



JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM
Version 01 - in effect as of: 15 June 2006

CONTENTS

- A. General description of the project
- B. Baseline
- C. Duration of the project / crediting period
- D. Monitoring plan
- E. Estimation of greenhouse gas emission reductions
- F. Environmental impacts
- G. Stakeholders' comments

Annexes

- Annex 1: Contact information on project participants
- Annex 2: Baseline information
- Annex 3: Monitoring plan

**SECTION A. General description of the project****A.1. Title of the project:**

Title of the project: Windpark Casimcea
Sectoral scope(s): (1) Energy industries (renewable/non-renewable sources)
Version: 4
Date: 27/12/2010

A.2. Description of the project:

The purpose of the project is the generation of green electricity through the construction of wind power turbines with a total capacity of up to 201MW located in four clusters North 1, North 2, South 1 and South 2 west-north-west from the town Casimcea, Tulcea district in Romania. The expected net annual generation of the project activity is approximately 563 GWh, once fully operational. By replacing fossil fuel based power generation of the national Romanian electricity grid approximately 518,955 tCO₂ will be reduced per year. The project is being developed by S.C. Alpha Wind S.R.L. (Project's Focal Point PFP according to Romanian track 1 procedure) and SC CAS Regenerabile SRL (jointly the "project proponents").

Situation existing prior to the starting date of the project

Same as baseline scenario, see paragraph below.

Baseline Scenario

According to applied CDM methodology ACM0002 "*Consolidated baseline methodology for grid-connected electricity generation from renewable sources*" Version 11 - If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".

Project Scenario

The project includes the construction and operation of a wind farm with the capacity of up to 201MW. The electricity will be fed into the grid at a new 400/110kV transformer station situated west of the village Rahman, which will be built by the project proponents. By replacing fossil fuel based power generation of the national Romanian electricity grid approximately 518,955 tCO₂ will be reduced per year.

Summary of the history of the project (incl. its JI component)

Date	Event/Action
November 26 th 2008	Foundation of Joint Venture <u>S.C. Alpha Wind S.R.L.</u> between Verbund-Austrian Renewable Power GmbH and ASTROPOINT Ltd to jointly develop and operate a 150 MW wind park near to the town Casimcea in the Tulcea district. This contract already explicitly mentions the <u>intention to use the Joint Implementation</u> mechanism for sourcing additional funds for the project.
March 25th 2009	<u>Contract with Energy Changes Projektentwicklung Gmbh for JI development</u>
August 26th 2009	Submission of documentation to the Designated Focal Point for Joint Implementation in order to <u>apply for the Letter of Endorsement (LoE)</u> within the Romanian JI approval procedure
November 2009	During project development it turns out that purchased land would allow an increase of capacity of around additional 50MW if permitted by the national grid operator (Transelectrica). <u>Approval procedure</u> for the transfer of additional 50MW is started.
December 3 rd 2009	Meeting of Romanian JI committee; <u>Approval for issuance of LoE</u>
December 9 th 2009	<u>Aquisition of SC CAS Regenerabile SRL</u> by Verbund-Austrian Renewable Power GmbH
December 10 th 2009	The grid operator <u>Transelectrica approves the increase of capacity of 50 MW</u> at the project site and transfers the rights to SC CAS Regenerabile SRL
June 8 th 2010	<u>Environmental Approval</u> for clusters North 1 and South 2
June 29 th 2010	Signing of purchase contract for wind turbines, this date is also the start date of the JI project activity

A.3. Project participants:

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Name of Party involved	Legal entity project participants (as applicable)	Please indicate if the Party involved wishes to be considered as project participant (Yes/No)
Romania (host)	SC Alpha Wind SRL SC CAS Regenerabile SRL	No
Austria	Verbund Austrian Renewable Power GmbH Energy Changes Projektentwicklung GmbH	No

A.4. Technical description of the project:

**A.4.1. Location of the project:****A.4.1.1. Host Party(ies):**

Romania

A.4.1.2. Region/State/Province etc.:

Tulcea district

A.4.1.3. City/Town/Community etc.:

Casimcea

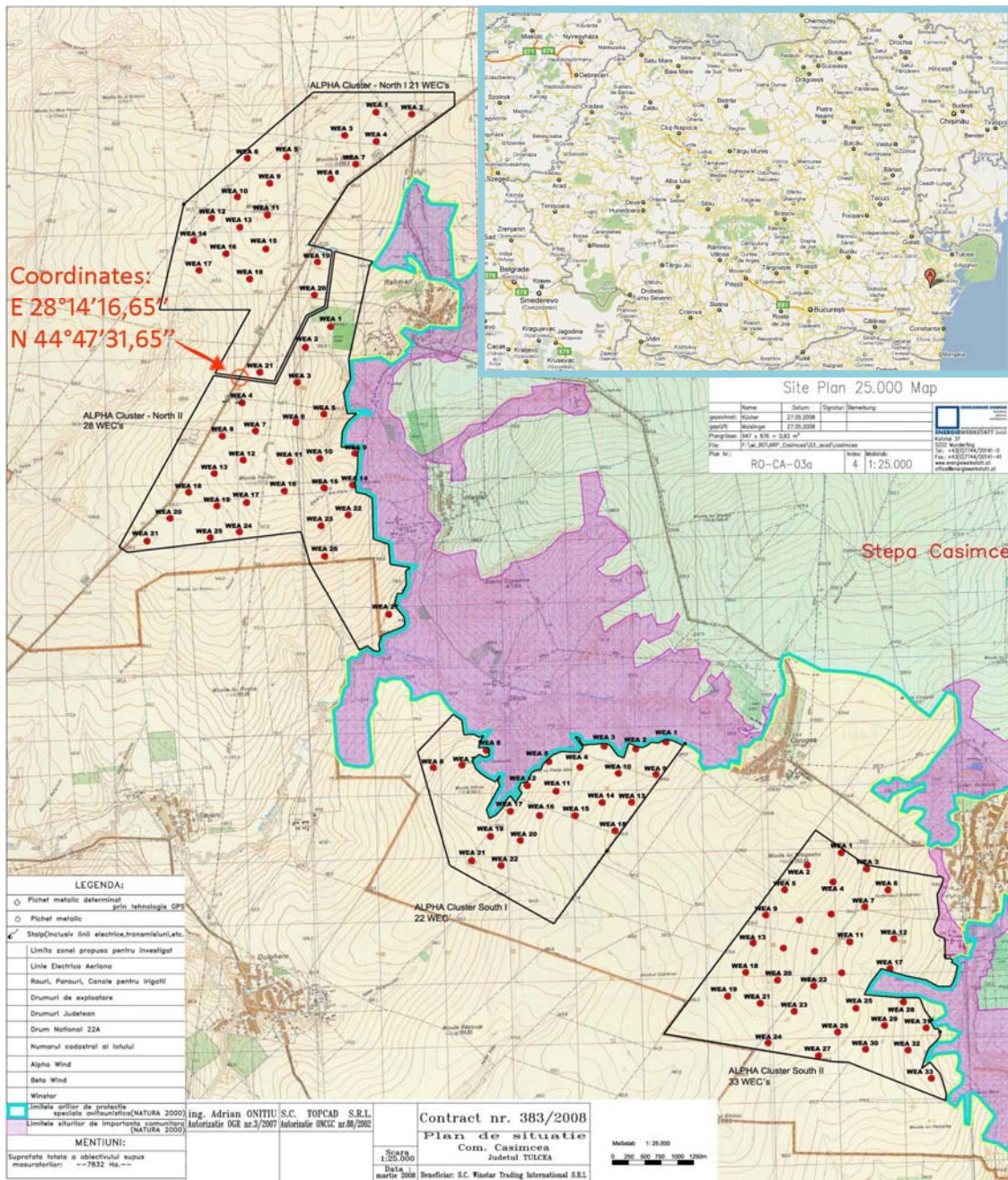
A.4.1.4. Detail of physical location, including information allowing the unique identification of the project (maximum one page):

West North West of Casimcea reaching towards the main road DN 22A; The turbines will be placed in 4 clusters North 1 (N1), North 2 (N2), South 1 (S1) and South 2 (S2) around this area.

The coordinates of the central points of the 4 clusters are:

North 1: Latitude: 44.811726 N; Longitude: 28.245319 E
North 2: Latitude: 44.781779 N; Longitude 28.248801 E
South 1: Latitude 44.729148 N; Longitude 28.295737 E
South 2: Latitude 44.705861 N; Longitude 28.348183 E

Coordinates: Latitude 44.791944° N and Longitude 28.237778° E define the intersection between borders N1, N2 and main road DN 22A (coordinates for intersection presented in degrees N 44° 47'31.65"; E 28°14'16.65")



A.4.2. Technology(ies) to be employed, or measures, operations or actions to be implemented by the project:

The technology to be employed is wind turbines with the following technical specifications:
The project proponents adopt advanced commercial wind power technology for the construction of the proposed project activity. In clusters North 1 (21) and South 2 (22) a total of 43 turbines with a capacity of 2.3 MW per turbine will be installed. The detailed parameters of the turbines are provided below:

Item	Parameters	Manufacturer
Type	ENERCON E-82 E2	Enercon
Quantity	43	
Rated capacity per turbine (kW)	2300	



Hub height (m)	78-138	
Rotor diameter (m)	82m	
Swept area (m ²)	5281m ²	
Blade material	Fibreglass (epoxy resin integrated lighting protection)	
Generator	ENERCON direct-drive synchronous anular generator	

In clusters North 2 (20) and South 1 (14) a total of 34 turbines with a capacity of 3 MW per turbine will be installed. The detailed parameters of the turbines are provided below:

Item	Parameters	Manufacturer
Type	ENERCON E-101	Enercon
Quantity	34	
Rated capacity per turbine (kW)	3000	
Hub height (m)	99-135.4	
Rotor diameter (m)	101m	
Swept area (m ²)	8012m ²	
Blade material	Fibreglass (epoxy resin integrated lighting protection)	
Generator	ENERCON direct-drive synchronous anular generator	

The electricity will be fed into the grid at a new 400/110kV transformer station situated west of the village Rahman, which will be built by the project proponents.

The planned implementation schedule is as follows (time of submission of PDD to validation)

- Securing the land done
- Location approval from grid operator done
- Grid connection permit done
- Environmental permit (North 1 and South 2) done
- Environmental permit (North 2 and South 1) October 2010
- Building permit (North 2 and South 1) December 2010
- Start of construction (wind park) June 2011
- Start of operation January 2012
- 98.9MW (48.3MW N1 and 50.6MW S2) 01.01.2012
- 60MW (60MW N2) 01.07.2012
- 42MW (42MW S1) 01.01.2013

Project proponents will conclude an Operation and Maintenance agreement with the technology provider for several years. Little training will therefore be needed for project proponents. Training plans for health and safety issues will be implemented according to internal guidelines of project proponents' parent companies.

A.4.3. Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances:

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According to EBRD Renewable Energy Initiative Country Profile Romania:

<http://ebrdrenewables.com/sites/renew/countries/romania/profile.aspx#Policy> accessed on July 15th 2010



As member country of the European Union Romania must take part in and “follow the EU’s energy policy and legislation. In negotiations for EU entrance, Romania agreed to privatize their energy sector. Programs have been launched for the sale of electricity production and distribution companies (IEA, 2009).

The Electric Power Law no.13/2007

- Ensures the non-discriminatory and regulated access for all participants on the electric power market and the public electric network
- Demands the transparency of the taxes and prices for electric power
- Promotes using new and renewable energy sources
- Promotes local and global environmental protection
- Ensures the safety of commercial electric power for the consumer.”

“Romania’s renewable energy target for 2020 is 38 percent renewable consumption. In order to meet these goals and set standards for Romanian renewable energy, Romania created a renewable energy law, Law no. 220/2008. Parliament passed the law in October of 2008. The law includes

- Incentives for small hydro, solar, wind, geothermal, biomass, biogas, and waste water sludge and gas projects
- Incentives are offered for 3 years after completion of small hydro refurbishments to 15 years for new power plants
- An outline for a green certificate trading market. Typically one certificate represents 1 MWh of electricity that can be traded. Suppliers must meet the annual mandatory target for green certificates; if they do not fulfill the target, they must pay a counter-value.
- Priority access for electricity produced by renewable energy sources, as long as such priority does not affect the safety of the National Energy System.
- Loan guarantees and tax exemptions for renewable energy investments”

However due to the current economic situation as well as the uncertainties in relation to the application of Law 220 (Green Certificates) banks were not willing to finance wind projects. “Unclear laws have prevented banks from funding green energy projects and holding up the sector from development.” <http://www.petrolplaza.com/news/industry/MiZlbiY5MjAzJiYxJjMwJjE%3D> As of 2009 only 14MW wind power was installed in Romania clearly evidencing barriers for investment in wind power in Romania.

Since the proposed project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system”.

Based on section E estimated emission reductions in 2012 will be 332,968 tCO₂e. In the following years (if approved by the host country) emission reductions would be 518,955 tCO₂e per year.

A.4.3.1. Estimated amount of emission reductions over the <u>crediting period</u>:

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	Years
Length of the crediting period	10



Year	Estimate of annual emission reductions in tonnes of CO ₂ equivalent
2012	332,968
2013*	518,955
2014*	518,955
2015*	518,955
2016*	518,955
2017*	518,955
2018*	518,955
2019*	518,955
2020*	518,955
2021*	518,955
*=subject to the approval by the Romanian Designated Focal Point as well as to the design of any post-Kyoto system	
Total estimated reductions over the <u>crediting period</u> (tonnes of CO₂ equivalent)	5,003,559
Total number of crediting years	10
Annual average of estimated reductions over the crediting period (tonnes of CO₂ equivalent)	500,356

A.5. Project approval by the Parties involved:

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**SECTION B. Baseline****B.1. Description and justification of the baseline chosen:**

Step 1. Indication and description of the approach chosen regarding baseline setting

CDM Methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” Version 11 is used in its totality. The emission factor for the Romanian national grid electricity system is provided by the Romanian Ministry of Environment and Sustainable Development, Designated Focal Point for Joint Implementation. The emission factor is fixed ex ante.

ACM0002 Version 11 also refers to the latest approved versions of the following tools:

- Tool to calculate the emission factor for an electricity system;
- Tool for the demonstration and assessment of additionality; Version 05.2
- Combined tool to identify the baseline scenario and demonstrate additionality; N.A.
- Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion. N.A.

Applicability conditions in Version 11 of ACM0002 related to wind power activities	Characteristics of the project activity	Applicability criterion met?
<i>This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where <u>no renewable power plant was operated prior to the implementation of the project activity (greenfield plant)</u>; (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).</i>	The proposed project activity is a new grid-connected wind farm project and no renewable power plant was operated prior to the implementation at the proposed project activity site	Yes
<i>The methodology is not applicable to the following:</i> <ul style="list-style-type: none"> • Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; • Biomass fired power plants; • Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m². 	The proposed project activity does not involve switching from fossil fuels to renewable energy. It is neither a biomass fired power plant and nor a hydro power plant,	Yes

Therefore, the methodology ACM0002 Version 11 is applicable to the project activity

Step 2. Application of the approach chosen

Identification of the baseline scenario

Since the proposed project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:



Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system”.

Baseline emissions

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y} \quad 1$$

Where:

BE_y	Baseline emissions in year y (tCO ₂ /yr)
$EG_{PJ,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)
$EF_{grid,CM,y}$	Combined margin CO ₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system “

Calculation of $EG_{PJ,y}$

The calculation of $EG_{PJ,y}$ is different for (a) greenfield plants, (b) retrofits and replacements and (c) capacity additions. These cases are described next

The proposed project activity is a greenfield plant therefore (a) applies.

(a) Greenfield renewable energy power plants

If the project activity is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity, then:

$$EG_{PJ,y} = EG_{facility,y} \quad 2$$

Where:

$EG_{PJ,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)
$EG_{facility,y}$	Quantity of net electricity generations supplied by the project plant/unit to the grid in year y (MWh/yr)

The following tables provide the key information and data used to establish the baseline:

Data/Parameter	$EF_{grid,CM,y}$
Data unit	tCO ₂ /MWh
Description	CO ₂ grid emission factor provided by the Romanian Energy Regulatory Authority - ANRE through the Romanian Designated Focal Point for Joint Implementation
Time of determination/monitoring	Fixed ex ante
Source of (data to be) used	Romanian Ministry of Environment and Sustainable Development, Designated Focal Point for Joint Implementation http://ji.unfccc.int/JI_Parties/PartiesList.html#Romania



Value of data applied (for ex ante calculation/determination)	0.9215
Justification of the choice of data or description of measurement methods and procedures (to be) applied	Romanian Energy Regulatory Authority - ANRE through Romanian Ministry of Environment and Sustainable Development, Designated Focal Point for Joint Implementation http://ji.unfccc.int/JI_Parties/PartiesList.html#Romania
QA/QC procedures (to be) applied	----
Any comment	----

Data/Parameter	$EG_{PJ,y}$
Data unit	MWh
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y . Net electricity generation is the difference between produced and consumed electricity.
Time of determination/monitoring	
Source of data (to be) used	Project activity site
Value of data applied (for ex ante calculation/determination)	Electricity meters in ownership of Operator al pietei de Masurare – OMEPA (Metering Market Operator) which is a subsidiary of Transelectrica. Values measured by OMEPA will be used to determine Green Certificates according to Law 2020 and simultaneously to determine periodic emission reductions. For <u>ex ante calculation</u> the value of 361,332MWh in 2012 is used for the following years the value of 563,163MWh is applied
Justification of the choice of data or description of measurement methods and procedures (to be) applied	Continuous measurement and at least monthly recording by OMEPA
QA/QC procedures (to be) applied	Cross check measurement results with records for sold electricity respectively number of Green Certificates received
Any comment	-----

Ex ante $EG_{PJ,y}$ is determined as follows:

Capacity development

01.01.2012 98.9MW (48.3MW N1 and 50.6MW S2)

01.07.2012 60MW (60MW N2)

01.01.2013 42MW (42MW S1)

From 01.01.2013 onwards 200.9 MW (98.9 MW N1 and S2 and 102 MW N2 and S1)

Plant Load Factor

N1 0.32

N2 0.32

S1 0.32

S2 0.32

According to the *Guidelines for the Reporting and Validation of Plant Load Factors Version 01* the plant load factor shall be defined ex-ante in the JI-PDD according to one of the following options:



(a) The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval;

(b) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company);

The plant load factor was determined by applying the wind potential of the site calculated by an external third party and using standard software “WindPro”. This plant load factor will be presented to the board of the mother company of the project proponents which finally gives approval for financing the proposed project activity.

Project emissions

For most renewable power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y} \quad 3$$

Where:

PE_y Project emissions in year y (tCO₂e/yr)

$PE_{FF,y}$ Project emissions from fossil fuel consumption in year y (tCO₂/yr)

$PE_{GP,y}$ Project emissions from the operation of geothermal power plants due to the release of non-condensables gases in year y (tCO₂e/yr)

$PE_{HP,y}$ Project emissions from water reservoirs of hydro power plants in year y (tCO₂e/yr)

The proposed project activity does not consume any fossil fuels, is not a geothermal power plant and no hydro. Therefore project emissions will be 0.

Leakage emissions

No leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected.

No leakage emissions are considered in the proposed project activity.

Emission reductions

Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y \quad 4$$

Where:

ER_y Emission reductions in year y (t CO₂e/yr)

BE_y Baseline emissions in year y (t CO₂e/yr)

PE Project emissions in year y (t CO₂e/yr)

Estimation of emissions reductions prior to validation

Project participants should prepare as part of the CDM-PDD an estimate of likely emission reductions for the proposed crediting period. This estimate should, in principle, employ the same methodology as selected above. Where the grid emission factor ($EFCM_{grid,y}$) is determined ex post during monitoring, project participants may use models or other tools to estimate the emission reductions prior to validation



Estimations of emission reductions are presented under section E of this JI-PDD

B.2. Description of how the anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the JI project:

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ACM0002 Version 11 is applied

According to Version 11 of ACM0002, the latest version of the “*Tool for the demonstration and assessment of additionality*” shall be used to demonstrate the additionality of this project activity.

Version 05.2 of the additionality tool includes the following steps:

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a: Define alternatives to the project activity

In general alternatives that provide outputs or services comparable to the proposed CDM project activity include

- Alternative 1: The proposed project activity undertaken without being registered as a JI project activity.
- Alternative 2: A thermal power plant with comparable capacity or electricity generation;
- Alternative 3: Other renewable energy with comparable capacity or electricity generation.
- Alternative 4: Continuation of the current situation Electricity delivered to the grid by the project activity would have otherwise been generated by the Romanian national grid.

However alternative 2 is not a realistic and credible alternative to the project activity since the project proponents only have experience and rights to invest and do business in renewable energy (except hydro).

Alternative 3 is not a realistic and credible alternative to the project activity since the project proponents have no experience and rights to invest in hydro power. Biomass or solar power plants will not deliver outputs and services similar to the project activity. No biomass or solar power plant with a size similar to the project activity exists.

Alternatives 1 and 4 are realistic and credible alternatives to the proposed project activity.

Sub-step 1b: Consistency with mandatory laws and regulations:

Alternatives 1 and 4 are theoretically technically feasible and comply with Romanian current laws and regulations, which were mentioned under A.4.3 The Electric Power Law no.13/2007 and the Renewable Energy Law, Law no. 220/2008. Furthermore the Romanian National Allocation Plan dated 12/12/2006 http://ec.europa.eu/environment/climat/pdf/nap_romania_final.pdf for the EU Emissions Trading System creates a specific Joint Implementation reserve for indirect reductions generated inter alia from renewable energy projects such as wind power.

Hence, alternatives 1 and 4 are further considered as realistic and credible alternatives.

Step 3: Barrier analysis

Sub-step 3a: Identify barriers that would prevent the implementation of the proposed JI project activity:



(a) Investment barriers, other than the economic/financial barriers in Step 2 above, inter alia:

No private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed CDM project activity is to be implemented, as demonstrated by the credit rating of the country or other country investments reports of reputed origin.

Romania is one of the countries in this region to have been hit hardest by the global economic crisis. A dramatic decline in domestic demand and industrial production triggered a drop in the growth rate from the previous average of 9% to 2.9% at the end of 2008. (KSV1870: Country Report for Investors and Exporters, Romania July 2009 p.4) During December 2009 through February 2010, the growth rate of credit to the private sector plunged deeper into negative territory and hit a 9-year low of -6.6 percent. (National Bank of Romania, Inflation Report May 2010 p.37ff)

This economic development as well as the uncertainties in relation to the application of Law 220 (Green Certificates) has led to the situation that banks were not willing to finance wind projects.

“Unclear laws have prevented banks from funding green energy projects and holding up the sector from development.” <http://www.petroplaza.com/news/industry/MiZlbiY5MjAzJiYxJmWjJE%3D>

The project proponents had various contacts with banks indicating unfavorable terms for financing the project activity.

Therefore the project proponents will very probably finance the project via internal funds of the mother company for which board approval is scheduled for November 2010. Additional funding through the use of carbon credits will be a significant decisive factor to get approval for the project.

Barriers due to prevailing practice, inter alia:

There is no other wind park of this size operational in Romania. As of 2009 there is an installed wind power capacity of 14MW in Romania. See <http://www.ewea.org/index.php?id=1486> (accessed on 12/07/2010). The Fantanele wind farm with a planned capacity of 347.5MW is currently under construction but not yet fully operational (see <http://renewableenergydev.com/red/wind-power-fantanele-wind-farm-romania/>) (accessed on 26/10/2010). The proposed project activity can therefore be classified as not being prevailing practice in the host country. .

Sub-step 3 b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity):

While alternative 1 is prevented by the barriers as mentioned above, alternative 4 would not be prevented.

Step 4: Common practice analysis

Sub-step 4a: Analyze other activities similar to the proposed project activity:

Provide an analysis of any other activities that are operational and that are similar to the proposed project activity.

There are no other similar activities to the proposed project activity that are operational. As of 2009 there is an installed wind power capacity of 14MW in Romania. See <http://www.ewea.org/index.php?id=1486> (accessed on 12/07/2010). Another 347.5MW project in Fantanele is getting fully operational until the end of 2010 (see <http://renewableenergydev.com/red/wind-power-fantanele-wind-farm-romania/>) .



(accessed on 26/10/2010). However these activities cannot be classified as being “similar” in the sense of Version 05.2 of the additionality tool.

- The total 14 MW installed capacity is not of similar scale as the proposed project activity. (This 14 MW even consists of several different projects)
- The Fantanele project is of similar scale (using a range of 50%-200%) but has received an Export Credit Guarantee of the Export Credit Agency of the Federal Republic of Germany (also called Hermes Cover). *Export Credit Guarantees (provided by governments of exporting countries) enable exporting activities which in the absence of the Export Credit Guarantee would not take place because of excessive risks for the exporting company.* (translated from German version of Wikipedia “Exportkreditversicherung”) (In the case of the Fantanele project technology transfer took place because wind turbines produced in Germany were exported to Romania.) According to the German government the project classifies as ...”*particularly worthy of being supported because it reduces 1.09 Mio. tons of CO₂ emissions per year*”. (translation from : <http://www.agaportal.de/pages/aga/nachhaltigkeit/umwelt/projekt/auswahl.html#rumaenien>). Therefore the Fantanele project was able to overcome the above mentioned barriers under step 3 by receiving an Export Credit Guarantee from the German Government. From this analysis it can be concluded that the project is not to be considered similar in the sense of Version 05.2 of the additionality tool (sub step 4a) paragraph 1.

Furthermore it can be concluded that similar activities have not yet diffused in the host country.

Sub-step 4b: Discuss any similar Options that are occurring:

Similar options are not widely observed and commonly carried out. Therefore this sub step is not applicable.

Since sub-steps 4a and 4b are satisfied the project activity is additional.

B.3. Description of how the definition of the project boundary is applied to the project:

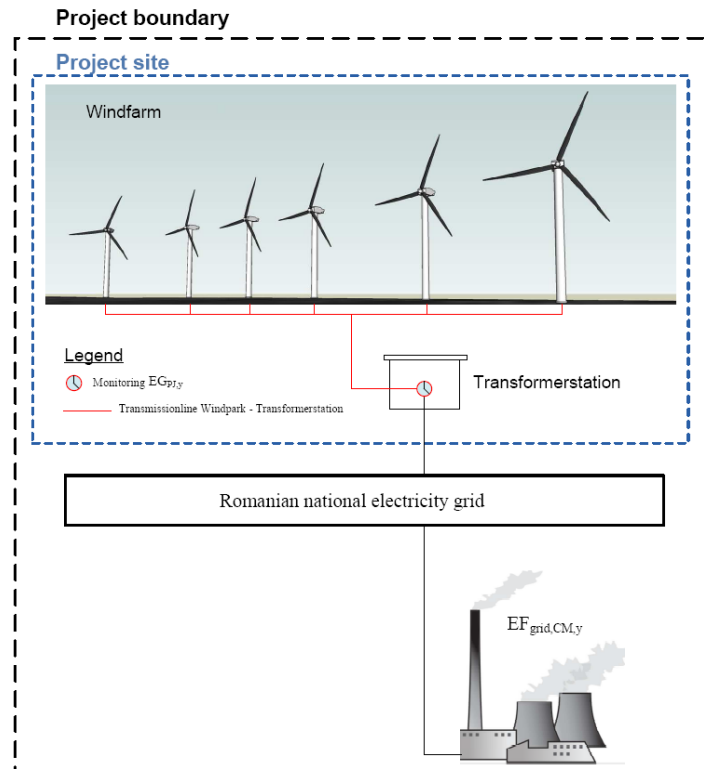
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According to ACM0002 the following greenhouse gases and emission sources must be considered to be included or excluded from the project boundary of the proposed project activity:

Source		Gas	Included	Justification/Explanation
Baseline	CO ₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity	CO ₂	Yes	Main emission source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
Project activity	For geothermal power plants fugitive emissions of CH ₄ and CO ₂ from non-condensable gases contained in geothermal steam	CO ₂	Yes	Main emission source
		CH ₄	Yes	Main emission source
		N ₂ O	No	Minor emission source
	CO ₂ emissions from combustion of fossil fuels for electricity generation in solar thermal power plants and geothermal power plants	CO ₂	Yes	Main emissions source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
	For hydro power plants, emissions of CH ₄ from the reservoir	CO ₂	No	Minor emission source
		CH ₄	Yes	Main emission source
		N ₂ O	No	Minor emission source

Baseline emissions to be included in the boundary of the proposed project are CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. Since the proposed project activity is neither a geothermal nor a hydro power plant nor does it consume fossil fuels no project emissions occur within the project boundary.

The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the Romanian national electricity grid where project power plant is connected to.



B.4. Further baseline information, including the date of baseline setting and the name(s) of the person(s)/entity(ies) setting the baseline:

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Date of baseline setting 27/12/2010

Energy Changes Projektentwicklung GmbH
Obere Donaustraße 12/28
1020 Vienna
Austria

Clemens Plöchl clemens.ploechl@energy-changes.com
Oliver Percl oliver.percl@energy-changes.com

**SECTION C. Duration of the project / crediting period****C.1. Starting date of the project:**

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According to the JI guidelines

The starting date of a JI project is the date on which the implementation or construction or real action of the project begins.

The starting date of the project is the signing of the purchase contract for the turbines which was 29/06/2010.

C.2. Expected operational lifetime of the project:

20 years, 0 months.

C.3. Length of the crediting period:

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Starting date of the crediting period shall be 01.01.2012

Length of the crediting period shall be 10 years 0 months. The first year of the crediting period falls under the first Kyoto commitment period. Beyond 2012 any further crediting is subject to the approval by the Designated Focal Point of Romania (or any of its successor institutions) as well as to the design of any post-Kyoto system. host Party. The crediting period does not extend the operational lifetime of the project.

**SECTION D. Monitoring plan****D.1. Description of monitoring plan chosen:**

>>

According to Guidelines for Users of the Joint Implementation PDD Form Version 04

Step 1 (Indication and description of the approach chosen regarding monitoring)

“Consolidated baseline methodology for grid-connected electricity generation from renewable sources” Version 11 is chosen (in its totality).

It’s applicability for the proposed project activity is described under section B.1.

Therefore tables provided in sections D.1.1.1., D.1.1.3., D.1.2.1., D.1.3.1. and D.2., of the Joint Implementation PDD Form Version 04 are not applied

Step 2 Application of the approach chosen

a) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination regarding the PDD;

None of the parameters and data explicitly mentioned in ACM0002 Version 11 not to be monitored are relevant in the project case. However ACM0002 Version 11 p. 12/19 further specifies

In addition to the parameters listed in the tables below, the provisions on data and parameters not monitored in the tools referred to in this methodology apply.

Data/Parameter	$EF_{grid,CM,y}$
Data unit	tCO ₂ /MWh
Description	CO ₂ grid emission factor provided by the Romanian Energy Regulatory Authority - ANRE through the Romanian Designated Focal Point for Joint Implementation



Time of determination/monitoring	Fixed ex ante
Source of (data to be) used	Romanian Energy Regulatory Authority - ANRE through Romanian Ministry of Environment and Sustainable Development, Designated Focal Point for Joint Implementation http://ji.unfccc.int/JI_Parties/PartiesList.html#Romania
Value of data applied (for ex ante calculation/determination)	0.9215
Justification of the choice of data or description of measurement methods and procedures (to be) applied	Romanian Ministry of Environment and Sustainable Development, Designated Focal Point for Joint Implementation http://ji.unfccc.int/JI_Parties/PartiesList.html#Romania
QA/QC procedures (to be) applied	----
Any comment	----

b) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination regarding the PDD;

Not applicable

c) Data and parameters that are monitored throughout the crediting period.

Data/Parameter	$EG_{PJ,y}$
Data unit	MWh
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y . Net electricity generation is the difference between produced and consumed electricity.
Time of determination/monitoring	
Source of data (to be) used	Project activity site
Value of data applied (for ex ante calculation/determination)	Electricity meters in ownership of Operator al pietei de Masurare – OMEPA (Metering Market Operator) which is a subsidiary of Transelectrica. Values measured by OMEPA will



	be used to determine Green Certificates according to Law 2020 and simultaneously to determine periodic emission reductions. For <u>ex ante</u> calculation the value of 361,332MWh in 2012 is used, in the following years the value of 563,163MWh is applied
Justification of the choice of data or description of measurement methods and procedures (to be) applied	Continuous measurement and at least monthly recording by OMEPA
QA/QC procedures (to be) applied	Cross check measurement results with records for sold electricity respectively number of Green Certificates received
Any comment	-----

All data collected as part of the monitoring are archived electronically and kept at least for 2 years after the end of the last crediting period. 100% of the data are monitored as indicated in the table below.

D.1.1. Option 1 – Monitoring of the emissions in the project scenario and the baseline scenario:

D.1.1.1 is not applicable since CDM Methodology ACM0002 Version 11 is followed in its entirety.

D.1.1.1. Data to be collected in order to monitor emissions from the project, and how these data will be archived:

ID number (Please use numbers to ease cross-referencing to D.2.)	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	Comment

**D.1.1.2. Description of formulae used to estimate project emissions (for each gas, source etc.; emissions in units of CO₂ equivalent):**

>>

D1.1.2. is not applicable since the proposed project activity does not emit any greenhouse gases

D.1.1.3 is not applicable since CDM Methodology ACM0002 Version 11 is followed in its entirety.

D.1.1.3. Relevant data necessary for determining the baseline of anthropogenic emissions of greenhouse gases by sources within the project boundary, and how such data will be collected and archived:

ID number (Please use numbers to ease cross-referencing to D.2.)	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	Comment

D.1.1.4. Description of formulae used to estimate baseline emissions (for each gas, source etc.; emissions in units of CO₂ equivalent):

>>

According to ACM0002 Version 11

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$$

1

Where:

BE_y Baseline emissions in year y (tCO₂/yr)

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)



$EF_{grid,CM,y}$ Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system “

Calculation of $EG_{PJ,y}$

The calculation of $EG_{PJ,y}$ is different for (a) greenfield plants, (b) retrofits and replacements and (c) capacity additions. These cases are described next

The proposed project activity is a greenfield plant there (a) applies.

(a) Greenfield renewable energy power plants

If the project activity is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity, then:

$$EG_{PJ,y} = EG_{facility,y} \quad 2$$

Where:

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)

$EG_{facility,y}$ Quantity of net electricity generations supplied by the project plant/unit to the grid in year y (MWh/yr)

D. 1.2. Option 2 – Direct monitoring of emission reductions from the project (values should be consistent with those in section E.):

D.1.2.1. is not applicable since CDM Methodology ACM0002 Version 11 is followed in its entirety

D.1.2.1. Data to be collected in order to monitor emission reductions from the project, and how these data will be archived:

ID number (Please use numbers to ease cross-referencing to D.2.)	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	Comment



D.1.2.2. Description of formulae used to calculate emission reductions from the project (for each gas, source etc.; emissions/emission reductions in units of CO₂ equivalent):

>>

Emission reductions

Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y$$

4

Where:

ER_y Emission reductions in year y (t CO₂e/yr)*BE_y* Baseline emissions in year y (t CO₂e/yr)*PE* Project emissions in year y (t CO₂e/yr)

D.1.3. Treatment of leakage in the monitoring plan:

D.1.3.1. is not applicable since CDM Methodology ACM0002 Version 11 is followed in its entirety

D.1.3.1. If applicable, please describe the data and information that will be collected in order to monitor leakage effects of the project:

ID number (Please use numbers to ease cross-referencing to D.2.)	Data variable	Source of data	Data unit	Measured (m), calculated (c), estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/paper)	Comment

D.1.3.2. Description of formulae used to estimate leakage (for each gas, source etc.; emissions in units of CO₂ equivalent):

>>



D.1.3.2. is not applicable since the proposed project activity does not result in any leakage emissions

D.1.4. Description of formulae used to estimate emission reductions for the project (for each gas, source etc.; emissions/emission reductions in units of CO₂ equivalent):

>>

According to ACM0002 Version 11

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y} \quad 1$$

Where:

BE_y Baseline emissions in year y (tCO₂/yr)

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)

$EF_{grid,CM,y}$ Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system “

Calculation of $EG_{PJ,y}$

The calculation of $EG_{PJ,y}$ is different for (a) greenfield plants, (b) retrofits and replacements and (c) capacity additions. These cases are described next

The proposed project activity is a greenfield plant there (a) applies.

(a) Greenfield renewable energy power plants

If the project activity is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity, then:

$$EG_{PJ,y} = EG_{facility,y} \quad 2$$



Where:

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)

$EG_{facility,y}$ Quantity of net electricity generations supplied by the project plant/unit to the grid in year y (MWh/yr)

Project emissions = 0

Leakage emissions = 0

Emission reductions

Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y \quad 4$$

Where:

ER_y Emission reductions in year y (t CO₂e/yr)

BE_y Baseline emissions in year y (t CO₂e/yr)

PE Project emissions in year y (t CO₂e/yr)

D.1.5. Where applicable, in accordance with procedures as required by the host Party, information on the collection and archiving of information on the environmental impacts of the project:

>>

The Environmental Impact Assessment (which is the basis for the Environmental Approval issued by the Tulcea Environmental Protection Agency) for the proposed project activity contains a monitoring plan which has to be observed according to Environmental Approval.

D.2. Quality control (QC) and quality assurance (QA) procedures undertaken for data monitored:

Data (Indicate table and ID number)	Uncertainty level of data (high/medium/low)	Explain QA/QC procedures planned for these data, or why such procedures are not necessary.

D.2. is not applicable since CDM Methodology ACM0002 Version 11 is followed in its entirety

**D.3. Please describe the operational and management structure that the project operator will apply in implementing the monitoring plan:**

>>

The aim of the monitoring plan is to make sure that the net electricity generation delivered to the grid is monitored completely, consistently, reliably and precisely. The details are summarized as follows:

1. Monitoring subject

The main data monitored is the net electricity generation delivered to the grid by the project.

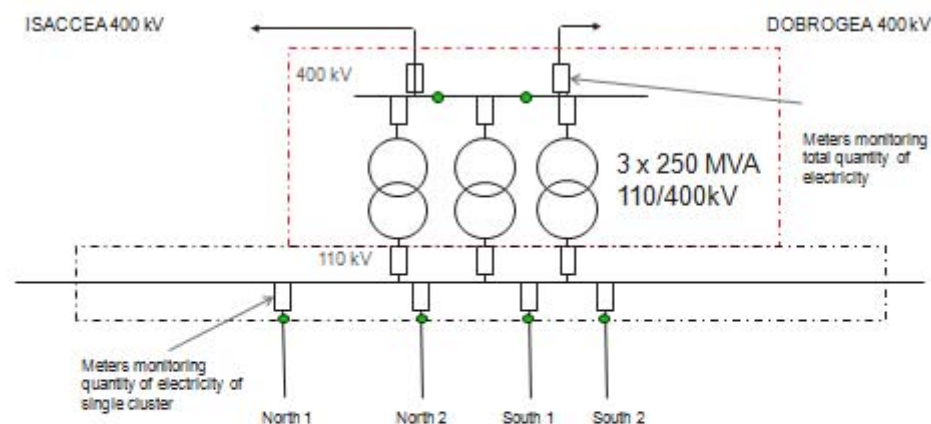
2. Monitoring management structure

In order to obtain reliable monitoring data, the project proponents will establish a monitoring management framework prior to the starting of the crediting period. Clear responsibilities will be assigned to all staff involved in the JI project. One individual will be appointed who has the overall responsibilities for the monitoring of the project, other staff will be responsible for the data recording, data collecting, data archiving and emission reductions calculation.

3. Monitoring apparatus and installation

The total quantity of annual electricity delivered to the grid by the proposed project and its clusters will be monitored through meters in the 400/110kV transformer station situated west of the village Rahman. This total quantity of annual electricity can be allocated proportionally to the existing or any future additional clusters based on monitoring through meters located at the 110kV side.

The following figure demonstrates this metering concept:



VPR&UNO Serachi / Vorname Nachname / Vilmu@b/htab/klasse

06.08.2010

†

Electricity meters will be in ownership and under management of “*Operator al pietei de Masurare*” – OMEPA (Metering Market Operator) which is a subsidiary of Transelectrica. All meters are bidirectional, measuring produced as well as consumed energy. Values measured by OMEPA will be used to determine Green Certificates according to Law 2020 and simultaneously to determine periodic emission reductions.

There will be an additional back up supply through connection of the project activity to the low voltage grid operated by ENEL Romania. Consumed energy will be monitored through meter readings (in ownership of ENEL) and invoices for consumed energy.

The net electricity supplied by the project will then be calculated as follows:



$$EG_{PJ,y} = EG_{Produced,y} - EG_{Consumed,y}$$

Where:

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the JI project activity in year y (MWh/yr)

$EG_{Produced,y}$ Quantity of electricity produced by the JI project activity in year y (MWh/yr)

$EG_{Consumed,y}$ Quantity of electricity consumed by the JI project activity in year y (MWh/yr)

$$EG_{Consumed,y} = EG_{Consumed400kV,y} + EG_{Consumed20kV,y}$$

Where:

$EG_{Consumed400kV,y}$ Quantity of electricity consumed by the JI project activity in year y from the 400kV grid (MWh/yr)

$EG_{Consumed20kV,y}$ Quantity of electricity consumed by the JI project activity in year y from the local 20kV grid (MWh/yr)

4. Data monitoring

The quantity of annual electricity delivered to the grid by the proposed project will be monitored.

5. Quality control

Will be managed by OMEPA

6. Data management

All monitoring data and records will be archived in electronic format. The electronic documents will be backed up on compact disc or hard disc. The project developer will also keep copies of Green Certificates received and prepare a monitoring report at the end of each year, which includes the net electricity generation, the monitoring data summary and the emission reductions calculation.

And all data is kept until 2 years after the end of the total crediting period of the JI project.

D.4. Name of person(s)/entity(ies) establishing the monitoring plan:

>>



Date of establishing the monitoring plan 27/12/2010

Energy Changes Projektentwicklung GmbH
Obere Donaustraße 12/28
1020 Vienna
Austria

Clemens Plöchl clemens.ploechl@energy-changes.com
Oliver Percl oliver.percl@energy-changes.com

**SECTION E. Estimation of greenhouse gas emission reductions****E.1. Estimated project emissions:**

>>

According to ACM0002 Version 11

For most renewable power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted for as project emissions by using the following equation:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$$

Where:

 PE_y Project emissions in year y (tCO₂e/yr) $PE_{FF,y}$ Project emissions from fossil fuel consumption in year y (tCO₂/yr) $PE_{GP,y}$ Project emissions from the operation of geothermal power plants due to the release of non-condensables gases in year y (tCO₂e/yr) $PE_{HP,y}$ Project emissions from water reservoirs of hydro power plants in year y (tCO₂e/yr)

The proposed project activity does not consum any fossil fuels, is not a geothermal power plant and no hydro. Therefore project emissions will be 0 for any year.

E.2. Estimated leakage:

>>

Leakage emissions

No leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected.

No leakage emissions are considered in the proposed project activity. Leakage emissions will be 0 for any year.

E.3. The sum of E.1. and E.2.:

>>

Sum of E.1. and E.2. equals 0.**E.4. Estimated baseline emissions:**

>>

Applying formula 1 $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ using the following values for data/parameter

$EG_{PJ,y}$ 2012	361,332MWh
$EG_{PJ,y}$ 2013 and following years	563,163MWh
$EF_{grid,CM,y}$	0.9215 tCO ₂ e/MWh

gives the following results

BE_{2012}	332,968 tCO ₂
BE_{2013} and following	518,955 tCO ₂

**E.5. Difference between E.4. and E.3. representing the emission reductions of the project:**

>>

ER₂₀₁₂ 332,968 tCO₂
 ER_{2013 and following} 518,955 tCO₂

E.6. Table providing values obtained when applying formulae above:

>>

Year	Estimated project emissions (tonnes of CO ₂ equivalent)	Estimated leakage (tonnes of CO ₂ equivalent)	Estimated baseline emissions (tonnes of CO ₂ equivalent)	Estimated emission reductions (tonnes of CO ₂ equivalent)
2012	0	0	332,968	332,968
2013	0	0	518,955	518,955
2014	0	0	518,955	518,955
2015	0	0	518,955	518,955
2016	0	0	518,955	518,955
2017	0	0	518,955	518,955
2018	0	0	518,955	518,955
2019	0	0	518,955	518,955
2020	0	0	518,955	518,955
2021	0	0	518,955	518,955
Total (tonnes of CO ₂ equivalent)			5,003,559	5,003,559

SECTION F. Environmental impacts**F.1. Documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party:**

>>

Romania requires the assessment of environmental impacts of wind power plants. The environmental impact assessment was provided to the Independent Entity. The next section summarizes the most important findings of the assessment.

F.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party:

>>

A detailed Environmental Impact Assessment has been carried out for the project activity. The environmental reports of all four clusters have been forwarded to the Independent Entity during determination. The following paragraphs summarize the environmental factors and the proposed mitigation measures:

Environmental factor water:

The wastewater produced during the construction shall not be discharged into the local natural areas. The resulting waste shall be selectively collected in containers and transported to especially arranged places, so that it could not be taken away by rain water. Ecological water closets shall be used.

Environmental factor air:



In order to limit the atmosphere pollution with dust, the powdery material shall be carried in conditions which are satisfying this requirement, namely the material shall be sprinkled with water, covered with tarpaulin, etc. The materials (cement, sand) shall also be handled so that the losses in the atmosphere will be minimized.. The plant and means of transportation shall be checked so that they would be in a good technical condition and would not emanate noxious substances over the accepted limits.

Environmental factor *ground and underground*:

Washing, repair, maintenance works of the means of transportation, plant and equipment used are forbidden within the site. The waste collection system on the site during the works shall be placed in especially fit-out premises, and waste shall be regularly disposed by the sanitation service. The waste resulted after the execution of the turbine installation works, irrespective of their nature are managed effectively.

The fuel or lubricant leaks due to accidental causes shall be reduced by the use of a sand bed, located in the most vulnerable areas, which is subsequently collected in a covered metal container and exploited by specialized units.

Fuel storage tanks shall not be placed on the wind farm site. In order to construct the wind turbines foundations the 30 cm fertile layer is firstly removed and is separately stored, on the vegetal soil platforms to be especially fit-out by covering them with a geotextile material, so that the land could be restored to its original condition.

Infertile soil is separately stored, on fit-out platforms, covered with geotextile material so as to delimit the natural layer from the layer to be temporarily stored. The temporary storage places mentioned in the layout annexed to the report on the environmental impact study shall be observed. The removed infertile soil shall be used for filling, and the excess soil shall be used for filling in the places mentioned by Casimcea Municipality. The removed fertile soil shall be entirely used for reconditioning the ground layer of the areas temporarily affected by works, provided that it is accordingly stored during the execution of the construction works.

The beneficiary shall ensure that puddles be prevented from forming near the wind turbines. Water infiltration into the land may have serious consequences for the foundation, requiring subsequent remedies, thus increasing the impact on ground and underground during the construction. Maintenance of the turbines must be carried out appropriately, so as to avoid accidental spills of transformer oil, lubricating oil. Observance of the manufacturer's instructions regarding the turbine assembling.

Environmental factor *biodiversity*:

The waste produced during the execution of the investment shall be stored according to the provisions of the report on the environmental impact study, based on which this environmental approval was issued. The soil areas affected by the construction works shall be covered or reconditioned, so that no other areas, except those provided by the project, be affected.

During and after completion of the construction-assembly works, the site shall be cleared of any debris and remains of materials, so as not to affect the use of the land classified as arable land or pasture. The wind farm site must be permanently maintained very clean, since trash attracts rodents and rodents are hunted by birds of prey. Where there is trash, there are also insects and insects also attract other birds of medium and small size, increasing the risk of collisions.

Formation of puddles or swamps in the area of turbines shall not be allowed, because they attract as well species of water birds or water organisms. The turbines must be signaled during the nighttime by red intermittent light at long intervals between two consecutive flashes, because the light makes birds more cautious and makes them avoid that area.



Permanent monitoring of the biodiversity in the wind farm area, results being stored in a database and the monitoring results being annually sent to Tulcea Environmental Protection Agency. It is recommended that, as the neighbouring wind farms are developed, in mutual agreement with the owners thereof, all such wind farms be monitored cumulatively, so as to compile a database reflecting the possible cumulated impact on the avifauna and the land fauna of that area.

- using rich soil to recondition the affected areas, starting from the base of the towers, so that no surface areas, except for those indicated in the project, be excluded from the lands reserved for agricultural use;
- no materials shall be handled or stored and no motor vehicles shall travel on the land neighbouring the site; construction materials and wind turbine parts will be stored exclusively within the site;
- in event of accidental spillage of wastewaters, oils or fuels resulting from the equipment used, it is recommended to collaborate with authorized companies specializing in de-pollution;
- the concrete for the foundations of wind turbines will be prepared in special batching plants, and carried by special means of transportation, dedicated to this type of material, so as to avoid concrete spillage during transportation and within the wind farm site;
- upon completion of construction works, excessive excavations, debris and household waste will be removed off the site and taken over by companies authorized for the collection of every such type of waste.
- in event that after a lifecycle of approximately 20-25 years the owner decides to dismantle the wind farm, the dismantling will be made by parts (blades, nacelles, towers, switchgears, transformers, foundations, substations, access roads); waste will be managed selectively and by types, and delivered to authorized companies for recovery or disposal; the entire surface area of the wind farm will be restored to its initial condition and function.

No transboundary impacts from the project activity were identified.

SECTION G. Stakeholders' comments

G.1. Information on stakeholders' comments on the project, as appropriate:

>>

The environmental approval for projects in Romania follows a two-step procedure. The first step is the Land use planning (PUZ) and the second step is the Environmental approval (PAC). At both stages a public hearing is required, where stakeholders can give comments, under supervision and coordination of the Local Environmental Agency Galati for PUZ stage and Local Environmental Agency Tulcea for PAC stage.

For cluster N1 these meetings were scheduled on 06 April 2010 (PUZ) and 19 April 2010 (PAC). Invitations to these meetings were published in the regional newspaper "Delta" as well as at the offices of Casimcea municipality and the Environmental Agency in Tulcea and Galati. For cluster S2 these meetings were scheduled on 11 March 2010 (PUZ) and 29 March 2010 (PAC). Invitations to these meetings were published in the regional newspaper "Delta" as well as at the offices of Casimcea municipality and the Environmental Agency in Tulcea and Galati.



The project was presented and stakeholders were able to comment and discuss. All comments received were positive, no negative impacts to the local stakeholders were identified

For Cluster S1 and N2 the meetings for PUZ stage are scheduled on 22 and 29 September 2010, and for PAC stage the meeting will be scheduled at the mid of October.

Additionally to these public hearings the PDD was published on the website of the Romanian Ministry of Environment and Sustainable Development and at an international level (by the Independent Entity), for a period of 30 days with the possibility for stakeholder to submit comments. No comments were received.

Annex 1**CONTACT INFORMATION ON PROJECT PARTICIPANTS**

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Annex 2



BASELINE INFORMATION

Annex 3

MONITORING PLAN
