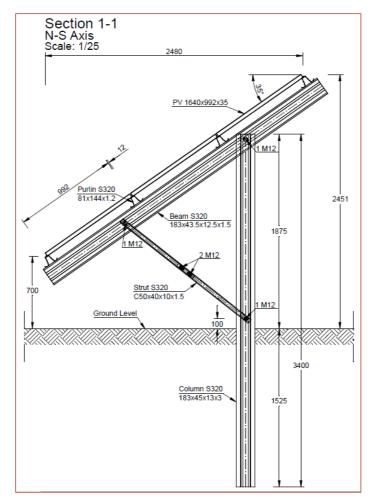
ID	Location
1	Cujmir
2	Vanju Mare
3	Burila Mica
4	Bailesti
5	Dabuleni
6	Grojdibodu

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

The site is located approximately 2.5 km to the west of the village of Cujmir in Mehedinti County. The overall area of the site is 34.2 ha (341,724 m2) and comprises of generally flat, former agricultural fields. A disused 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 Cujmir 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.

8

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 unnamed 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 Olt 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.

#### I.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 northeast in the village of Bucura. There are intermittent stands of trees along the southwest 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 northwest 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 Blahnita 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.

#### I.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 2014

Year 2014 is the second operational year for all 6 solar PV plants. The start of operation dates are presented below:

SOLAR PV Plant	2014 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 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 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.



**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 2014 is fourth 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.
- c) 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.
- f) 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.

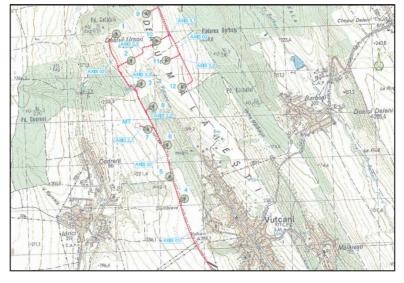
#### I.10. Sarichioi (33MW) and Vutcani (24MW) Wind Farms - Operation

**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

#### 2014 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).

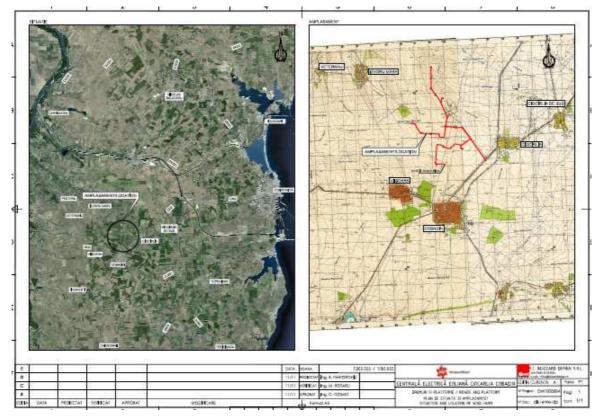
- k) Connection works for Sarichioi WF consisting in additional works executed in Enel facilities (Zebil substation) and Transelectrica facilities (Tulcea Vest Substation) are going to be executed according with the connection permits in force (issued by Enel and Transelectrica) and were finished in March 2012.
- 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 2014 is the third 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

**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,

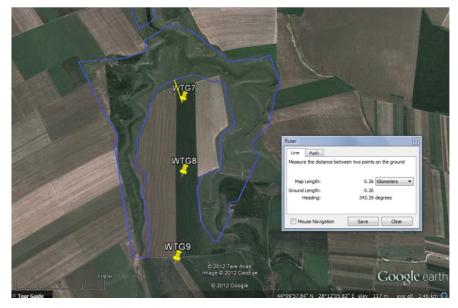
including wheat. Within the Site there are no forested areas or rare/sensitive plant species. Agricultural land use is not colonised other than by grasses and plants which are fast growing and tolerant to the environmental conditions. Water resources are limited, with no irrigation systems in place.

#### Ecology

**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



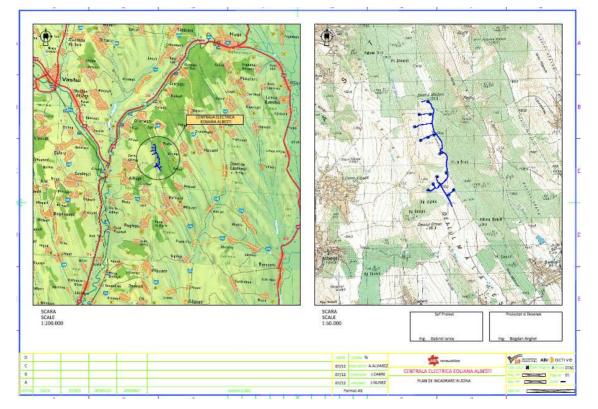
Albesti (Vutcani Extension) wind farm is located within Moldova area, and is approximately 4.7 km from Albesti, 4 km from Oltenesti, 11 km from Costesti, 7 km from Codreni, and 5.5 km from Vutcani localities, as shown on Figure below. These localities are rural in character and are situated along water 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.

Albesti (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.

Albesti (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).



# 2014 status of Cobadin and Albesti (Vutcani Extension) WFs – second operational year:

**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 wind farm was connected to Enel Distribution Company on 30.01.2013 and became fully operational on May 2013, after finishing mandatory compliance tests. The procedure for obtaining the environmental authorization (EA) was started during the first quarter of 2013 and was obtained on 01.04.2014.

**Albesti (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 became fully operational in June 2013.

Year **2014** is the second 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 Wind Farm – First Phase 132 MW – Operation

**Facaeni** Wind Farm 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.

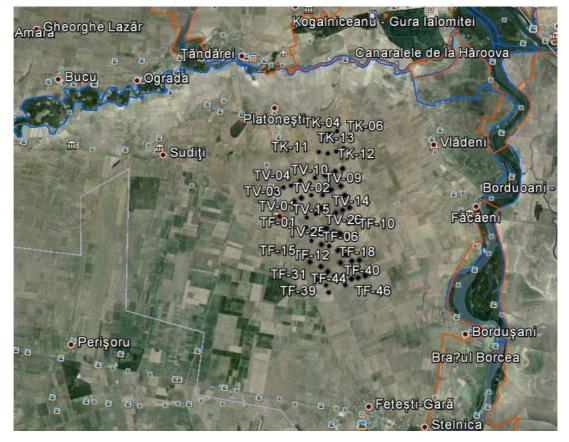


The Site covers an area of ~539,72 ha on a land that has limited agricultural value and is used for crop production, including wheat. Within the Site there are no forested areas or rare/sensitive plant species. Agricultural land use is not colonised other than by grasses and plants which are fast growing and tolerant to the environmental conditions. Water resources are limited, with no irrigation systems in place.

#### Ecology

The 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 lalomitei 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

The implementation of Facaeni project didn't generate changes regarding the structure and integrity of Natura 2000 sites and the impact on lads and vegetation is insignificant and mostly reversible, except the areas permanently occupied by the wind turbines foundations.

The legal procedure in order to obtain the Environmental Authorization for the first phase of Facaeni WF – 132 MW was followed, according with applicable legislation in Romania.

The required documentation was prepared and submitted to EPA lalomita and to Local Councils from the area where the wind farm is located and on 11.08.2014 the Environmental Authorization for Facaeni WF - Phase I was obtained.

**The wind farm was energized on 25.09.2014**, becoming fully operational in December 2014 after the testing period.

## II. Contact authorised representative

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

Name: Laura Lazar Title: Head of Asset Management and Environmental Coordinator Tel: 0040-212010890, Mobile : 0040-725929884 Email: lauralazar@edpr.com

Name: Florentina Fasie Title: Environmental Specialist/EMS Manager Tel: 0040-212010890, Mobile : 0040-735519394 Email: <u>florentina.fasie@edpr.com</u>

## III. <u>Summary of compliance evaluation</u>

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

EDPR succeeded to implement and respect all measures foreseen for the 7 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 phase of Facaeni WF – Phase I 132 MW developed at the beginning of 2014, the company paid zero penalties to Local Authorities. No court trials against the company were instructed because of the construction damages. No other material non-compliances with environmental, social and H&S regulations or law appeared in 2014.

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 2014 was 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 2014 was 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, analyse, 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 labour conditions on sites.

KPMG has confirmed the **A+ GRI rating** for EDPR 2014 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 2014 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 2014**.

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

In 2014 EDPR implemented for Facaeni WF and 2 solar PV plants: Bailesti and Burila Mica the EMS ISO 14001 and maintained EMS system certified for Pestera, Cernavoda, Sarichioi, Vutcani-Albesti and Cobadin WFs and also for the 4 solar PV plants: Cujmir, Vanju Mare, Grojdibodu and Dabuleni.

The certification was obtained in November 2014 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 and solar PV plants.

Currently, EDPR Romania operates 521 MW in wind and solar sector, that are fully EMS certified.

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

#### III.4.4.1. Infrastructure investments in public or private roads during 2014:

During 2014, EDPR invested in rehabilitation of existing local roads for public use:

- DC7 (2.5 km) in Movila locality, that can be used as a second main access road to Făcăeni WF. Estimative investment: 72 kEuro.
  - DC28 (2 km) main access road to Cobadin WF. Estimative investment: 68 kEuro.

**In 2014**, the only investment done in road infrastructure of solar PVs was in Vanju Mare PV rehabilitating main access road and internal accesses due to the damages produced by flooding.

			2014				
Roads			Facaeni WF Vanju Mare PV		Cobadin WF		
rehabilitated in 2014	Ope	eration	Ope	eration	Operati	on	
	km	€K	km	€K	km	€K	
	2.5	72	1	15	2	68	

In all **7 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.

		20	10		2011			
New roads constructed	Peste	ra WF		voda I-II VF	Saricl	nioi WF	Vutco	ani WF
in 2010 and 2011	Oper	ation	Ope	ration	Ope	ration	Oper	ation
	km	€K	km	€K	km	€K	km	€K
	26.82	3078	40	3702	17	1073	11	1000

		2	2012		20	)13	
New roads	Cob	adin WF	Alb	esti WF	Faco	aeni WF	
constructed in 2012 and	Ope	eration	Operation		Construction		
2013	km	€K		€K	km	€K	
			km				
	15.2	1300		1111	55	1300	
			8.3				

Total internal road network for the 7 WFs is ~173 km.

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	leni PV	•	obodu V	•	v Mare V	Baile	sti PV	Burila P	Mica V
In 2012 and	Const	ruction	Const	ruction	Const	ruction	Const	ruction	Const	ruction	Constr	uction
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**.

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

In 2013 and 2014 for the connection of Facaeni WF to the distribution networks, EDP Romania has made following investments:

Electric energy utility updates	Facaeni V	VF
	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
Rehabilitation of existing 400 kV substations (1)	1	3,300
	(Gura Ialomitei)	
Total:		10,019

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/PV 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/PVs 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 Cadastral and Land Booking and Department for Agricultural Development), ANCPI – National Authority of Cadastral Plans

	TAXES PAID T	O LOCAL A	AUTHORITIES IN 2014	
PROJECT		Land	Wind farm / PV	OCPI, ANIF, ANCPI
Cernavoda		13,23	946,22	1,98
Pestera		8,33	237,50	0
Vutcani		3,34	110,95	21,34
Sarichioi		2,36	84,14	3,29
Cobadin		8,9	88,74	0,85
Albesti		1,04	87,68	1,44
Facaeni		26,36	0	12,25
	SUBTOTAL WIND	63,56	1555,23	41,15
Cujmir		0	34,92	26,72
Grojdibodu		0	39,20	23,44
Dabuleni		0	0,048	13,13
Vanju Mare		0	34,57	19,48
Bailesti		0	22,53	8,92
Burila Mica		0	27,39	11,66
	SUBTOTAL SOLAR	0	158,658	185,65
	TOTAL €K	63,56	1713,88	226,8

In 2014 EDPR made following payments. Please see table below:

- 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)

# 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 and PV plants.

During **2014** two site visits were organized in June in Cernavoda WF for a school from Fetesti locality and in April in Cujmir PV plant for two groups of students from Drobeta Turnu Severin locality.

EDPR O&M personnel presented to the visitors the substation and wind turbines, several equipments of the facilities and also provided them interesting information regarding wind and solar energy.



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.

The amount spent in 2014 for presentation materials was 4 €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 2014 EDPR Romania granted **6 school allowances** to children from Facaeni and Pestera localities, areas where EDPR is developing wind farms.

The 6 scholarships are offered for each of the following categories:

- 2 Compulsory Education a lump sum allowance of 500 € each
- 2 Secondary Education a lump sum allowance of 1.000 € each
- 2 University a lump sum allowance of 1.500 € each

The program budget was **6 €k**.

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

During 2014, 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 **2014** was **~15,5** €**K**, as presented below:

Local Council		Councils for social, sports, c utility activities - 2014
Cultural Association Dorulet	1 k€	Facaeni WF
Mihail Kogalniceanu	4,5 k€	Sarichioi WF
Mircea Voda	1,7 k€	Cernavoda WF
Pestera	4,2 k€	Pestera WF
Facaeni	4,1 k€	Fcaeni WF
Total	15,5 k€	

#### III.4.4.6. Donation to "Save the Children" Association

Every year, EDPR Romania is contribution to Save the Children Association, in 2014 with  $3 \in K$ .

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 2014 Facaeni WF and 2 solar PV Plants: Bailesti and Burila Mica were certified with Environmental Management System (EMS) ISO 14001:2004 by Lloyds Register.

Main challenges encountered in 2014 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,

32

Environment & Sustainability, Asset Management) 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 operational with regard to:
  - Assessment of environmental aspects
    - Compliance with legislative and other requirements
    - Setting objectives and targets for 2014
    - 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

Another challenge in 2014 for EDPR Romania was to obtain the Environmental Authorization for Facaeni WF – Phase I 132 MW.

Because the Overhead Line 400 kV is crossing 4 Sites of Community Importance (SCIs) and Special Protected Areas (SPAs) a site visit was organised with the custodians of 2 of them: ROSCI0290 Coridorul Ialomitei and ROSPA0017 Canaralele de la Harsova.

All the legal procedures were followed and the required documentation was prepared and submitted to competent EPA, to the custodians and to the Local Councils where the wind farm is located.

Both custodians emitted favorable permits for Facaeni WF and the Environmental Authorization was obtained on 11.08.2014.

#### IV.1. Information on ESAP implementation – 2014 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 2014	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 (" <b>EMMP</b> ")	An EMMP was implemented during operation of 7 wind farms and 6 solar PV Plants Please see <b>Section IV.2</b> regarding the EMMP implementation and the measures developed in 2014.	The actions foreseen in the EMMP for operational period will be further implemented in 2015.				
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 Cobadin, Sarichioi, Vutcani and Albesti (Vutcani Extension) WFs. For Burila Mica PV Plant a monitoring activity has started in September 2013 and ended in September 2014 in order to comply with the measures foreseen 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 results didn't show any negative impact.	Monitoring activities will continue during 2015 for Cobadin, Sarichioi, Vutcani and Albesti WFs, including Facaeni WF from January 2015, except for: - Pestera and Cernavoda WFs where 2013 was the third monitoring year				

No.	Actions set in ESAP	Implementation during 2014	Further actions
3.	The Company will shut down wind turbines on the basis of written Notice to Close issued by the IOE.	During 2014 no written notices were received from the IOE appointed for the monitored operational facilities. The monitoring results didn't show any negative impact.	The IOE will continue its activity in 2015 for the facilities that will be monitored.
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. Undertake a health and safety risk assessment of all staff job functions and activities, and implement health and safety action plan covering control measures and work instructions as required.	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 2014 a collision Risk Analysis was developed for Cobadin WF. The report is published on company website. Procedure OHSP-ROM/11 - Hazard Identification, Risk Assessment and 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.	In <b>2015</b> a Collision Risk Assessment will be done for Cobadin WF. During 2015, according with the Program of environmental objectives and targets prepared for the EMS system, an analysis of the biodiversity monitoring results will be performed in order to understand and manage associated risks. EDPR H&S responsible is following up the implementation of procedure OHSP- ROM/11.
		nagement, Environmental, Health and Safety ı	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 2014.	The actions foreseen in SEP related to operational period of the wind farms will be further implemented and follow up in 2015.
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 through an internal tool SIS (Sustainability Information System), the reporting to EPAs	The Environmental Manager and OH&S Manager for EDPR Romania will continue to develop

No. Actions set in ESAP	Implementation during 2014	Further actions
	Implementation during 2014 according with conditions set in the environmental authorisations and legislation in force. In 2014 EMS ISO 14001 was implemented and certified to all 7 operational wind farms and 6 operational PV Plants. OH&S Manager employed with EDP Renewables Romania since August 2012	Further actionsthese activities in 2015.According with the Program of environmental objectives and targets prepared for the EMS system, in 2015 several actions will be performed as:Making society more aware about the benefits of wind and solar energyImprove the collaboration with third parties hired for O&M activities<
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 certification by 2012 (voluntary).	<ul> <li>Part of the implemented Environmental Management System EMS ISO 14001 EDPR are the following procedures:</li> <li>EMS-EU_GP 00001 Identification and assessment of environmental aspects_v00</li> <li>EXPR-EU_EMS-GEN 00004 Competence, training and awareness_v01</li> <li>EMS-EU_GP 00007 Operational control, monitoring and measurement_v00</li> <li>EMS-EU_GP 00008 Emergency preparedness and response_v00</li> <li>EMS-EU_GP 00009 Non-conformities, corrective actions and preventive actions_v00</li> <li>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.</li> <li>In 2014 Facaeni WF and 2 solar PVs: Bailesti and Burila Mica were included in the EMS</li> </ul>	communication process with stakeholders In 2015 surveillance audits will be organised for the facilities certified with ISO 14001 and OHSAS 18001. The surveillance audits will be conducted by Certification organisations (Lloyd's Register Quality Assurance).
	process and certified with ISO 14001. Site OH&S Coordinators developed the Site OH&S Management Plans for each of the construction sites. Each Contractor	

No.	Actions set in ESAP	Implementation during 2014	Further actions
		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.	
		The implementation of the OH&S Management System started in EDP Renewables Romania in the second quarter of 2013 with the aim of having facilities summing 378 MW covered by certification by end of 2013 and extension of implementation of OH&S Management System to new built facilities in 2014. As planned, the surveillance audit performed by LRQA in December 2014, was extended to new built facilities with the purpose of including these three, namely, Burila Mica PV plant, Bailesti PV Plant and Facaeni WF, in the OHSAS certification.	
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 use such equipment.	All contract signed with contractors hired in the construction and operation have stipulated the obligation of complying with all national environmental, health 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 legal requirements, it was foreseen to hire a Health and Safety Coordinator during the construction works. His task was to check 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 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	During 2015, will be implemented an online tool "E- Gestiona" for facilitating the management of contractors hired during operation.

No.	Actions set in ESAP	Implementation during 2014	Further actions
		performing tasks in our facilities have appropriate competence and they are fit for the job.	
		For 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.	Surveillance audits were conducted by Banks representatives for the wind projects and PV projects by external companies (KPMG, WSP Group, Garrat Hassan). In 2014 no new project was developed or	n/a
	Greenneid) projects.	constructed.	
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. <u>www.edpr.com/susta</u> <u>inability</u>
		Biodiversity monitoring reports (of Cobadin, Vutcani, Albesti and Sarichioi WFs) and noise measurements reports (for all facilities) were made publicly by submission to Local EPAs.	
		Interested public can consult these reports at EPAs headquarters and on EDPR website.	
1.7	Develop and implement	Site OH&S Coordinators developed the Site OH&S Management Plans for each	In 2015, the focus shall be given to correct

No.	Actions set in ESAP	Implementation during 2014	Further actions
	an occupational health and safety (OHS) plan to guide all activities on project sites during site preparation, construction, and operation.	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.	implementation and use of the Risk Guides documents delivered for every operational site.
	New projects:		
11.1	Commission external Environmental and Social Due Diligence Assessments according to implemented EHS due diligence procedures.	External companies were hired to conduct/certify or monitor the implementation EMS and OH&S system for the 7 operational WFs and 6 operational PV Plants.	In 2015 all operational facilities will be subject of EMS 14001 and OH&S management system surveillance and recertification where applicable.
11.2	Undertake initial ornithological and baseline environmental screening of projects during initial wind survey assessments. Avoid environmentally sensitive areas, such	For Facaeni WF – Phase I 132 MW the EIA procedures were followed prior to construction. Part of this study was to undertake a biodiversity survey and no negative impact was identified. All the conditions imposed by Local EPAs in the environmental agreements were fully complied. Regarding Facaeni WF some additional	n/a
	as designated Natura 2000 areas under the EU Birds Directive.	<ul> <li>measures were implemented for birds protection:</li> <li>Artificial nests were installed on the high voltage poles</li> <li>Flagpoles were mounted on the conductors</li> <li>"Anti-Storks" devices were installed (groups of spikes mounted on the console above the isolators)</li> </ul>	
11.3	Complete detailed stakeholder mapping for each project.	For Facaeni WF, meetings with the Romsilva custodians of 2 natural protected areas were held. After site visits and consulting the documentation received, they emitted favourable permits for the wind farm.	n/a
11.4	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 and respected in the previous years.	n/a

No.	Actions set in ESAP	Implementation during 2014	Further actions
		In 2014 no new projects were constructed.	
11.5	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.	According with the Program of environmental objectives and targets prepared for the EMS system, an analysis of the biodiversity monitoring results will be performed in order to understand and manage associated risks.
II.6	Prepare and disclose Non Technical Summaries (NTS) of	A NTS was elaborated for each project during EIA procedure followed for obtaining the environmental agreement.	n/a
	the ElAs	In October 2014 a NTS and SEP were elaborated for Facaeni WF – Phase I 132 MW.	
II.7	Include EHS	In 2014 no new projects were constructed.	These measures will
	management requirements in contracts, including for EPC contractors	For the operational period, all contracts 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 Procedures developed and implemented policy of EDP Group.	be implemented to any other operational contract signed during 2015.
		Also for the EMS system, all services contractors received and signed a form (which is attached to the contract) regarding the environmental requirements for subcontractors and were informed about EPDR Environmental Policy.	
11.8	Prepare and implement internal and external Emergency Plans, and Occupational Health and Safety Plans for construction.	Was implemented for Sarichioi and Vutcani WFs as a requirement of EMS ISO 14001 system, as soon as the WFs become operational. Firefighting 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 firefighting strategies taking into consideration the facilities described into the firefighting plans, distance and itinerary to facilities. The firefighting plans are subject to tests in the periodical firefighting drills; during 2014, fire drills were performed in all locations across EDP Renewables Romania.	During 2015, emergency drills will continue to be performed in all 13 operational facilities, in order to test the emergency plans.

No.	Actions set in ESAP	Implementation during 2014	Further actions
III. 1	Provide annual reports on the Environmental, Social, Health and Safety (ESHS) to the EBRD and IFC and other shareholders. A general summary of environmental and social issues to be provided on the web site.	An Annual Report was prepared in January 2015 and published on company website. www.edpr.com/suatainability	This Annual Environmental Report for 2014 will be published on our company website. <u>www.edpr.com/suat</u> <u>ainability</u>
III. 2	Set up and operate grievance forums: information offices, hot lines, etc. to enable meaningful public consultation and information process	EDPR Romania had conducted several visits of local inhabitants and students to wind farms and solar PVs under operation with the aim of sustaining local social and educational activities. A grievance mechanism included in the Internal Regulation Document and Code of Ethics is available at each facility for public consultation or complaints, if any.	According with the Program of environmental objectives and targets prepared for the EMS system, in 2015 several actions will be taken in order to make society more aware about the benefits of wind and solar energy by conducting educational campaigns in the local communities where the wind farms and PV plants are installed.

## IV.2. Information on EMMP implementation – 2014 year

EMMP contains a set of mitigation and enhancement measures that EDP Renewables Romania will implement during various stages within the lifetime of the 7 operational wind farms, considered as Category 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 Sarichioi, Vutcani, Cobadin, Albesti (Vutcani Extension) and Facaeni 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.

#### 2014 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:

No	ЕММР	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
1.1	Undertake site specific bird and bat surveys during and after construction	IFC Performance Standard EBRD PR 6 Requirement of Environment al Agreement (including environment al monitoring programme)	Specialised companies were hired for biodiversity monitoring of Cobadin, Sarichioi, Vutcani and Albesti (Vutcani Extension) WFs. For Burila Mica PV Plant a monitoring has started in September 2013 and ended in September 2014 in order to comply with the measures foreseen 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 that can be generated 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 for Cobadin, Sarichioi, Vutcani and Albesti (Vutcani Extension) WFs will continue during 2015, including Facaeni WF (starting with January 2015).
1.2	Establish a protocol / approach for monitoring of ecological impacts during construction and operation	IFC Performance Standard EBRD PR 6 Requirement of Environment al Agreement (including environment al monitoring programme)	During 2014 no new projects were constructed. For the operational period the monitoring is made through biodiversity reports and EMS procedures.	The monitoring activities will continue during 2015
1.3	Undertake monitoring of effectiveness of ecological off-	IFC Performance	Not applicable. The results of undertaken avifauna monitoring during construction works didn't show any	n/a

No Actions set in . EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
setting 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)	Standard EBRD PR 6 Requirem ent of Environm ental Agreeme nt (includin g environm ental monitorin g program me)	adverse impacts that needed further studies. In 2014 no new projects were constructed.	
1.4 Undertake noise monitoring at the site perimeter during operation	Best practice Government Decision no. 321/2005 (requirement of Environment al 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 2014 in order to elaborate Noise Measurements Reports for all 7 operational WFs and 6 operational PV plants. a) Elaboration of Noise Maps for 7 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	Same actions are foreseen in the environment al authorisation s for all operational years and will continue in 2015.

No Actions set in . EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
		<ul> <li>g) Elaboration of final noise assessment report and submission to competent EPA.</li> </ul>	
		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 during construction periods of all facilities.	n/a
		Not applicable in 2014 - no new projects were constructed.	
<b>1.6</b> Implement the construction waste	Romanian Legislation and	In September 2014 an external environmental audit was conducted by Lloyds Register Company.	An annual environment al audit will
management plan and maintain records for annual environmental	EU Directives Environment al Permit	According with GD 856/2002 non- hazardous and hazardous waste quantities produced in 2014 were reported in January 2015 at:	be conducted by an external company for
audits		- Constanta EPA for Pestera, Cernavoda I-II and Cobadin WFs.	all operational facilities.
		- Tulcea EPA for Sarichioi WF.	Waste
		- Vaslui EPA for Vutcani WF and Albesti (Vutcani Extension) WFs.	reporting to EPA is
		- Ialomita EPA for Facaeni WF.	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.
1.7 Continue the Ecological monitoring during the entire construction works and for at least one year following commissioning to	Environment al agreement	See point I.1.	The monitoring will continue in 2015.
provide a more complete			
ANNUAL MONITORING REPOI	रा		2014

No	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
	baseline of the sites conditions and to verify the conclusions of the EIA Reports			
1.8	Review and monitor implementation of Contractors' health and safety plans, health and safety risk assessments and associated procedures during construction and operation (e.g. maintenance activities). Ensure effective control and management of all health and safety risks by contractors, such as through the adoption of safe working practices and use of personal protective	Romanian Legislation (e.g. Law 319/2006 on Health and Safety at Work) and EU Directives EBRD PR2	As per provisions of procedure OHSP- ROM/05 - Safety Inspections, contractors' activity is periodically checked throughout formal safety inspections in order to ensure they fulfil legal and EDPR's requirements with regard to health and safety. Besides safety inspections of contractors, procedure OHSP-ROM/07 - Contractors' requirements - defines the controls set by EDPR in terms of risk assessment, training, competence and ability of personnel for the assigned tasks. Formal "works agreements" are established with contractors that contain duties and responsibilities of both parties and arrangements to address main hazards. 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. In addition, EDPR had closed technical assistance contracts and hired OH&S Site Coordinators for each facility under	In 2015 EDPR Romania will implement a new online tool for managemen t of contractors.
1.9	equipment where required. 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 Environment al Permit	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.	

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
2.1	Provide information on public access	Best practice	During operation EDPR Romania allow visits of children from local community in order to support educational activities regarding renewable energy – wind and solar. During 2014 several visits of students were organized in Cernavoda WF and Cujmir PV plant.	In 2015 EDP Romania will continue supporting social and educational activities for local inhabitants
			No complaints were registered related to the access.	and interested public.
2.2	Undertake vocational education /	Best practice	30% of hired personnel by contracted companies is from local communities.	Same services will be subcontracted
	training where practicable during construction		For all 7 operational wind farms and 6 operational PV Plants Local Companies (Elcomex, General Electric, Pet Communications, Efacec, GES, Isastur) were contracted for substations and PVs operations. Other local companies were contracted for different services: waste and wastewater management, security, snow removal services, maintenance, etc.	in 2015 depending on the needs.
2.3	Undertake preparation and implementation of a Construction	Best practice Would provide a mechanism to assist in implementation of conditions of	A Construction Environmental Management Plan (CEMP) was developed and distributed for implementation to all constructors hired during construction periods of all facilities.	n/a
	Environmental Management Plan	the Environmental Permit	Not applicable in 2014 - no new projects were constructed.	

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

# 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 2014	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 November 2014 Facaeni WF and 2 solar PV Plants: Bailesti and Burila Mica were certified by Lloyds with environmental management system ISO 14001, contributing in this way to compliance with this action. Also the EMS was maintained in the other operational facilities. 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 identification, evaluation and control.	Annual EMS audits performed by Lloyds. EMS 14001 will continue to be implemented and maintained in all operational facilities during 2015
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 2014 is issued every year by EDPR Group, available at: <u>http://www.edpr.com/sustainability/d</u> <u>ocuments-library-and-publications/</u>	-
4.3	Establish formalised procedures to monitor and review the Project in accordance with PR1.	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.	n/a
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 Developmen t	During 2014 several visits to Cernavoda I-II WF and Cujmir PV plant were organised for children/students of public schools/universities of Fetesti and Drobeta Turnu Severin localities. EDPR O&M personnel provided information regarding wind and solar energy and presented to them the substations, wind turbines and other equipments in the facilities. In order to sustain educational activities outside the school and public awareness, brochures and	According with the Program of environment al objectives and targets prepared for the EMS system, in 2015 several actions will be taken in order to make society more aware

		Derfermen		
No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
			presentation materials were distributed to every visitor and to Local Councils. During 2014, EDPR Romania contributed to local budget of the localities where is present (Pestera, Mircea Voda, Mihail Kogalniceanu and Facaeni) 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.	about the benefits of wind and solar energy by conducting educational campaigns in the local communities where the wind farms and PV plants are installed.
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	<ul> <li>Part of the Environmental Management System EMS ISO 14001 EDPR implemented following procedures:</li> <li>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</li> <li>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</li> </ul>	Mentioned procedures will be followed in 2015.
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: <u>http://www.edpr.com/sustainability/d</u> <u>ocuments-library-and-publications/</u>	-
4.8	Undertake a regular environmental audit	Best practice	An EMS audit performed by Lloyds Register was conducted in September 2014. As a result Facaeni wind farm and	An EMS audit will be

No.	Actions set in EMMP	Performance Standard /Legislation or permits requirements	Implementation during 2014	Further actions
	(every year) of the wind farm		2 PV plants were certified with EMS ISO 14001.	conducted also in 2015.
4.9	Monitor subcontractors' compliance with EDPR and EBRD health and safety policies and procedures Creation of a register of near-misses and accidents (including by subcontractors)	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. 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 re- vegetation over time	Best practice EBRD PR6	Please see description of Environmental Construction Monitoring campaigns. Not applicable during 2014 - no new projects were constructed.	-

## Environmental Construction Monitoring (ECM) and CEMP:

During 2014 no new projects were constructed, in this regard the ECM and CEMP was not applicable.

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

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



## IV.3. Information on SEP implementation – 2014 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:

- operational period of 6 solar PV plants
- operational period of: Pestera, Cernavoda, Sarichioi, Vutcani, Cobadin, Albesti (Vutcani Extension) and Facaeni 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. 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 2014 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 2014:

No.	Actions set in SEP	Type of information disclosed	Forms of communications	Stakeholder Groups informed
1.	Publication of ESIA Disclosure Package for Facaeni WF	- Stakeholder Engagement Plan, - Non- Technical Summary,	Internet: - Company website and Emails	All interested Stakeholders
2.	Announcem ent of the Facaeni Wind Farm commissioni ng and start-up	Formal notification of operation of the wind farm.	Internet: - Company website	All interested Stakeholders
3.	Announcem ents on maintenanc e 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: - Facaeni WF	All interested Stakeholders
4.	Monitoring programme to assess the impacts to birds and bats that may be occurring during the operational phase of the wind farms	Statistics and recorded data to comprised: - Bird monitoring to include recording the flying height; maximum approach height towards the wind turbines; modifications of any migration routes; - Identification of breeding birds in the area. - Monitoring of species of birds or bats found dead near the wind farm.	<ul> <li>Internet: Company website</li> <li>reports submitted to competent environmental protection agencies, SOR and other interested organisations</li> </ul>	All interested Stakeholders EPAs: Constanta, Tulcea, Vaslui, Ialomita SOR, Eco Pontica, ARBDD
5.	Employees	Internal meetings, employees and managers.	Monthly coordination Meetings with all departments involved: Engineering, Environment & Sustainability,	Internal meetings, employees and managers. As part of the OH&S Management System

No. Actions set in SEP	Type of information disclosed	Forms of communications	Stakeholder Groups informed
		Operation& Maintenance, Assets and Projects Managers.	implementation, safety commission took place as according to provision of the OH&S Management System

## V. <u>Compliance with IFC Performance Standards</u> 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 facilities: (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), Facaeni WF (certified in 2014), Bailesti and Burila Mica PV plants (certified in 2014).

For 2015 the intention is to continue to implement and maintain EMS ISO 14001 in all operational facilities.

#### **Environmental Policy:**

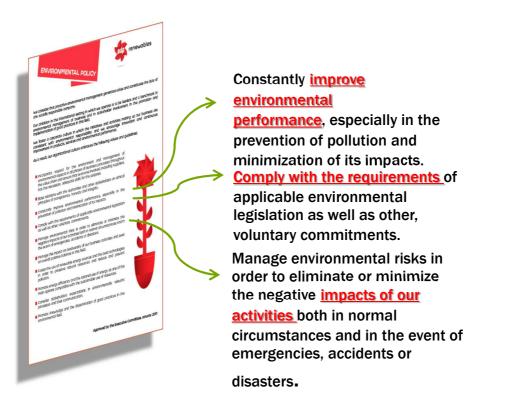
Environmental Policy was approved in January 2011 by EDPR Executive Committee for all countries were EDPR wind farms are present, including in Romania. Environmental Policy was sent to all identified stakeholders for all operational facilities.

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;

52

- 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.

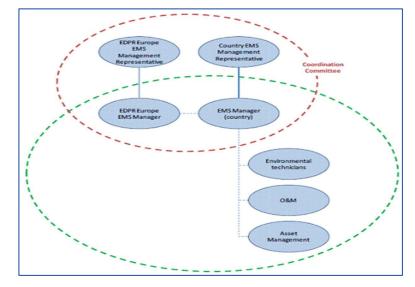
Responsibilities regarding EMS requirements and reporting to EMS Manager were added to job descriptions of all employees from Romania.

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 (Florentina Fasie). The EMS Manager reports to the Europe EMS Manager (Angela Toledo) and to the Country Management Representative.

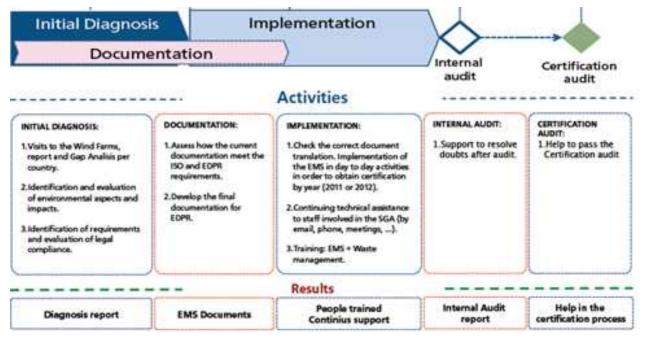
Responsibilities regarding EMS requirements and reporting to the EMS Manager have been added to the job descriptions of all employees in Romania.

The EMS organisational chart is:



#### Phases and results of EMS Implementation in 2014:

EDPR contracted Cality Consulting Service to help in the implementation of ISO 14001: 2004. CCS activities are presented in following figure:



# List of procedures, forms of EMS ISO 14001 implemented in 2011, 2012, 2013 and 2014:

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 Proce	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 complianceof
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
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.Controlofdocuments4.5.4.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

CODE	DOCUMENT	SCOPE	SECTION OF ISO 14001:2004 STANDARD
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- SPV-00024	O&M Procedures for PV Waste management and module recycling	PV Waste management and module recycling	4.4.6. Operational control
EXPR- GLB_TSO&M- SPV-00025	O&M Procedures for PV Water management for module cleaning	M Procedures for PV Water management for module Water cleaning anagement for	
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	<b>o i i i</b>	
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.Controlofdocuments4.5.4.Control of records
EMS-EU_F- 00006	Distribution Control EMS documentation_v00	Comply with EMS-EU_GP 00006	4.4.5.Controlofdocuments4.5.4.Control of records
EMS-EU_F- 00007	Env Monitoring & Measurement Program_v00	Comply with EMS-EU_GP 00007	4.4.6. Operational control

CODE	DOCUMENT	SCOPE	SECTION OF ISO 14001:2004 STANDARD
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 operational facilities:

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.

In November 2014 Facaeni WF, Bailesti and Burila Mica PV plants were certified with EMS 14001 by Lloyds.

The certificates obtained from Lloyd's Register Quality Assurance are presented in the followings:



## CERTIFICATE OF APPROVAL

This is to certify that the Management System of:

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

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

#### ISO 14001:2004

The scope of this approval is applicable to:

## Operation and maintenance management of wind farms and photovoltaic solar plants.

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: LIS6010748

Original Approval:	17 December 2010
Current Certificate:	24 November 2014
Certificate Expiry:	16 December 2016

Issued by: Lloyd's Register EMEA For and on behalf of Lloyd's Register Quality Assurance Limited.



This document is induct to the provision below. As: D. Carbo I, 44 – 47, 1200–948 (abov, Yonugal Registration survive: 110/510000 For wrst carbonial following and the second office Village, Stein Drive, Coverstry Cv3 453, United Ringdom, The approval is carbon and in accordance with the URGA exceeded all certification procedures and manifold by URGA. The use of the URAS Accreditation Mark indicates Accreditation in regist of these activities covered by the Accreditation Certificate transmit 001 sec.

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

Locations:

SC Poteki Solar S.A. Photovoltaic solar plant Dabulers Dolj County Romania SC Studina Solar S.A. Photovoltaic solar plant Grojdloodu Off, County! Romania SC Ialomita Power S.R.L. Wind fam Facaeni lalomita County Romania SC Foton Delta S.A. Photovoitaic solar plant Bailesti Doil County Romania SC Foton Epsilon S.A. Photovoltaic solar plant Burila Mica Mehedinty County Romania

#### Activities;

Operation and maintenance management of photovoltaic solar plarit.

Operation and maintenance management of photosoltaic solar plant.

Operation and maintenance management of wind farm.

Operation and maintenance management of photovoltaic solar plant.

Operation and maintenance management of photovoltaic solar plant.

Approval Certificate No: LIS6010748



17 December 2010

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Page 24 nf 26



Approval Certificate No.: 156010748 Av. D. Carlos A. (2014)

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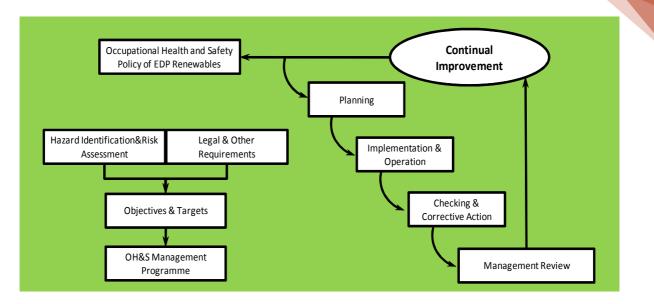
#### OH&S Management System 18001:2007:

During 2014, the implementation of the OH&S Management System was successfully continued in EDP Renewables Romania, focus being given to latest built facilities, namely Facaeni Wind Farm, Burila Mica PV Plant and Bailesti PV Plant, along with improving the overall performance of the organisation in health and safety at work. The goal was to have capacities totalling 521.4 MW covered by certification. Together with the certification audit carried out by Lloyd's Register Quality Assurance, the new facilities were included in the audit for the extension of the existing certifications. The audit report concluded that the OH&S Management System implemented in EDP Renewables Romania complies with the requirements of OHSAS 18001:2007 and made the recommendation for maintaining and extension of certification. The certified scope was maintained to "Activities including and associated with operation and maintenance management of wind farms and photovoltaic parks". The full list of locations covered by certification is presented below:

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

The OH&S Management System includes the OH&S Manual plus 11 procedures covering all requirements of OHSAS 18001:2007.

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 fulfils 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.

Clause	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		Occupational 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 Requirements	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	Implementation	and operation		
4.4.1	Resources, roles, responsibility, accountability and authority	OHSM-ROM	OH&S Manual – Section 9	
4.4.2	Competence, training and awareness	OHSP-ROM/04	Competence , 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	Communicatio n, participation and consultation	OHSP-ROM/03	Consultation, participation and communicati on	This procedure is to describe the channels of consultation and participation of employees regarding the aspects of occupational health and safety, and specifically defining: • Internal communications relating to

Clause	OHSAS	Code	Name	Purpose
				<ul> <li>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</li> </ul>
4.4.4	Documentatio	OHSM-ROM	OH&S Manual	outside EDPR.
	n		– Section 5	
4.4.5	Control of documents	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> <li>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.</li> </ul>
4.4.6	Operational control	OHSM-ROM	OH&S Manual – Section 12	
4.4.7	Emergency preparedness and response	TI-ROM/00-02	Emergency preparedness 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 measurement and monitoring	OHSP-ROM/05 OHSP-ROM/06	OHS Inspection Personal Protective Equipment and working	
		OHSP-ROM/07	Clothes OHS Contractor Requirements	
4.5.2	Evaluation of compliance	OHSP-ROM/02	Legal Requirements	To define the methodology used by the Health and Safety Department and the OH&S Manager Romania to identify

Clause	OHSAS	Code	Name	Purpose
				and maintain an updated register with the legal and other OH&S requirements to which the organization subscribes.
4.5.3	Incident investig	ation, nonconforn	nity, corrective a	ction 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.
4.5.3.2	Nonconformity , corrective and preventive action	OHSP-ROM/09	Nonconformit ies	<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> <li>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.</li> </ul>
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	Management 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 solar 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:	25 January 2015
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.



31 Iancului Avenue, 021716, 2 District, Bucharest For and on behalf of Hiramford, Middlemarch Office Village, Siskin Drive, Coventry, CV3 4FJ, United Kingdom

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

#### Head Office

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

#### Locations

Cernavoda Cernavoda, Constanta County

Pestera Pestera, Constanta County

Sarichioi Sarichioi (VS Wind Farm) DJ 222, Tulcea County

Cobadin Cobadin, Constanta County

Vutcani Vutcani (Wind Farm), DJ 244A, Vaslui County

Albesti Albesti, Vaslui County

## Activities

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

#### Activities

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

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

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

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

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

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

Page 1 of 3

Approval Cerificate No: BUC6018490 31 Iancului Avenue, 021716, 2 District, Bucharest For and on behalf of Hiramford, Middlemarch Office Village, Siskin Drive, Coventry, CV3 4FJ, United Kingdom

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

#### Locations

#### **Activities**

Grojdibodu Grojdibodu , Olt County

Dabuleni Dabuleni, Dolj County

Cujmir Cujmir, Mehedinti County

Vainju Mare Solar Park Vinju Mare, Mehedinti County

Facaieni (Ialomita Power) DN 38, Facaieni, Ialomita County

Bailesti (Foton Delta) Silozului St., Dolj County Activities including and associated with operation and maintenance management of photovoltaic solar park.

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

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

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

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

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



Page 2 of 3

Approval Cerificate No: BUC6018490 31 Iancului Avenue, 021716, 2 District, Bucharest For and on behalf of Hiramford, Middlemarch Office Village, Siskin Drive, Coventry, CV3 4FJ, United Kingdom

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

#### Locations

#### **Activities**

Burila Mica (Foton Epsilon) DN 56C, Burila Mica, Mehedinti County Activities including and associated with operation and maintenance management of photovoltaic solar park.

Approval Certificate No: BUC6018490

Original Approval:	15 January 2014
Current Certificate:	25 January 2015
Certificate Expiry:	14 January 2017



Page 3 of 3

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# 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: Cality Consulting Service. A training regarding EMS requirements was provided to EDPR employees: EMS Manager, Asset Managers and Wind Farm/PV plant Operation Managers.

Following procedures from EMS system required training of operational personnel:

- According with EXPR-EU\_EMS-GEN 00004 Competence, training and awareness procedure\_v01, part of EMS system implemented in 2014 EMS Manager Romania identified, proposed and analysed 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 TMP-EU\_EMS-GEN-00003 Environmental Training Needs\_v01 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:

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 first aid.
- **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.



## Trainings performed in 2014:

The table below describes the trainings performed during 2014:

Training	Scope	EDPR /Contractor Employees	Persons trained	Training time (man- hours)	Cost (US\$)
Induction	OH&S and emergency response, including requirements of OH&S Management System	EDPR	4	64	0
On-the-job	OH&S and emergency response	EDPR	4	64	0
Periodical training	Manual handling, VDEs, ergonomics, hazards & management of risk, earthquakes, general emergency response	EDPR	31	91	0
OH&S Management System	Updates of the OH&S Management System	EDPR	8	32	0
Work at height	Working at height/rescue from height and nacelle delivered by Miller/Honeywell	EDPR	7	112	5100
Operation of substations	Training delivered by	EDPR	6	102	7570
Use of service lifts	Training delivered under the scope of formal certification as competent users of lifting equipment	EDPR	5	50	Under the scope of service contract
Safety induction	Training for works in EDPR facilities; in total, there were 180 training sessions and 89 contractors involved	Contractors	871	269	0
Environmental emergency response (including drills)	Training on the preparation of drills	Employees EDPR Romania	9	15	0
SALEM - environmental legislation tool	Provided by EMS Manager to Asset Managers	Employees EDPR Romania	4	2	0
Environmental Management System in Europe EDPR	Provided by EMS Manager to Asset Managers and O&M Managers	Employees EDPR Romania	13	8	0
SIS tool	Provided by EMS Manage to O&M Managers	Employees EDPR Romania	8	4	0
Update on Environmental Legislation and EMS requirements	Provided by EMS Manager	Employees EDPR Romania	4	2	0
Waste Management	Provided by EMS Manager to O&M Managers	O&M Managers	8	3	0
Operational Control and Emergency preparedness and response	Provided by EMS and O&M Managers	Contractors	35	4	Ο

# 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, 2013, 2014 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 2014 that will be 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 2014 associated with the operation of any facility 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 and its later updates. 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.

During 2014, the entire process for management of contractors was reviewed and technical specifications were issued in order to ensure health and safety is correctly addressed to. A online tool was also established in Romania for the management of contractors which will enable EDPR have a better command on the activities of contractors on its premises.

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 has 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 and implemented for 2014.

Regarding benefits, apart from the health insurance, since July 2014 a life insurance was provided to every employee.

## 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.

Indicators:		Category	2010	2011	2012	2013	2014
Total number of	А	Employees	13	18	32	31	32
workforce		Contractors	860 <sup>1)</sup>	980 <sup>1)</sup>	13001)	395 <sup>IV)</sup>	168
Total number of Man	В	Employees	18,984	26,608	37,471	58,560	59,888
Hour Worked		Contractors	322,616	392,000	465,626	781,479	331,67 1
Total number of	С	Employees	0	0	0	0	0
facilities		Contractors	0	0	0	0	0
Total number of lost	D	Employees	0	0	ן וו)	0	0
time accidents		Contractors	0	0	0	1	1
Total Lost Time	Е	Employees	0	0	<b>1 1</b> II)	0	0
accidents (Man-Day)		Contractors	0	0	0	43~)	28 <sup>∨I)</sup>
Lost Day Rate	E/	Employees	0	0	2.93 ())	0	0
	В	Contractors	0	0	0	0.55 <sup>III)</sup>	0.84 <sup>III)</sup>
Fatality Rate	C	Employees	0	0	0	0	0
	/B	Contractors	0	0	0	0	0

Occupational Health and Safety performance of the Company:

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

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

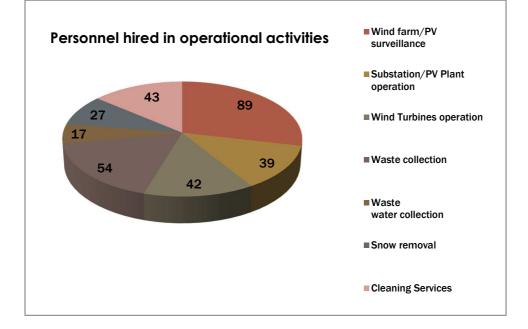
VI) one accident recorded in Bailesti PV Plant in delivering operation services in 2014 – injured person trips and falls and suffers injury to elbow.

### INDIRECT EMPLOYMENT / NEW JOBS in 2014:

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.

For operational activities developed in 2014 for the 7 operational wind farms and 6 operational PV Plants personnel was hired from local communities, as presented in the table below:

		2014 – New jobs created in local communities											
Operational activities	Facaeni WF	Pestera WF	Cernavoda 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/PV surveillance	12	6	14	8		7	6	4	8	4	4	8	8
Substation/PV Plant operation	6	4	6	6		6	4	1	1	1	1	1	2
Wind Turbines operation	10	6	8	6	4	4	4	n/a	n/a	n/a	n/a	n/a	n/a
Waste collection	5	5	5	5		5	5	4	4	4	4	4	4
Waste water collection	2	2	2	2		1	2	1	1	1	1	1	1
Snow removal	4	2	4	2	2	2	2	1	1	1	2	2	2
Cleaning Services	2	2	2	2	1	1	2	6	6	6	5	5	3
EDPR Romania O&M Personnel	1	1	1	1		1	1		1			1	
Total	42	28	42	32	27	27	26	18	22	18	18	22	21



Construction activities of **Facaeni WF** were closed in 2013 for civil works. During 2014, electrical works were finished in Facaeni and Movila substation until reception of works date: May 2014.

Connection works in Gura Ialomtei have started in 2014 and finished in September 2014.

EDPR Romania subcontracted works to different companies that hired personnel from local communities, as presented in following table:

Construction activities:	Facaeni WF
Substation construction – 33/110/400 kV Facaeni	15
Substation construction – 33/110 kV Movila	10
Wind turbines tests	10
Total	35

## 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.

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. Complying with environmental authorisation conditions issued by competent EPAs practically means the compliance with all applicable environmental standards and legislation in force.

The environmental authorisations for the 7 operational wind farms and 6 operational PV plants are published on EDP Renewables website.

The validity of the environmental authorisations is 5 (five) 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 (waste evidence, noise measurements, biodiversity reports, etc) was performed in 2014 to Environmental Protection Agencies as foreseen in the environmental authorizations of the 7 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 2014.

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 7 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 points for wind farms are constructed on a concrete platform foreseen with a roof and proper fencing. For PV plants they were installed during operational period, having a steel or gravel floor, metal roof and wire fence.

Bins for selective collection of hazardous and non-hazardous waste are placed and labelled according with the collected type of waste. All clean points are endowed with retention tanks for HW containers in order to prevent accidental leakages and also with biodegradable absorbent materials to correct accidental spillage.

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

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(%)
Non- hazardous	Mixed municipal waste (LER 20 03 01)	633	0	633	0%
waste	Paper and cardboard (LER 20 01 01)	602	602	0	100%
	Metals (LER 20 01 40)	380	380	0	100%
	Plastics (LER 2001 39)	475	475	0	100%
	Biodegradable waste (LER 20 02 01)	1076	1076	0	100%
	Waste printing toner other than those mentioned in 08 03 17 (LER 08 03 18)	11	11	0	100%
	Alkaline batteries (except 16 06 03) (LER 16 06 04)	0,5	0,5	0	100%

### 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 (%)
Hazardous waste	Mineral based non- chlorinated hydraulic oils _(LER 13 01 10*)	342	342	0	100%
	Mineral-based non- chlorinated engine, gear and lubricating oils (LER 13 02 05*)	754	754	0	100%
	Mineral-based non- chlorinated insulating and heat transmission oils (LER 13 03 07*)	0	0	0	0%
	Packaging containing residues of or contaminated by dangerous substances (LER 15 01 10*)	665	665	0	100%
	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances (LER 15 02 02*)	2407	2407	0	100%
	Metallic packaging containing a dangerous solid porous matrix (e.g. asbestos), including empty pressure containers (LER 15 01 11*)	0	0	0	0%
	Oil filters (LER 16 01 07*)	2597	2597	0	100%
	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 (LER 20 01 35*)	218	218	0	100%
	Lead batteries (LER 1606 01*)	0	0	0	0%
	Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12 (LER 16 02 13*)	0	0	0	0%
	Fluorescent tubes and other mercury-containing waste (LER 20 01 21*)	0	0	0	0%
	Waste paint and varnish containing organic solvents or other	0	0	0	0%

Type of waste	Item	Generatio n (kg/year)	Recovery &Reuse (kg/year)	Treatment /Destructi on/Dispos al (kg/year)	Recycling Rate (%)
	dangerous substances (LER 08 01 11*)				

# 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  $CO_2$  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  $CO_2$  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	152606	84391
Sarichioi WF	65039	35966
Vutcani WF	52058	28788
Cernavoda 1 WF	126489	69948
Cernavoda 2 WF	126775	70107
Cobadin WF	74344	41112
Albesti WF	55929	30929
Facaeni WF	79429	43924
Dabuleni PV	8971	4961
Grojdibodu PV	12042	6659
Cujmir 1 PV	7240	4003
Cujmir 2 PV	7287	4029
Vanju Mare PV	10598	5861
Burila Mica PV	7923	4381
Bailesti PV	4871	2694
Total	791608	437759



## 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 **2014** noise measurements were done for all 7 operational WFs and 6 operational PV Plants.

### Ambient noise – maximum values measured in 2014:

	Unit	IFC environmental guidelines	EU/Host Country standards	Result of monitoring	Compliance	
Residential, institutional,	dBA					
educational:						
Day time		55	50	27-41	Yes	
Night time		45	40	-	-	
Industrial, Commercial:	dBA					
Day time		70	70	n/a	Yes	
Night time		70	70	n/a	Yes	
Distance from the site	m	Receptors in	Residential,	institutional,	educational	
boundary to the closest		areas:				
noise receptors		>700 m				
-		Receptors in industrial, commercial areas:				
		0 m				

All the measurements were conducted with a sound level meter type Blue Solo Metravib. For the mandatory calibrations, we used an 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 and PV plants 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 2014 no emergency situations were registered. There have been made simulation for different situations: fire and extreme meteorological conditions.

## 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 2014 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, bird strikes, 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 7 operational wind farms. Data is recorded on external hard disk.



### Information regarding avifauna monitoring programs:

For Pestera and Cernavoda WFs the monitoring activities were ended in December 2013 after 3 years of monitoring.

## The conclusions of 2014 monitoring programs of avifauna, flora and habitats for Vutcani WF are:

In the area of Vutcani WF, near natural protected area ROSCI0335
Padurea Dobrina Husi, habitat 91Y0 – Dacian Forests of oak and hornbeam
– there is a favourable conservation status. The impacts or current pressures
and future threats will not have a significant effect on the habitat from this
area.

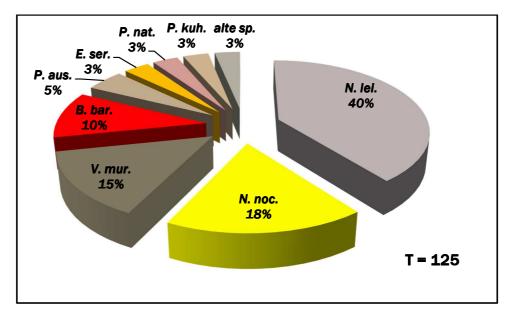


 Birds monitoring: during 2014 monitoring period of Vutcani WF area a number of 30 birds species were observed (Ciconia ciconia, Sturnus vulgaris, Hirundo rustica, Alauda arvensis, Carduelis carduelis and others). From the 30 species identified, 21 were found nesting in the wind farm or near it and the other 11 were found nesting in the forest or at its edge, but feeding also inside the wind farm.

3 species are included in Annex 1 – Bird Directive: Ciconia ciconia, Lanius collurio and Lanius exubitor.

Regarding birds/bats mortality, no negative impact was identified according with the monitoring reports results.

Bats monitoring: during 2014 monitoring a number of 12 species of bats were identified. The dominant ones are: Nyctalus leisleri (40%), Nyctalus noctula (18%) and Vespertilio murinus.



According with the monthly registrations performed, depending on the year period a number of bats crossings per detector per hour was registered:

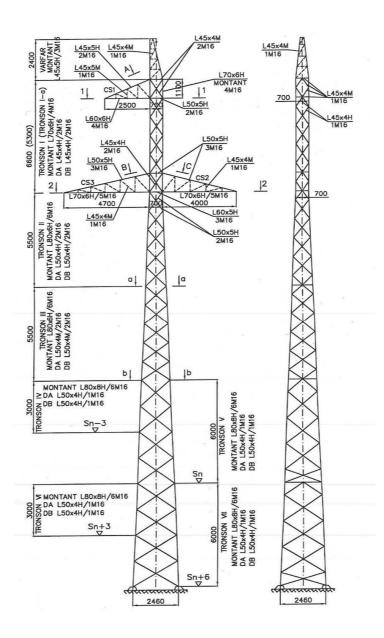
- During mating and migration autumn period (August-October) total number registered:14,2 crossings/detector/hour.
- During spring migration period (April-May) total number registered: 4,5 crossings/detector/hour.
- During birth and summer colonies development (June-July) total number registered: 7,5 crossings/detector/hour.

# The conclusions of 2014 monitoring programs of avifauna, flora and habitats for Sarichioi WF are:

The impact of the 870 m overhead power line 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 in 2014 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 power line and they flew either above the power lines, or beneath them, even during foggy days.
- 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.
- Several flocks of wild goose (Anser Anser anser and albifrons) were seen during winter, crossing the area on Razelm lake Big Island of Braila direction.
- 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.
- No dead animals or birds were identified inside the area monitored.

Regarding the flora and fauna within the wind farm, no events that could lead to its degradation were registered.



Regarding the Additional Measures for the Protection and Conservation of Birds on the route of the 110 kV overhead power line 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 that all the measures imposed were respected.

The conclusions of 2014 monitoring programs of avifauna, flora and habitats for Albesti WF are:

 In the area of Albesti WF, near natural protected area ROSCI0335 Padurea Dobrina Husi, habitat 91Y0 – Dacian Forests of oak and hornbeam – there is a favourable conservation status. The impacts or current pressures and future threats will not have a significant effect on the habitat from this area.



• Birds monitoring: during 2014 monitoring period of Vutcani WF area a number of 42 birds species were observed (Ciconia ciconia, Sturnus vulgaris, Merops apiaster, Emberiza citronella, Carduelis carduelis and others).

From the 42 species identified, 31 were found nesting in the wind farm or near it and the other 11 were found nesting in the forest or at its edge, but feeding also inside the wind farm.

6 species are included in Annex 1 – Bird Directive: Ciconia ciconia, Aquila pomarina, Pernis apivorus, Lullula arborea, Lanius collurio and Lanius exubitor.

Regarding birds/bats mortality, no negative impact was identified according with the monitoring reports results.

• Bats monitoring: during 2014 monitoring a number of 16 species of bats were identified. The dominant ones are: Nyctalus leisleri (30%), Nyctalus noctula (27%) and Vespertilio murinus(20%).

According with the monthly registrations performed, depending on the year period a number of bats crossings per detector per hour was registered:

- During mating and migration autumn period (August-October) total number registered: 45,5 crossings/detector/hour.
- During spring migration period (April-May) total number registered: 12 crossings/detector/hour.
- During birth and summer colonies development (June-July) total number registered: 30 crossings/detector/hour.

# The conclusions of 2014 monitoring programs of avifauna, flora and habitats for Cobadin WF are:

• The site of Cobadin 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;

- 86
- 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;
- 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 agro-ecosystems;
- As regards the monitoring of the avifauna of the wind farms area and its proximity, 53 species of birds have been identified out of which 27 migratory species and 10 partially migratory and 16 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;
- Regarding the avifauna migration, in the wind farm area no intense migration of big birds (like storks or raptors) was registered;
- As regards the impact on the avifauna, during the period of performing the monitoring (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.

### Facaeni WF monitoring programs of avifauna, flora and habitats:

For Facaeni WF the monitoring program of avifauna, flora and habitats was developed in 2013, only during construction of 400kV HVL.

# All the measures imposed regarding birds protection were fulfilled: artificial nests, flagpoles and "Anti-Storks" devices being installed.

In 2014 no other biodiversity monitoring activities were performed in the wind farm, but they will start from January 2015, according with Environmental Authorization of Facaeni WF provisions.

# The conclusions of 2013-2014 monitoring programs of avifauna, flora and habitats for Burila Mica PV Plant are:

The avifauna monitoring within Burila Mica PV plant has shown the presence of 98 birds species – nesting, summer guests, birds of passage and winter guests.

The preponderant ones are the Passeriformes with 57 species (58% from the total identified), the day raptors with 13 species (14%), turdidae species – 8, fringilidae (6 species), corvidae (6 species), picidae (6 species) and alaudidae (5 species) the other families having 1-3 species.

In terms of phenology, the birds within Burila Mica PV plant area can be divided in 2 categories: sedentary and migratory birds.

The sedentary species are the ones present in the area all year and can be further divided into several categories: sedentary themselves, as many of synanthropic species (sparrows, dove - present inside villages), pheasants, partridges; sedentary species-erratic (which in winter wander from one place to another in search of food sources, as do the cops.) whose populations are more numerous in winter. Migratory species are divided into three categories: winter guests who come usually from north lands, summer guests who in spring season and leave in autumn, and species of passage which are only transiting the area.



Regarding the vegetation monitoring, no important species for preservation were identified inside the PV plant. It was followed the evolution of the vegetation layer and the occupancy of the land which is bounded by the fenced area of the PV plant. A special attention was given to the species with negative impact (the invasive ones) which appear mostly during summer and autumn.

As a conclusion, the impact generated by the presence and operation of the PV plant on the vegetation identified is insignificant, except the areas that are permanently affected by the metallic structure. No negative alteration was generated by the project regarding the structure and integrity of Natura 2000 site.



### (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 Cobadin** WF elaborated for 2014 monitoring is 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 Cadastral 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.

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

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

Wind Farm	Affected land	UM
Cobadin	2.27	ha
Albesti	3.54	ha
Facaeni	32.19	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 2014, 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).** 

edp	Metrics Action Plans	Florentina Fasie - 218 {Contributor} : Reader
Portal	MY DASHBOARDS	or or
My Dashboards	• Home	医白头
Information Sharing     ■	Quick Links	
Corganizational Axes ⊕ Users Log Out Contributor •	Information Sharing           Store, organize, consult and share documents, ideas, best practices and reports.	There is no news
On Line HELP 🛛 🖉 😒 Manage your personal Jashboard	Organizational Axes View, edit, add, delete and arrange entities comprising your various organizational representations (axes).	My Scope
		Bailesti P.V.
Powered by	Users	Bucharest Office
enablon	Access features tailored for the user - preferences, profiles and help files.	Burila Mica P.V. Cemayoda W.F.
		Cernavoda W.F. Cobadin W.F.
		Cobdun W.F. Cujmir P.V.
		Dabuleni P.V.
		EDPR Romania
		Facaeni W.F.
		Groidibodu P.V.

**Environmental Key Performance Indicators** related to 2014 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)	13	no
IA-03.03.S : Installed Capacity with environmental certification (ISO 14001)	521,38	MW
IA-35.3.S : List of facilities to maintain/achieve certification in the following period (2015)	521,38	MW
IA - 14 - Water consumption and use		
IA-14.05.1.S : Water withdrawal from well	46	m <sup>3</sup>
IA-14.08.S : Amount of water coming from other private entities	115	m <sup>3</sup>
IA-14.12.S : Consumption of water for human use	161	m <sup>3</sup>
IA - 18 - Biodiversity		
IA-18.03.S : Land management area inside protected areas	22.82	ha
IA - 26 - Energy Efficiency		
IA-26.3.S : Backfeed Power	6049,28	MWh
IA - 16 - Efluentes Líquidos		
IA-16.24.S : Domestic wastewater sent to municipal treatment	73	m <sup>3</sup>
IA - 17 - Spills and near miss		

Environmental Key Performance Indicators	Value	Unit
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	2	no
IA-13.02.S : SF6 emissions	0	kg
IA - 22 - Noise		
IA-22.01.S : No. of facilities where noise measurements were made	13	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

## Environmental studies during operation

NUMBER OF ENVIRONMENTAL STUDIES OPERATION						
Facility	Environmental Monitoring Plans – EMS ISO 14001	Noise Studies	Specific fauna & flora studies	Other environmental studies (landscape, etc)		
Pestera		1				
Cernavoda		1				
Sarichioi		1	1			
Vutcani		1	1			
Cobadin WF		1	1			
Vutcani Extension(Albesti) WF		1	1			
Facaeni WF	]	1				
Cujmir PV Plant		1				
Dabuleni PV Plant		1				
Grojdibodu PV Plant		1				
Vanju Mare PV Plant		1				
Burila Mica PV Plant	1	1	1			
Bailesti PV Plant	1	1				
TOTAL	3	13	5	0		