Environmental Due Diligence of Mezzogiorno Wind Farm Portfolio (Sicily and Apulia, Italia)

September 2015

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September 2015

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ERM Italia S.p.A.	
Reviewed by: Paola Bertolini	Approved by: Alessandro Battaglia
Principal Consultant	Partner
September 2015	September 2015

Contents

Environmental Due Diligence Criteria

ERM understands that Glennmont wishes to conduct a review of the environmentally relevant documents available in the VDR (Virtual Data Room) in order to identify:

- Environmentall Permit requirements that might lead to liabilities and costs if not complied with. The analysis is focused on requirements which are still applicable and verifiable during operation and decommissioning. Requirements which only applied to the construction phase (e.g. dust and noise emissions connected to construction) are not considered in this review.
- Environmental risks associated with sensitivities of the environment (natural environment, cultural heritage);
- Possible liabilities associated with monitoring campaigns results;
- Additional decommissioning costs.

Issues which have been considered as material are those which do or could materially impact the business and:

- Are in excess of 20,000 Euro per issue;
- Might lead to business interruption;
- Have a potential impact on the license to operate;
- Have the potential to lead prosecution of Glennmont or impact Glennmont's reputation from an environmental perspective.

An estimate of costs to address the issue is provided, where possible, for each significant (material) issue.

Introduction and Due Diligence Criteria

ERM was commissioned to undertake a limited desktop-based **Environmental Due Diligence (EDD)** in relation to the Mezzogiorno wind farm portfolio (Sicily and Apulia Regions, Southern Italy).

All of this program was undertaken using documentation provided through a VDR.

The VDR was populated with several documents by the client including permitting procedures, project design documents, and technical studies related to physical environment interactions such as acoustic assessment. ERM has reviewed all the documents present in VDR as of 21st August, 2015.

According to the SoW, the objective of the desktop EDD is to identify any potential weaknesses in the EIA process regarding the location of the Target site and to develop recommendations to address these liabilities and estimate associated cost or project development delay in terms of environmental risks.

Issues which have been considered as material are those which do or could materially impact the business and:

- Are in excess of 20,000 Euro per issue; or
- Have the potential to lead prosecution of Glennmont or impact Glennmont's reputation from an environmental perspective.

Where possible, for each significant (material) issue, an estimate of costs to address the issue in the **Most Likely Case (MLC)** and **Reasonable Worst Case (RWC)** is provided by ERM.

Contents of the following Specific Windfarm Sections

Each specific windfarm section will contain the following:

- Main data about of the windfarm (size, location)
- Review of the environment-related permitting documents and of the requirements contained therein
- Environmental Impact Study Summary Slide (depending on the availability of the EIS)
- Review of documents produced in compliance with the reviewed requirements (e.g. Environmental Monitoring, Decommissioning Plans)
- Royalties Agreements and associated costs

ERM analysis of the documents is reported at the end of each slide and includes:

- **Conclusions of the documents analysis: highlighted in green under arrow shaped bullets in case no issue was highlighted and no further action is required.**
- **Recommendations are highlighted in blue under arrow shaped bullets in case further analysis is suggested by ERM.**
- **Findings and related cost estimates are highlighted in red at the end of each slide under arrow shaped bullets.**

Limitations

The conclusions expressed in this desk-top based Phase I Environmental Due Diligence have been limited to the review of a Virtual Data Room (VDR) organized by the Vendor. No site visit or management interviews were conducted by ERM within the scope of this assignment.

Conclusions obtained are based upon ERM professional judgement and experience in assessing liabilities in similar operations. However, the conclusions obtained are limited to the quantity of information reviewed in the timeline available for review. Therefore, provided the limited scope of the assessment, the existence of material implications cannot be discarded even if specific potential environmental issues are not mentioned in this report or have not been found as of material cost therein.

The focus of the assessment has been on the Project's environmental permitting requirements and subsequent activities reports.

This report is confidential to Glennmont Partners (from now onwards Glennmont) and CEF 2 Wind Energy Partners we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party rely upon the report at their own risk.

The Target: Mezzogiorno Portfolio

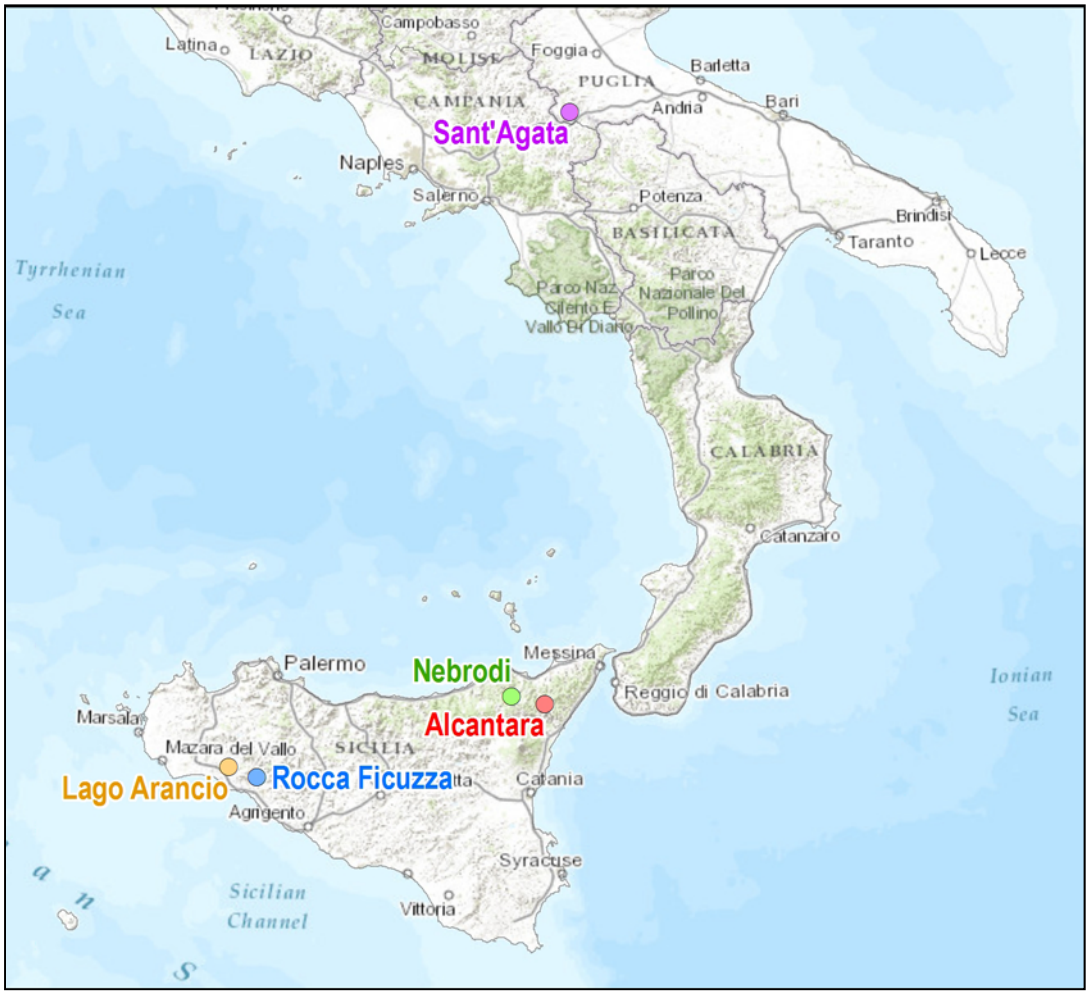
- The Mezzogiorno Portfolio consists of 231 Turbines for a total power of 244.7 MW. These are distributed on 5 windfarms located in Sicily and Apulia as follows:
- Sicily:
  - 4 windfarms
  - 180 turbines
  - 178.3 MW
  - 73% of the total capacity
- Apulia:
  - 1 windfarm
  - 51 turbines
  - 66.4 MW
  - 27% of the total capacity
- The windfarms achieved COD (Commercial Operation Date) between 2009 and 2012.

The Target: Mezzogiorno Portfolio

The table below provides further details on the Portfolio. This is derived from the Infoset Mezzogiorno provided by Glennmont.
The term “Macro-Project” used therein is substituted in the rest of this Report with the term “Windfarm”, conventionally used to indicate one wind energy installation included in one permitting procedure.

Region	Windfarm	Windfarm portions	Turbines	Turbines subtotals	Capacity
Sicily	Alcantara	Alcantara Nord	28 x 850 kW	56	23.8 MW
		Alcantara Sud	28 x 850 kW		23.8 MW
	Lago Arancio	Lago Arancio	22 x 2.0 MW	22	44.0 MW
	Nebrodi	Nebrodi Ovest	24 x 850 kW	76	20.4 MW
		Nebrodi Nord	28 x 850 kW		23.8 MW
		Nebrodi Est	24 x 850 kW		20.4 MW
	Rocca Ficuzza	Rocca Ficuzza	26 x 850 kW	26	22.1 MW
Apulia	Sant’Agata	Serra del Vento Nord	14 x 850 kW	51	11.9 MW
		Serra del Vento Sud	17x 850 kW		14.4 MW
		Taverna la Storta Nord	9 x 2.0 MW		18.0 MW
		Taverna la Storta Sud	11 x 2.0 MW		22.0 MW
Total			**189 x 850 kW 42 x 2.0 MW**	**231**	**244.7 MW**

Mezzogiorno Portfolio Windfarms Location



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Environmental Permitting

The windfarms in Sicily were authorized based on the Italian Legislative Decree n. 387 of the 23.12.2003 on the permitting of renewable energy production plants. This procedure was intended to simplify the permitting process and unify the permitting outcomes in an umbrella permit called «Autorizzazione Unica», single permit for construction and operation.

The following environmental permits, constituting the main environmental component of the permit, were issued for the Sicily windfarms upon submission of the respective Environmental Impact Assessments:

- Alcantara: Regional Decree n. 512 of the 12.05.2004
- Lago Arancio: Regional Decree n. 1424 of the 05.12.2003
- Nebrodi: Regional Decree n. 918 of the 27.08.2004
- Rocca Ficuzza: Regional Decree n. 1382 of the 27.12.2004

The Sant'Agata windfarm in Apulia was authorized according to the pre-existing legal framework and therefore the project was subject to obtainment of Building Concessions by the Local Authorities.

The proponent requested and obtained the exclusion from the Environmental Impact Assessment procedure, in consideration of the limited impacts of the plant.

Alcantara, Sicily

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Alcantara: Main Data

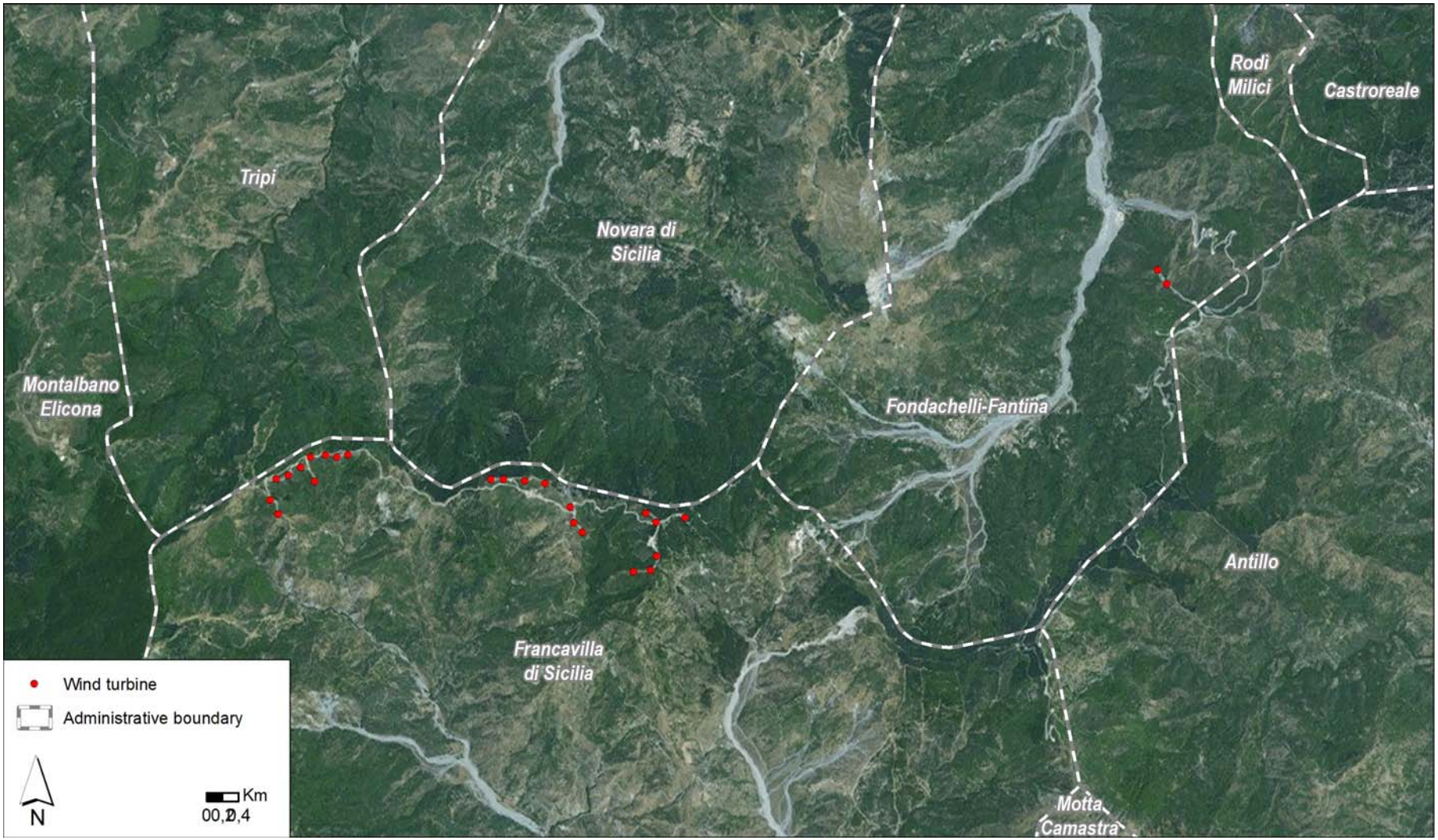
According to Mezzogiorno info set provided by Glennmont Partners (06.07.2015), the Alcantara windfarm (officially named “Alcantara-Peloritani” in the permitting procedure, “Alcantara” herein after), includes:

- 56 Turbines of 850 kW
- For a total capacity of 47,6 MW.

The wind turbines are located on the territory of Messina Province in the Municipalities of:

- Francavilla di Sicilia;
- Fondachelli Fantina.

Alcantara: Location



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Alcantara: the environmental permitting

- The Project obtained the final Construction and Operation Permit (Autorizzazione Unica) from Sicily Region on February 13th, 2007, based on the Italian Legislative Decree n. 387 of the 23.12.2003 on the permitting of renewable energy production plants.
- The approval sets out environmental requirements to be implemented during the entire initiative lifecycle (construction, operation and decommissioning), mainly with reference to the Environmental Permit (Compatibilità Ambientale) and the Landscape Permit (Autorizzazione Paesaggistica).
- The Environmental Permit, was issued by Sicily Region on May 12th, 2004.
- The requirements relevant to this assessment set out by the permits and the relevant subsequent documents produced in compliance thereof, are summarized in the following pages.

Alcantara: Environmental Permit Requirements (1)

Turbines layout

1. The following wind turbines were not permitted and removed from the submitted project based on impact assessment findings:
   - 108, 136 (Francavilla); 201, 202, 203, 204, 205, 212 (Fondachelli) for flora protection
   - 209 (Fondachelli) for visual impact
2. The following wind turbines were moved: 112, 127, 129, 206, 210, 211, 213 for flora and environment protection.
3. Maintain adequate distance between wind turbines and buildings, even from isolated ones.
4. Minimum distance between wind turbines: 6 times the rotor radius and anyway at least 150 m.

➢ **No evidence of the approval by the authorities of the working design document - Progetto Esecutivo (considering the above modifications) was made available to ERM in the VDR. However the minutes of an inspection carried out by Regional Authorities (Regional Energy Department, Regional Environmental Department, Forest Inspectorate) after construction, on 10.07.2013, states that the Alcantara windfarm was constructed in compliance with the submitted project.**

Given the statements of the regional authority ERM performed no further analysis on the project layout.

Alcantara: Environmental Permit Requirements (2)

ACCESS ROADS

1. Minimise access roads and do not asphalt roads but rather use gravel from the local rock formations, that well integrate with the surrounding landscape.
2. Reinstatement using low impact natural engineering techniques in particular at:
   - Wind turbines in Fondachelli,
   - Wind turbine 304 in Antillo,
   - 137, 220, 207, 213, 215, 216, 217, 222, 223, 224, 225, 226 in the road route at Portella Tre Fontane.
3. Road connection between wind turbines 117 and 116 not approved. Turbine 117 to be accessed through turbine 118 access road.
4. Wind farm 135 to be accessed through route connection for wind turbine 136, not to be constructed

➢ **ERM recommends a site survey to assess implementation of these requirements.**

Alcantara: Environmental Permit Requirements (3)

CONSTRUCTION YARDS

1. Construction yards to be reinstated to the pre-construction condition (immediately after work completion)
2. In Fondachelli young plants of *Adenocarpus commutatus* shall be replanted along roads immediately after construction completion.
3. Construction excavation material to be disposed of at authorised sites.
4. Low impact natural engineering techniques to be adopted for slope stabilisation and water downflow control.
5. At completion of the construction works a photographic report to be delivered to the Region (Environment and Territory Department).

➢ **ERM recommends a site surveys to assess implementation of requirements 1 to 4.**

Alcantara: Environmental Permit Requirements (4)

DECOMMISSIONING PLAN

1. Site Decommissioning Plan to be delivered. It should include a detailed cost estimate for the restoration activities to be performed at the decommissioning of the windfarm.
2. Bank guarantee to be delivered to the Environmental Department of the Region to cover for the estimated cost of the Reinstatement Plan.

➢ **Decommissioning Plan available in VDR, analysed in the following page.**

Alcantara: Decommissioning Plan and Costs

- The Decommissioning Plan was prepared in compliance with the Environmental Permit requirement (Piano di Smantellamento, October 2004)
- The Plan considers the operation lifetime of the plant to be around 30 years.
- In terms of vegetation restoration the Plan only includes seeding. No planting is foreseen.
- The total estimated cost of the Decommissioning Plan is **221.532 €.** The unit cost per turbine, indicatively calculated on 56 turbines, is **3.955 €**.
- The estimated cost for vegetation restoration (seeding) is **3.378 €** (2,38 €/m^2 x 1422 m^2).
- The Bank guarantees for the Alcantara windfarm were made available for review in the VDR. These correspond to the Decommissioning Plan amount, were stipulated on 27 October 2009 and will expire in 2025.

➢ **The cost of the vegetation restoration appears underestimated. In case planting is required, in addition to seeding, the additional cost might be 20 k€.**

Alcantara: Environmental Permit Requirements (5)

Environmental Management and Monitoring

1. A Birds collision monitoring plan should be put in place.
2. In case of frequent collision the wind turbine where collisions happen has to be inactivated.
3. A noise monitoring plan should be put in place.
4. Electromagnetic field control measures to be implemented.
5. Waste oils and batteries to be properly collected and disposed of.
6. No advertising is allowed on wind turbines, not to increase visual impact.

- **Monitoring reports performed in response to requirements 1 to 3 are available in VDR. See following page.**
- **No evidence of electromagnetic monitoring measures was provided. In case an electromagnetic monitoring campaign was required, this would cost 10k €.**
- **ERM recommends a site survey to assess appropriate management of points 5 and 6.**

Alcantara: Environmental Monitoring Results - Birds

Avifauna and bats monitoring

- Four biannual reports (for 2013, 2014) and a final conclusion report were made available for review.
- According to the reports the Birds Monitoring Plan was duly submitted to Sicily Region as per Environmental Permit requirement.
- No birds nor bats collisions were detected throughout the 2-year monitoring campaigns in 2013 and 2014.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that future monitoring of birds will be needed. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Alcantara: Environmental Monitoring Results - Noise

- The noise monitoring campaign was performed between July and November 2012
- All turbines are located in Zone E (agricultural area) according to the applicable noise zoning.
- According to the monitoring results the noise emissions from the windfarm were in compliance with the applicable noise limit values.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that noise monitoring might need to be repeated in connection with changes in the surrounding settings (e.g. construction of buildings) or in the plant itself. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Alcantara: Main Reviewed Documents

4.1.1.3	Final Construction and Operation Permit – Autorizzazione Unica D.R.S. 48, 13-02-2007
4.1.1.1.2.2	Environmental Permit - D.R.S. n. 512 del 12-05-04
4.1.1.1.1.1	AL - A.R.T.A. Land Planning Permit - Autorizzazione in Variante - D. Dir. n° 955, 08-09-2004
4.1.1.1.3.1	Landscape permit – Nulla Osta Paesaggistico, 06-06-2003
4.1.1.1.2.4	Appropriate Assessment Summary Report – Valutazione di Sintesi della Valutazione di Incidenza, 05-2004
4.1.1.1.2.1.3.1	Birds Monitoring Reports, 2013-2014
4.1.1.1.2.1.3.2.1	Noise Monitoring Report, 2013
4.1.1.1.2.1.1.	Decommissioning Plan, 10-2014
4.1.6.1.1	Regional Authorities Survey Minutes, 17-07-2013
4.1.1.1.2.1.2.1 – 2	Bank Guarantees
4.1.4.1.3	Royalties Agreement of Antillo Municipality, Convenzione definitiva Comune di Antillo, Rep. 493, 25-11-2010
4.1.4.1.1	Royalties Agreement of Francavilla di Sicilia Municipality, Convenzione preliminare Comune di Francavilla, Rep. 493, 10-04-2001
4.1.4.1.4	Royalties Agreement of Fondachelli Fantina Municipality, Convenzione definitiva Comune di Fondachelli Fantina, 11-05-2001

Lago Arancio, Sicily

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Lago Arancio: Main Data

According to Mezzogiorno info set provided by Glennmont Partners (06.07.2015), the “Lago Arancio” windfarm includes:

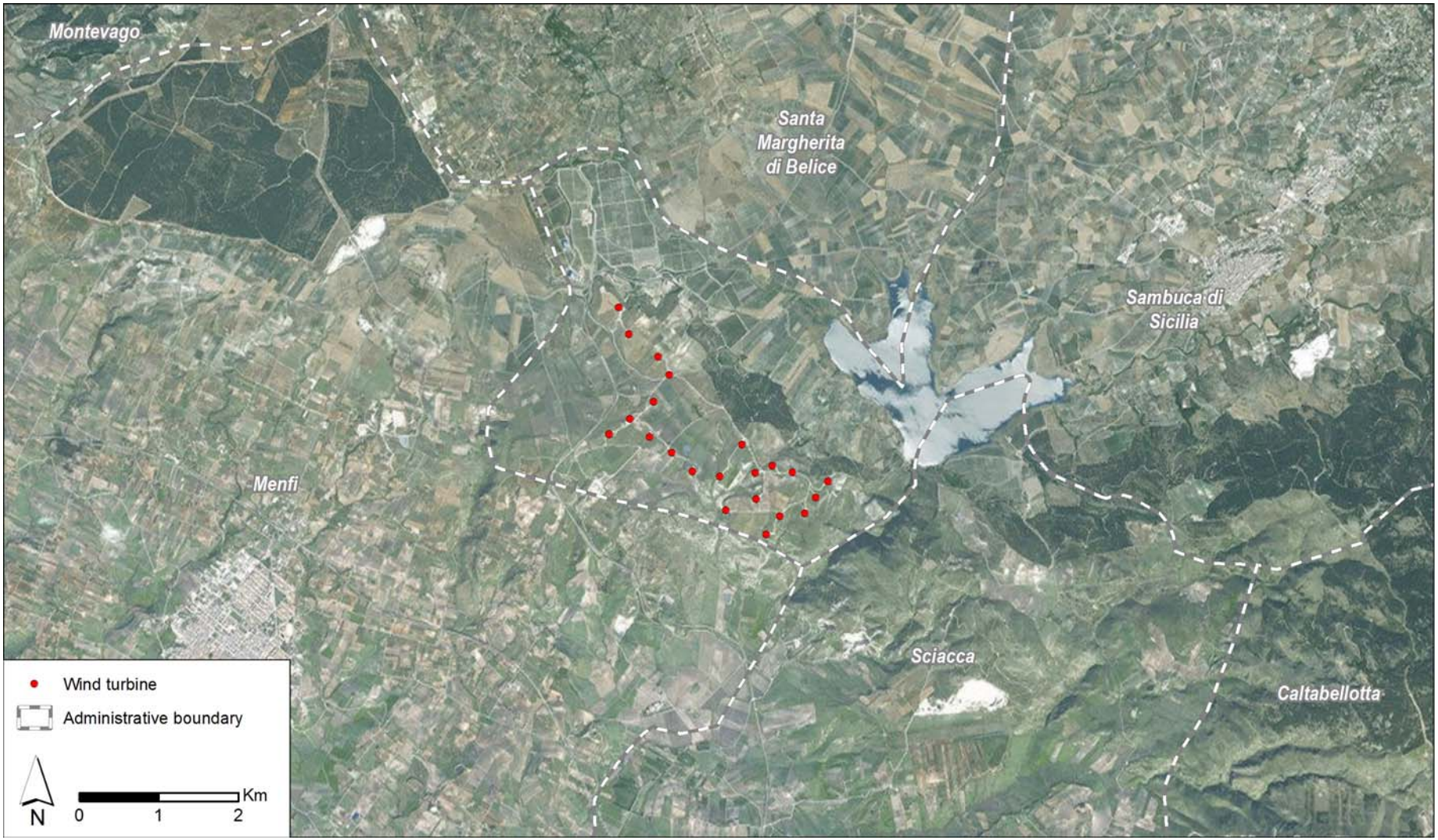
- 22 Turbines
- For a total capacity of 44 MW.

The capacity indicated in the building and operation permit is 50.6 MW.

The project is located in Agrigento Province. The wind turbines are located in Sambuca Municipality.

The closest urban area is the settlement of Menfi (Menfi Municipality), less than 1 km West from the windfarm.

Lago Arancio: Actual Wind Farm Location



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Lago Arancio: the environmental permitting

- The Project, including the windfarm and the electrical connections obtained the Environmental Permit (Compatibilità Ambientale) by the Sicily Region on December 5th 2003.
- According to the Legislative Decree No. 387/2003 on the permitting of renewable energy production plants, the Project obtained the permit for construction and operation (Autorizzazione Unica) by the Sicily Region on December 7th, 2006.
- The approval sets out environmental requirements to be implemented during the entire initiative lifecycle (construction, operation and decommissioning), mainly with reference to the Environmental Permit (Compatibilità Ambientale) and the Landscape Permit (Autorizzazione Paesaggistica).
- The requirements relevant to this assessment set out by the permits and the relevant subsequent documents produced in compliance thereof, are summarized in the following pages.

Lago Arancio: Environmental Permit Requirements (1)

TURBINES LAYOUT

1. The following wind turbine as included in the submitted project were not permitted/moved according to the environmental permit requirements:
   - 001- to be removed
   - 002 - to be moved upstream based on visual assessment findings
   - 016 – to be moved based on flora impacts findings
2. Maintain adequate distance between wind turbines and buildings, including the isolated ones.
3. Minimum distance between wind turbines: 6 times the rotor radius and anyway at least 150 m.

➢ **ERM overlaid the following georeferenced information (see following Slide):**

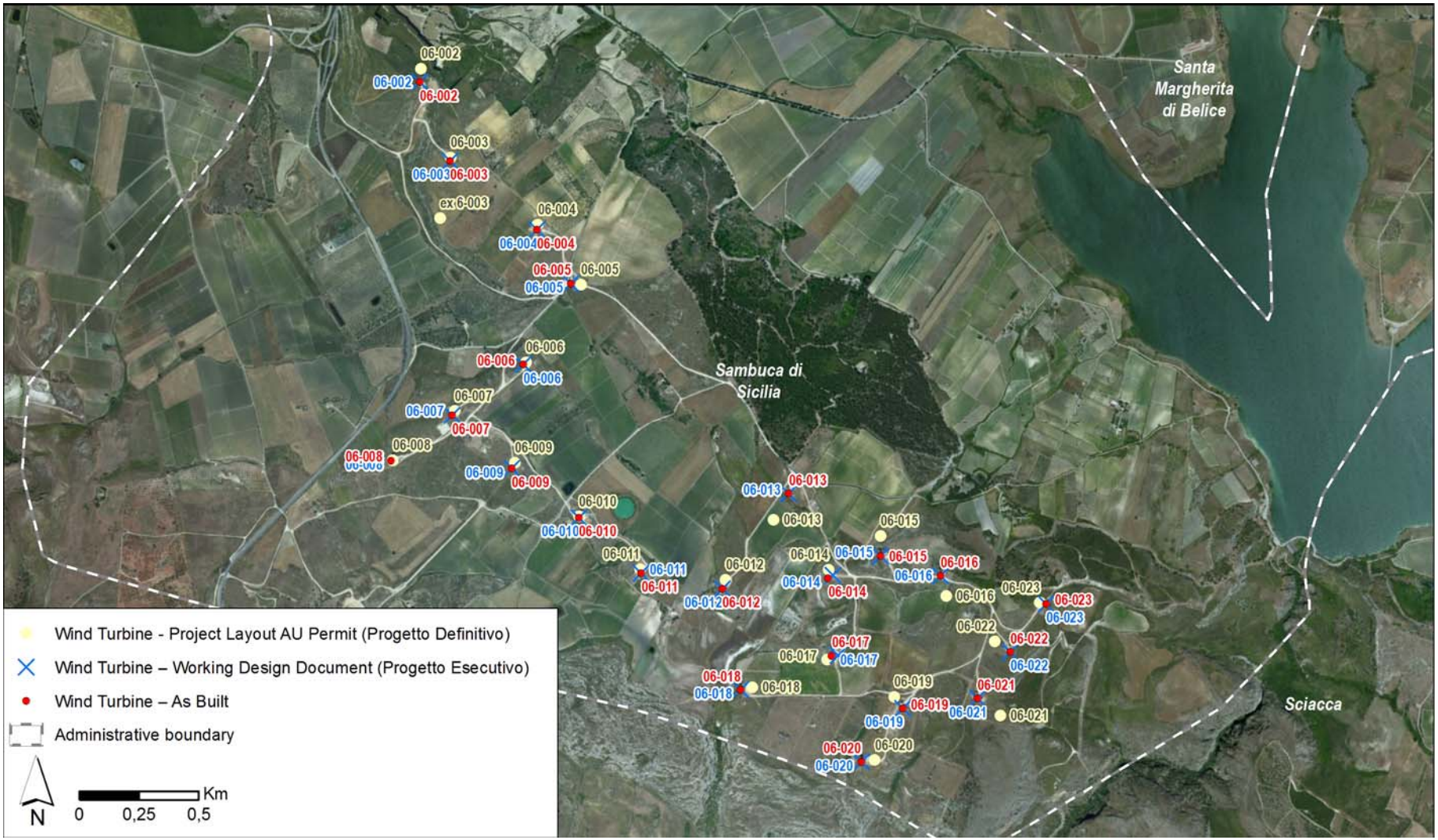
- ➢ **layout delivered with the AU Permit,**
- ➢ **layout modified according to permitting requirements (Progetto Esecutivo)**
- ➢ **layout as built and**
- ➢ **satellite image.**

The resulting map shows that:

- ➢ **The above mentioned requirements related to the turbines layout were actually considered.**
- ➢ **The layout as built corresponds with the Progetto Esecutivo and with the actual position of the turbines (visible on the satellite image at a larger view).**

➢ **No evidence of the formal approval by the authorities of the working design document (Progetto Esecutivo) is available. Refer to legal advisor report for further details on this point.**

Lago Arancio: Layout Conformity Analysis



Lago Arancio: Environmental Permit Requirements (2)

ACCESS ROADS

Minimise access roads and do not asphalt roads but rather use materials that well integrate with the surrounding landscape and allowing storm water runoff.

WATER DRAINAGE SYSTEM

Adequate hydraulic works to be performed on all the plant areas including roads to avoid impacts on morphology and hydraulic regime from surface and storm water.

FENCING

Parcels n. 47 and 73 shall be fenced to protect grazing areas.

- **ERM recommends a site surveys to assess implementation of the above reported requirements.**

Lago Arancio: Environmental Permit Requirements (3)

DECOMISSIONING AND RESTORATION PLAN

1. Site Decommissioning and Restoration Plan to be delivered. It should include also a detailed cost estimate for the restoration activities to be performed at the decommissioning of the windfarm.
2. Bank guarantee to be delivered to the Environmental Department of the Region to cover for the estimated cost of the Decommissioning Plan.

➢ **Decommissioning Plan available in VDR. See following page.**

Lago Arancio: Site Decommissioning Plan and Costs

- The Decommissioning Plan (Piano di Disattivazione e Smantellamento, October 2004) was prepared following the Environmental Permit requirements.
- The Plan considers the operation lifetime of the plant to be around 30 years.
- In terms of vegetation restoration the Plan only includes seeding and related preparatory activities. No planting is foreseen.
- The total estimated cost of the Decommissioning Plan is **90.841 €**. The unit cost, indicatively calculated on 22 turbines, is **4.129 €.**
- The estimated cost in the Decommissioning Plan for vegetation restoration (seeding) is **1.179 €** (2,38 €/m^2 x 497 m^2).
- The Bank guarantee for Lago Arancio windfarm, available for review in the VDR, was stipulated on the 27 February 2009 (expiration date 31 December 2024) for a total amount corresponding to the Decommissioning Plan cost.

➢ **The cost of the vegetation restoration appears underestimated. In case of planting, and not only seeding, the cost might increase up to 10 k€.**

Lago Arancio: Environmental Permit Requirements (4)

CONSTRUCTION YARDS

1. Construction yards to be reinstated to the pre-construction conditions (immediately after work completion).
2. Installation of 008 and 005 windfarms (including assembly) shall be carried out avoiding damages to the vegetation.
3. Construction excavation material to be disposed of at authorised sites.
4. Low impact natural engineering techniques techniques to be adopted for slope stabilisation and water downflow control.
5. Quarterly reports to be delivered during the construction activities; at completion of the construction works a photographic report to be prepared and submitted to the region.

- **ERM recommends a site survey to assess implementation of requirements 1 to 4.**
- **The photographic report after completion of construction works was made available in the VDR.**

Lago Arancio: Environmental Permit Requirements (5)

Environmental Management and Monitoring

1. A Birds collision monitoring plan should be put in place – per wind turbine and per year – reports to be submitted to the competent Authority.
2. In case of frequent collision the wind turbine where collisions happen has to be inactivated.
3. Noise monitoring survey shall be carried out and results shall be communicated to the competent Authorities.
4. Electromagnetic monitoring measures shall be implemented.
5. Waste oils and batteries to be properly disposed of.
6. No advertising is allowed on wind turbines, not to increase visual impact.

- **Monitoring reports for noise and birds collisions available in VDR. See following pages.**
- **No evidence of electromagnetic monitoring measures for the wind farm in operation has been provided. Based on the Electric/electromagnetic study undertaken as part of the Environmental Impact Study the risk for electromagnetic exposure of the population in the vicinity of the wind farm is considered negligible. However it cannot be excluded that authorities require an electromagnetic survey in the future. This would cost 10k €.**
- **ERM recommends a site survey to assess appropriate management of points 5 and 6.**

Lago Arancio: Environmental Monitoring Results - Birds

Avifauna and bats monitoring

- Four biannual reports (for 2013 and 2014) and a final conclusive report were made available for review.
- The Birds Monitoring Plan was submitted to Sicily Region in compliance with D.R.S. 1424 of the 5-12-2003.
- No birds nor bats collisions were detected throughout the 2-year monitoring campaigns in 2013 and 2014.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that future monitoring of birds will be needed. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per annual monitoring campaign).

Lago Arancio: Environmental Monitoring Results - Noise

- The noise monitoring campaign was performed in June 2012.
- All turbines are located in agricultural area. Noise zoning at municipal level is not available.
- According to the monitoring results the noise emissions from the windfarm (daily measurements) were in compliance with the regulation (threshold values).

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that noise monitoring might need to be repeated in connection with changes in the surrounding settings (e.g. construction of buildings) or in the plant itself. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Lago Arancio: Litigations and Inspections

The Litigation list includes a litigation with two land owners (*Abruzzo Giuseppe and Guasto Nina*) concerning noise impacts due to the wind farm operation.

- **The status of the litigation is reported as 'closed with Settlement'. ERM recommends to verify the closure of this issue with the legal advisors.**

The report of a survey of the Regional Forest Inspectorate (dated 28.01.09) notifies that approx. 8.000 m^2 of the constructed road had not been duly authorized. No further information was found by ERM about the closure of this issue.

- **ERM recommends to verify the closure of this issue with the legal advisors.**

Main Reviewed Documents

4.2.1.3	Final Construction and Operation Permit – Autorizzazione Unica D.R.S. 2337, 7-12-2006
4.2.1.1.2.2	Environmental Permit - D.R.S. 1424, 5-12-2003
2.2.5.4	Electric/Electromagnetic Assessment – Annex to the Environmental Impact Assessment
4.2.1.1.1.1	AL - A.R.T.A. Land Planning Permit - Autorizzazione in Variante - D. Dir. n° 231, 8-3-2004
4.2.1.1.3.1	Landscape permit – Nulla Osta Paesaggistico n 5588, 25-06-2003
4.2.1.1.3.2	Landscape permit – Nulla Osta Paesaggistico (for underground cables) n° 611, 25-10-2005
4.2.1.1.3.3	Landscape permit – Nulla Osta Paesaggistico n° 991, 13-02-2008
4.2.1.1.2.1.2.1	Birds Monitoring Final Reports, 2013-2014
4.2.1.1.2.1.2.2	Noise Monitoring Report, 2012
4.2.1.1.2.1.1.1	Decommissioning Plan
4.2.4.1.1	Preliminary Agreement with Sambuca Municipality, Convenzione preliminare Comune di Sambuca, Comune di Antillo, del 25-05-2001
4.2.4.1.2	Amendment and review of the Preliminary Agreement with Sambuca Municipality, 31-07-2003
4.2.1.1.2.1.3.1	Bank Guarantee
9.2.2.2	Litigation List
4.2.1.1.6.3	Verbale di Contestazione n. 04 del 28-01-09

Nebrodi, Sicily

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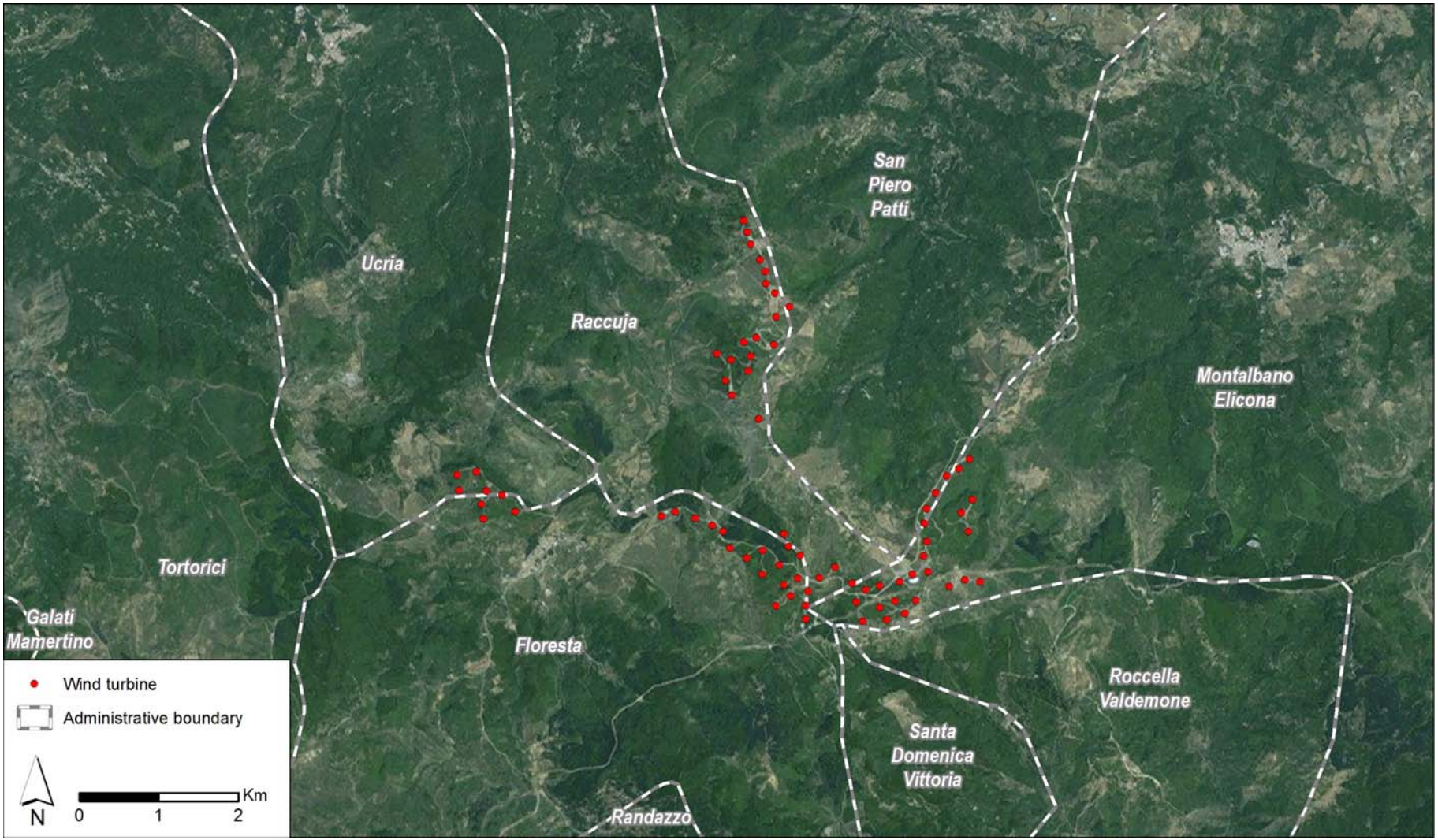
Nebrodi: Main Data

According to Mezzogiorno info set provided by Glennmont Partners (06.07.2015), the project Nebrodi includes three windfarm portions named respectively Nebrodi Est, Nebrodi Nord and Nebrodi Ovest for a total of 56 Wind Turbine Generators (WTGs), 850 kW each one, for a total capacity of 64,6 MW.

The wind turbines are located on the territory of Messina Province in the following Municipalities:

- Floresta
- Ucria
- Montalbano Elicona
- Raccuja
- San Piero Patti

Nebrodi: Location



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Nebrodi: the Environmental Permitting

- The Project, including the windfarm and the electrical connection, obtained the Environmental permit (Compatibilità Ambientale) by the Sicily Region - ARTA (Competent Authority) on 27th August 2004 .
- According to the Decree No. 387/2003 on the permitting of renewable energy production plants, the same Project obtained the permit for construction and operation (Autorizzazione Unica) by the Sicily Region (Competent Authority) on 27th February 2007.
- The approval sets out environmental requirements to be implemented during the entire initiative lifecycle (construction, operation and decommissioning) mainly with reference to the Environmental Permit (Compatibilità Ambientale) obtained on 27th August 2004 by the Sicily Region.
- The requirements relevant to this assessment set out by the permits and the relevant subsequent documents produced in compliance thereof, are summarized in the following pages.

Nebrodi: Environmental Permit Requirements (1)

Turbines layout

- The following WTGs were not permitted and removed from the submitted project based on impact assessment findings:
  - n.15 WTGs (616, 617, 619, 620, 623, 624, 626, 628, 630, 635, 636, 638, 642 an 643) located in the municipality of Montalbano Elicona for flora protection and archaeological reasons;
  - n.6 WTGs (101, 102, 103, 104, 105, and 110) located in the municipality of Floresta for flora protection;
  - n.5 WTGs (203, 204, 212, 213 and 214) located in the municipality of Raccuja; and
  - n.3 WTGs (401, 409 and 417) located in the municipality of Ucria.
- The following wind turbines were moved for environmental and vegetation emergences:
  - n.1 WTG (118), Municipality of Floresta,
  - n.1 WTG (641), Municipality of Montalbano Elicona, and
  - n.3 WTGs (212, 225 and 227), Municipality of Raccuja.
- Minimum distance between wind turbines and public roads: 3 times the rotor radius and anyway at least 150 m.
- Minimum distance between wind turbines: 6 times the rotor radius and anyway at least 150 m.

➢ **No evidence of the approval by the authorities of the final Working Design (considering the above modifications) was made available to ERM in the VDR. However the minutes of an inspection carried out by Regional Energy Department after construction, on 12.03.2015, states that the Nebrodi windfarm was constructed in compliance with the submitted project.**
Given the statement of the regional authority ERM performed no further analysis on the project layout conformity.

Nebrodi: Environmental Permit Requirements (2)

ACCESS ROADS

- Minimise access roads using, where is possible, the existent roads.
- The use of asphalt/cement for roads is forbidden.
- Reinstatement using low impact natural engineering techniques.

CONSTRUCTION YARDS

- Construction areas to be reinstated to the pre-construction conditions (immediately after work completion)
- Construction excavation material to be disposed of at authorised sites.
- Low impact natural engineering techniques to be adopted for slope stabilisation and water drainage control.
- At completion of the construction works a photographic report to be delivered to the Region (Environment and Territory Department).

➢ **ERM recommends a site surveys to assess implementation of the above reported requirements.**

Nebrodi: Environmental Permit Requirements (3)

DECOMMISSIONING PLAN

- Site Decommissioning Plan to be delivered. It should include a detailed cost estimate for the restoration activities to be performed at the decommissioning of the windfarm.
- Bank guarantee to be delivered to the Environmental Department of the Region to cover for the estimated cost of the Reinstatement Plan.

➢ **Decommissioning Plan available in VDR, analysed in the following page.**

Nebrodi: Site Decommissioning Plan and Costs

- The site Decommissioning Plan was prepared in compliance with the Environmental Permit requirements (Piano di Smantellamento, December 2004)
- The Plan considers the operation lifetime of the plant to be around 30 years.
- In terms of vegetation restoration the Plan only includes seeding. No planting is foreseen.
- The total estimated cost of the decommissioning plan is **90,841 €**. On the other hand the Bank guarantee for the Nebrodi wind farm is **151.981 €**. Therefore 151.981 € is assumed here as the accepted amount for the decommissioning cost. Assuming 151.981 € as the accepted cost estimate for the decommissioning the unit cost per turbine would be **2.000 €**, indicatively calculated on 76 turbines.
- The estimated cost in the Decommissioning Plan for vegetation restoration (seeding) is 1,180 € (2,38 €/m^2 x 497m^2).

➢ **The cost of the vegetation restoration appears underestimated in case planting is required. In case of planting ERM estimates an additional cost of 20 k€.**

Nebrodi: Environmental Permit Requirements (4)

EMMP - Environmental Management and Monitoring Plan

- An EMMP should be defined that includes birds collision monitoring at each turbine.
- In case of frequent collision the wind turbine has to be inactivated.
- Monitoring and control of noise and electromagnetic waves
- No advertising is allowed on wind turbines.

➢ **Monitoring reports available in VDR, analysed in the following page.**

➢ **No evidence of electromagnetic monitoring measures for the wind farm in operation has been provided. In case an electromagnetic monitoring campaign was required, this would cost 10k €.**

Nebrodi: Environmental Monitoring Results - Birds

- Four biannual reports (for 2013, 2014) and a final conclusive report were made available for review.
- The Birds Monitoring Plan was submitted to Sicily Region as required in the Environmental permit dated 2004
- Some birds collision was detected during the 2-year monitoring campaigns in 2013 and 2014 but the impacts were identified as not significant in terms of birds protection for the relevant species assessed.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that future monitoring of birds will be needed. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Nebrodi: Environmental Monitoring Results - Noise

- The noise monitoring campaign was performed in March 2013
- All turbines are located in Zone E (agricultural area) according to the noise zoning plan.
- According to the monitoring results the noise emissions from the windfarm were in compliance with the current regulation.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that noise monitoring might need to be repeated in connection with changes in the surrounding settings (e.g. construction of buildings) or in the plant itself. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Main Reviewed Documents

4.3.1.3	Permit for Construction and Operation (Autorizzazione Unica) D.R.S. No.49 dated 23rd February 2007
4.3.1.1.2.2	Environmental Permit (Compatibilità Ambientale) - D.R.S. No. 918 dated 27° August 2004
2.3.5.4	Electric/Electromagnetic Assessment – as Annex of the Environmental Impact Assessment
4.3.1.1.2.1.2	Environmental Management and Monitoring Plan (EMMP)
4.3.1.1.2.1.2.1	Birds Monitoring Reports, 2013-2014 and final Reports
4.3.1.1.2.1.2.2	Noise Monitoring Report, 2013
4.3.1.1.2.1.3	Decommissioning Plan, December 2014
4.3.1.1.2.1.4.1	Photographic Report
4.3.4.1	Local Develpment Plans
4.3.6.1.1	Regional Authorities Survey Minutes, 17-07-2013
4.3.1.1.2.1.1	Bank Guarantees
2.3.5.1	Naturalistic Study 07-2003
9.3.1.1	Litigation List

Rocca Ficuzza, Sicily

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Rocca Ficuzza: Main Data

According to Mezzogiorno info set provided by Glennmont Partners (06.07.2015) “Rocca Ficuzza” windfarm includes:

- 26 Turbines of 850 kW,
- for a total capacity of 22,1 MW.

The Wind Farm project is located in Agrigento Province, in the municipality of Caltabellotta.

The ancillary energy distribution facilities impact the following additional municipalities:

- Sciacca;
- Menfi,
- Sambuca di Sicilia.

The project is located on a green previously undeveloped area. Adjacent areas are mainly agricultural or forest. The closest settlements is one farm house (approximately 400 m from the closest wind turbine).

The area is located within a Natura 2000 area «Complesso Monte Telegrafo e Rocca Ficuzza». However following studies undertaken by an external expert in fauna and nature of science, no constraints for the construction of the wind farm were identified.

No landscape constraints have been identified within the EIA for the subject wind farm site.

No protected archeological findings or architectural settlements are located within the wind farm area.

Rocca Ficuzza: Actual Wind Farm Location

Rocca Ficuzza: the Environmental Permitting

- On 27 April 2007, the Sicily Region authorized API holding S.p.A. for the construction and operation (Autorizzazione Unica) of or the Wind Farm Rocca Ficuzza and the ancillary facilities within the project. The permit is based on the Italian Legislative Decree n. 387 of the 23.12.2003 on the permitting of renewable energy production plants. On 11 March 2008, the Construction and Operation Permit was formally transferred to the new project developer SER S.p.A.. The AU refers to prior permitting procedures obtained by the proponent, which mainly include the ones summarized below.
- On 7 November 2002 a permit for movement of soil, which was subject to specific hydrogeological regulation, in order to construct wind turbine N 7 was granted by the Region.
- In 2003 API holding S.p.A. was granted the urban planning permit by the Region of Sicily.
- The Environmental Permit (DRS 1382), was issued by Sicily Region on 27 December 2004. The permit sets out environmental requirements to be implemented during the entire initiative lifecycle (construction, operation and decommissioning).
- On 3 July 2006 the Province of Agrigento granted API holding S.p.A. permission to use 2.585 m^2 of state-owned forest land for the access to some wind turbines. The permit is valid for 19 years and has an annual cost of 4.058 €/year. Moreover it is understood that the rent for the land has costs 82.280 €/year.
- The requirements relevant to this assessment set out by the permits and the relevant subsequent documents produced in compliance thereof, are summarized in the following pages.

Rocca Ficuzza: Environmental Permit Requirements (1)

Turbines layout

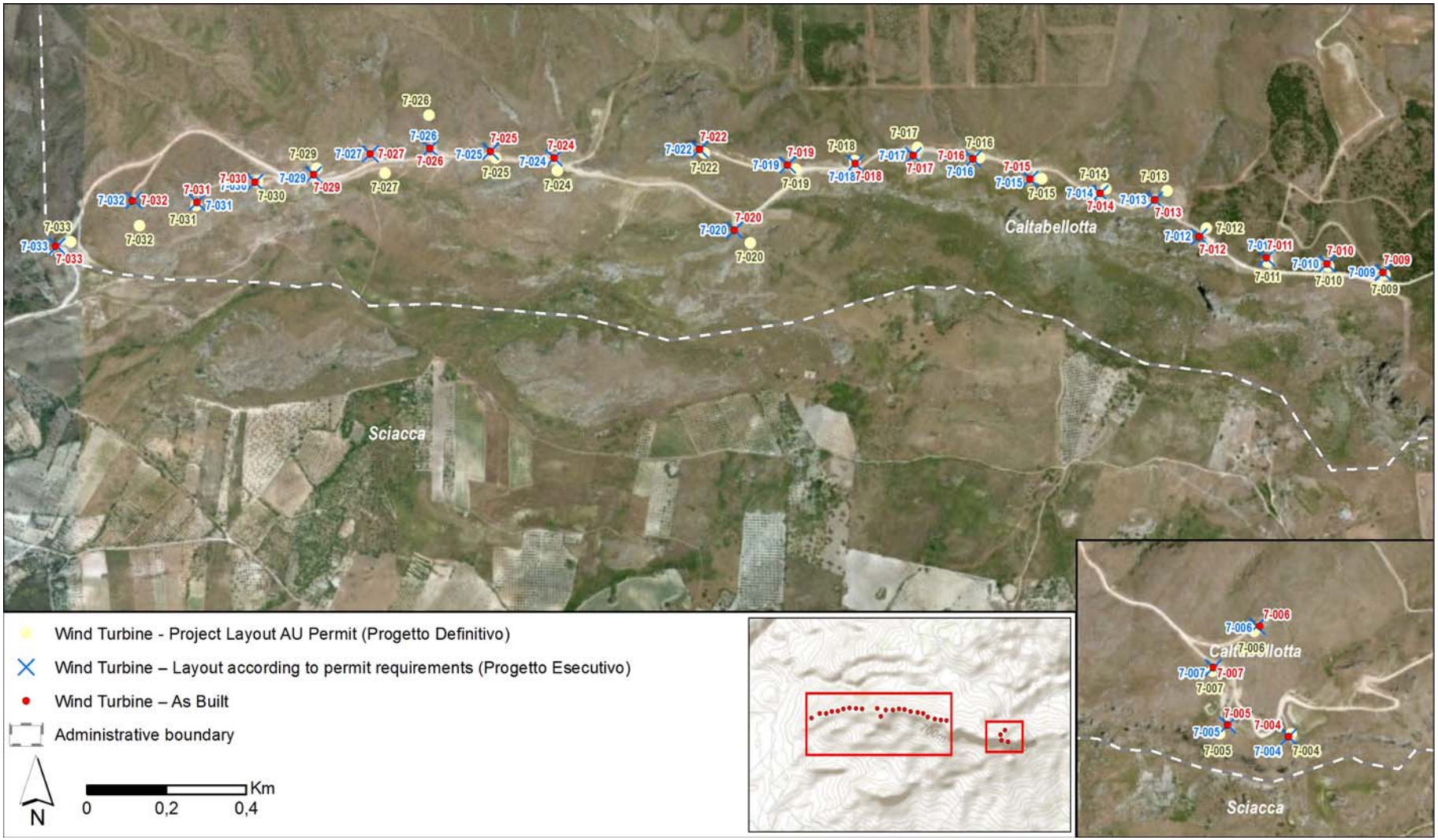
- The following wind turbines were not permitted and removed from the submitted project based on impact assessment findings:
  - 7-034, 7-035, 7-036, 7-001 to respect distance to already existing windfarm
  - 7-002, 7-008, 7-021, 7-023, 7-028 for flora and environmental protection
- The following wind turbines were moved: 7-008, 7-022,7-032, 7-033 for visual impact and accessibility.
- Minimum distance between wind turbines: 6 times the rotor radius and anyway at least 150 m.
- Maintain adequate distance between wind turbines and buildings, even from isolated ones to avoid interference from the wind turbines.

➢ **ERM overlaid the following georeferenced information (see following Slide):**
  - ➢ **layout delivered with the AU Permit,**
  - ➢ **layout modified according to permitting requirements (Progetto Esecutivo)**
  - ➢ **layout as built and**
  - ➢ **satellite image**

  The resulting map shows that:
  - ➢ **The above mentioned requirements related to the turbines layout were actually considered.**
  - ➢ **The layout as built corresponds with the Progetto Esecutivo and with the actual position of the turbines (visible on the satellite image at a larger view).**

➢ **However no evidence of the formal approval by the authorities of the working design document (Progetto Esecutivo) is available.**

Rocca Ficuzza: Layout Conformity Analysis



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Rocca Ficuzza: Environmental Permit Requirements (2)

ACCESS ROADS

- Minimise access roads and do not asphalt roads but rather use gravel from the local rock formations, that well integrate with the surrounding landscape.
- Use permeable natural construction materials for new roads.
- The storm water runoff along the access roads to Wind Turbine n 7 has to be collected and after excavation works the areas shall be stabilized in order to minimize landslides. No excavation material must be left on site.

CONSTRUCTION AREAS

- Construction and access roads and machinery platform areas to be reinstated to the pre-construction condition (immediately after work completion)
- Construction excavation material to be disposed of at authorised sites.
- At completion of the construction works a photographic report to be delivered to the Region (Environment and Territory Department).

➢ **ERM recommends a site survey to assess implementation of these requirements.**

Rocca Ficuzza: Environmental Permit Requirements (4)

DECOMMISSIONING PLAN

- Site Decommissioning Plan to be prepared and delivered. It should include a detailed cost estimate for the restoration activities to be performed at the decommissioning of the windfarm.
- Bank guarantee to be delivered to the Environmental Department of the Region to cover for the estimated cost of the Reinstatement Plan.

➢ **Subsequent documents available in VDR. See following page.**

Rocca Ficuzza: Site Decommissioning Plan and Costs

- The site Decommissioning Plan was prepared in compliance with the Environmental Permit requirement (Piano di Smantellamento, May 2004).
- The total estimated cost for the decommissioning is **169,842 €**. The unit cost per turbine, indicatively calculated on 26 turbines, is **6.532** €.
- The Plan considers the operation lifetime of the plant to be around 30 years.
- The Bank guarantee for the Rocca Ficuzza windfarm were made available for review in the VDR. These correspond to the Decommissioning Plan amount, were stipulated on 27 February 2009 and will expire in 2025.

➢ **The cost of the vegetation restoration appears underestimated. In case planting is required, in addition to seeding, the additional cost might be 20 k€.**

Rocca Ficuzza: Environmental Permit Requirements (5)

EMMP - Environmental Management and Monitoring Plan

- An EMMP should be defined that includes birds collision monitoring at each turbine. Results shall be communicated to the competent authority.
- In case of frequent collision the wind turbine has to be inactivated.
- The environmental noise impact must respect local noise limit values and a monitoring plan shall be developed. Each wind turbine shall not exceed the legislative limit value of 60 dB(A) and 70 dB(A) for night and day time respectively.
- All waste oil and exhaust batteries must be disposed of through authorized waste transport and treatment firms.
- The visual impact from the wind turbines must be kept to a minimum and no advertising is allowed on wind turbines.
- Monitoring and control of noise and electromagnetic field.

➢ **Subsequent documents available in VDR. See following pages.**

➢ **No evidence of electromagnetic monitoring measures has been provided. In case an electromagnetic monitoring campaign was required, this would cost 10k €.**

Rocca Ficuzza: Environmental Monitoring Results - Birds

Avifauna and bats monitoring

- Four biannual reports (for 2013, 2014) and a final conclusive report were made available for review.
- One bird collision was detected for 2013 and no collisions were detected in 2014. However, the report concludes that the incident can be considered as negligible compared to relevant international statistics. Moreover, no Hot Spots for bird or bat collisions have been identified within the Wind Farm.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that future monitoring of birds will be needed. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Rocca Ficuzza: Environmental Monitoring Results - Noise

- A noise monitoring survey was undertaken at the Rocca Ficuzza Wind Farm in July 2012.
- The results from the survey confirmed the site to be in compliance with national and regional noise limits for day and night time (i.e. < 60 dB(A)).
- The noise monitoring should be repeated in connection with changes in the surrounding settings (e.g. construction of buildings) or in the plant itself.
- An additional noise monitoring survey was undertaken in October 2012, however it was not possible to open the respective report in the Data Room and ERM cannot evaluate the results from this additional survey.

➢ **The company has reportedly received no feedback from the authorities about the monitoring outcomes.**
It cannot be excluded however that noise monitoring might need to be repeated in connection with changes in the surrounding settings (e.g. construction of buildings) or in the plant itself. The estimated cost for this activity is 80k€ (assuming 4 yearly monitoring campaigns, 20k€ per each).

Main Reviewed Documents

2.4.5.2-4	Annexes to the Environmental Impact Assessment, Ing. Marco Vitali, 2003
4.4.1.1.1.1	ARTA Dip. Reg.le Urb. – D. Dir n 650 (document not complete in Data Room)
4.4.1.3	Request for construction of ancillary facilities (power line and power plant) in association to the Wind Farm project Rocca Ficuzza; 27-04-2006
4.4.1.4	Final Construction and Operation Permit – Autorizzazione Unica D.R.S. 24, 13-02-2007, Industrial Department of Palermo, Sicily
4.4.1.5	Transfer of Construction and Operation Permit, 11-03-2008, Industrial Department of Palermo, Sicily
4.4.1.1.2.1.4.1	RF Report Fotografico, 27 December 2004
4.4.1.1.2.2	Environmental Permit - D.R.S. n. 1382 of 27-12-04
4.4.1.1.2.1	Bank Guarantee N 29915 of Banca delle Marche, 27-02-2009
4.4.1.1.2.1.2.1	Decommissioning Plan, 3° Ingegneria Srl, May 2005
4.1.1.1.1.1	Land Planning Permit, A.R.T.A., Region of Sicily, 2003
4.4.1.1.6.3	Permit for use of state-owned forest land, Province of Agrigento 03-07-2006
4.4.1.1.6.2	Rental cost for state-owned forests land, Region of Sicily, 2008
4.4.1.1.6.5	Permit for soil excavation, Region of Sicily, 2002
4.4.1.1.2.1.3.2.1	Birds Monitoring Reports, 2013-2014
4.4.1.1.2.1.3.2.2	Noise Monitoring Report, 2012

Sant' Agata, Apulia

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Sant'Agata: Main Data

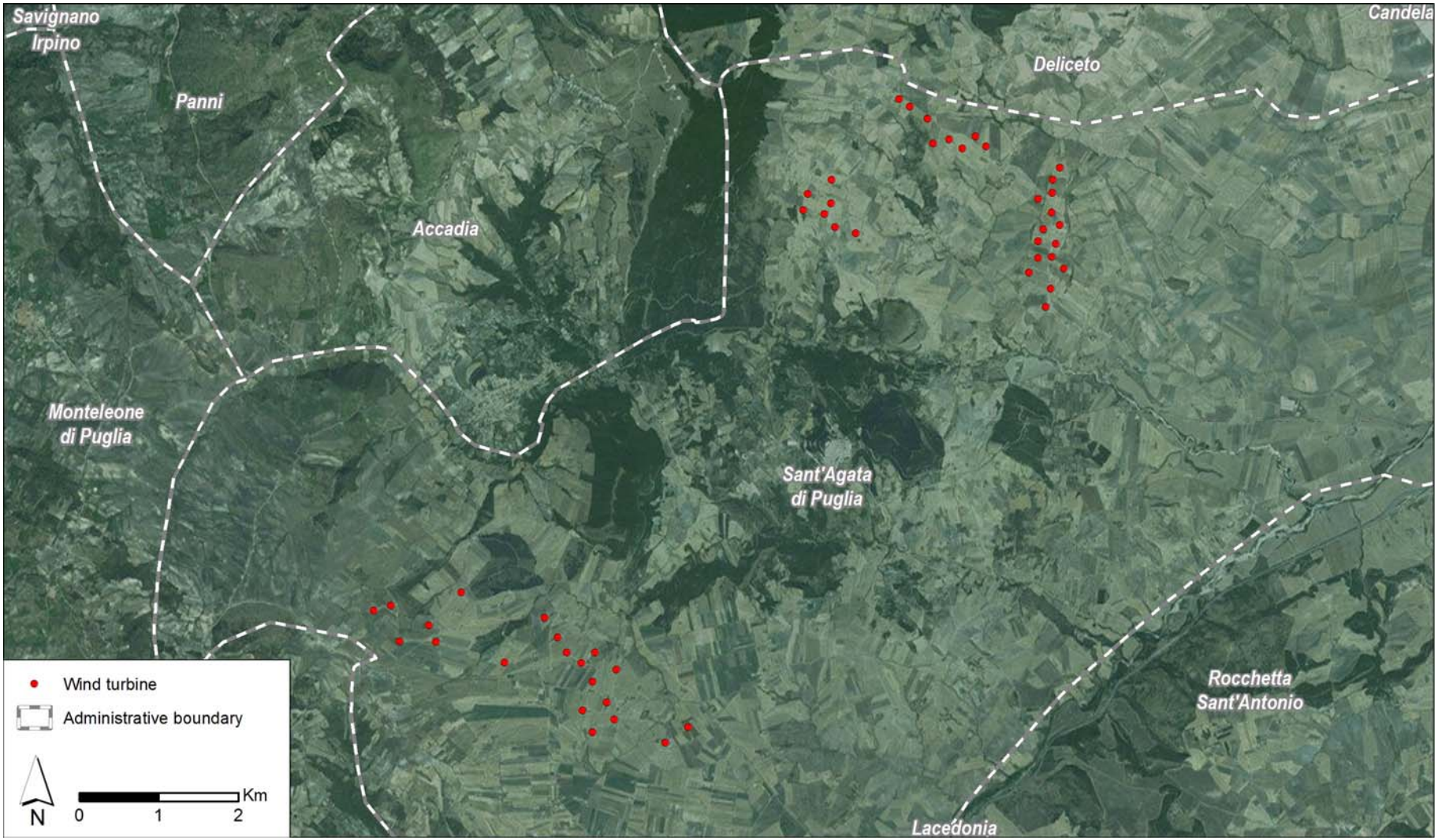
According to Mezzogiorno info set provided by Glennmont Partners (06.07.2015), the Sant'Agata windfarm includes:

- 31 Turbines of 850 kW
- 20 Turbines of 2.0 MW
- For a total capacity of 66.4 MW.

The wind turbines are located in Foggia Province the Municipality of Sant'Agata.

None of the turbines is located in a natural protected area.

Sant' Agata: Location



Sant'Agata: the environmental permitting

- Api Holding S.p.A. applied to the Regional Authority on the 10 April 2003, for the verification of the applicability of the EIA procedure to the Sant'Agata project. The Apulia Region considered that the project was to be excluded from the applicability of the EIA procedure (Decision of the 17 December, 2003), provided the compliance with the specified requirements.
- The Landscape Permit was granted on 29.06.2004 and indicated the requirements summarized in the following pages.
- The requirements relevant to this assessment set out by the permits and the relevant subsequent documents produced in compliance thereof, are summarized in the following pages.
- Some elements of the project are sited within the natural areas protected according to the Natura 2000 European network (enlarging of the existing electrical substation and construction of the electric connection within the protected Site of Community Importance "Accadia-Deliceto"). The proponent submitted the corresponding Appropriate Assessments (Valutazione di Incidenza) and received positive opinion from the Region.

Sant'Agata: Environmental Requirements

The environmental decision including exclusion of the project from the EIA contained the following requirements:

1. Excess material from construction shall be appropriately disposed of;
2. New roads shall be minimised and not be asphalted;
3. Natural characteristics of the construction sites shall be restored after construction completion;
4. One of the three wind blades shall be coloured in black in order to minimise "motion smear" and birds collisions. Non-reflecting paints shall be used for metal parts;
5. Waste oil to be properly disposed through authorised companies;
6. A bank guarantee should be provided to cover decommissioning costs.

- **ERM recommends a site survey to assess appropriate management of points 1 to 5.**
- **With respect to point 6 Bank Guarantees were duly signed in favour of Sant'Agata Municipality for a total amount of 728.000€ on 24 July 2008, expiring 2028. The unit cost per turbine, indicatively calculated on 51 turbines, is 14.274 €.**
- **No environmental monitoring was explicitly required and no environmental monitoring reports were provided in the VDR for review. It cannot be excluded however that monitoring activities will be required in the future. The estimated cost for these activities is 170 k€ (assuming 4 yearly monitoring campaigns, 40 k € for each monitoring campaign – 20 k € for noise + 20 k€ for birds and 1 electromagnetic survey on each windfarm, 10k€ unit cost).**

Sant'Agata: Landscape Permit Requirements

- The Permit specifies the minimum distances between rotors (depending on the location of the turbines), to minimize landscape impact from highly inhabited viewpoints.
  - in case of non parallel, non grid-like layout 3 x rotor diameter between rows and 3 or 5 x rotor diameter between rotors on the same row
  - in case of parallel, grid-like layout 5 x rotor diameter between rows and 5 or 7 x rotor diameter between rotors on the same row.
- Barriers creation at highly inhabited viewpoints are also required to mitigate Visual impact.
- Minimize the impact with the *«Tratturo regio»* (rural path of high cultural heritage value) as foreseen by the Environmental Impact Study.

➢ **ERM recommends a site survey to verify these points.**

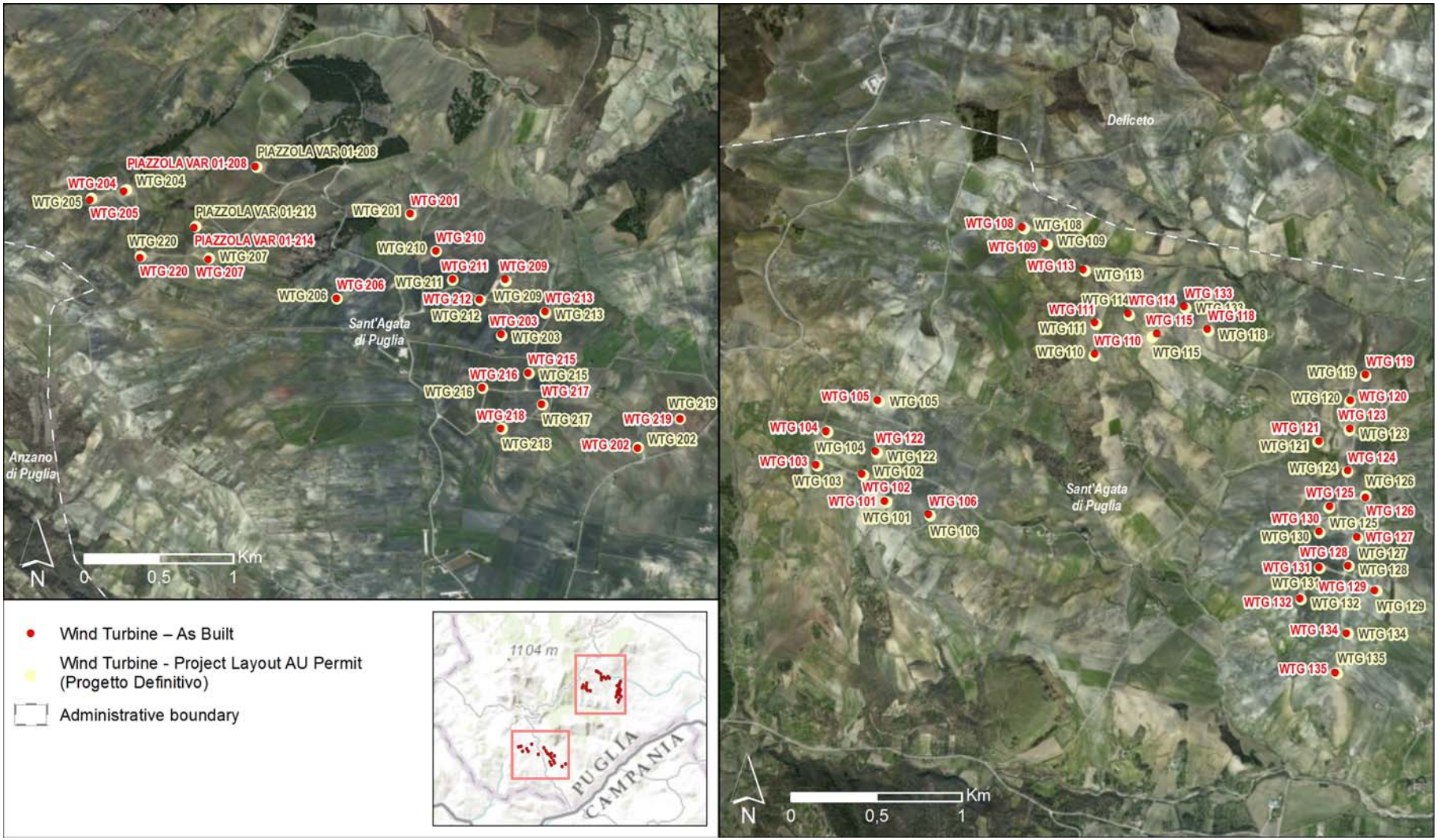
ERM overlaid the following georeferenced information (see following Slide):

- ➢ **permitted layout**
- ➢ **layout as built**

The resulting map shows that:

- ➢ **The above mentioned requirements related to the turbines layout were considered.**
- ➢ **The layout as built corresponds with the authorised layout and with the actual position of the turbines (visible on the satellite image at a larger view).**

Sant' Agata: Layout Conformity Analysis



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Main Reviewed Documents

4.5.3.1.4.4	Evaluation of applicability of the EIA procedure – Verifica di assoggettabilità a VIA, 29.12.2003
4.5.3.1.4.3	Appropriate Assessment of the connection to the national grid - Valutazione di Incidenza – Apulia Region – 09.11.2005
4.5.3.1.5.1.2.3	Appropriate Assessment on the Electric Substation – Valutazione di Incidenza Stazione Utenza – Apulia Region – 09.11.2005
4.5.3.1.1.1	Landscape permit – Attestazione di Compatibilità paesaggistica, 29.06.2004
4.5.3.1.4.1.3.1-2	Bank Guarantees. 24.07.2008

Conclusions

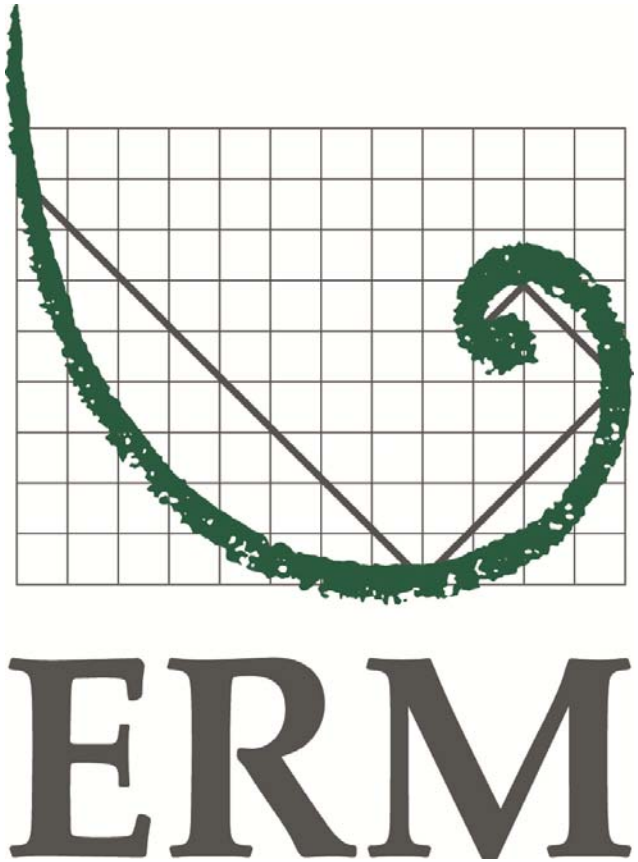
ERM

EDD Findings

Applicabilty	Description	Cost estimate
All wind farms	**Noise and birds collision monitoring reports** were available for all windfarms in Sicily. These were required by the environmental permits. Little or no birds collisions were recorded on the windfarms. No exceedance of the applicable noise threshold limits was detected. No monitoring reports were available on the Sant'Agata windfarm in Apulia and none was required by the environmental permit. No electromagnetic field survey was made available for review. Although the results of the available monitoring campaigns were generally positive (no or very limited birds collision, noise levels below threshold limit values), it cannot be excluded that additional monitoring will be required in the future (e.g. due to changes in the surrounding settings). Electromagnetic surveys might also be required. ERM estimates a **total cost of 850k € for environmental monitoring** (4 yearly monitoring campaigns, 40 k € for each monitoring campaign – 20 k € for noise + 20 k€ for birds - on the 5 windfarms. 1 electromagnetic survey on each windfarm, 10k€ unit cost).	850 k €
Sicily Wind Farms	The **vegetation restoration costs included in the decommissioning plans for Sicily Windfarms** appear underestimated. In terms of vegetation restoration only seeding is foreseen in the cost calculations, whereas planting might be needed at some locations. ERM estimates that and additional amount of **70k€** (20k€ for Alcantara, Nebrodi, Rocca Ficuzza, 10k€ for Lago Arancio) might be needed for vegetation restoration.	70 k €
All plants	No evidence of the formal approval by the authorities of the working design document (Progetto Esecutivo) - Builind Permit for Sant'Agata is available. Refer to legal advisor report for further details on this point.	Not applicable

EDD Recommendations

Applicabilty	Description	Cost estimate
All wind farms	Given that the plants are already in operation, ERM recommends an **environmental site survey** to assess compliance with the environmental permitting requirements and with applicable environmental legislation such as: • compatibility of the final layout with the environmental constraints • construction yards reinstatement, • roads size and characteristics, • techniques used for slope stabilization works performed (i.e. low impact natural engineering versus traditional engineering), • environmental management of the sites: waste oil management, oil spills emergency plans, visual evidence of oil spills, waste management.	Below materiality threshold
All windfarms	The **overall decommissioning cost estimate for the portfolio**, calculated summing up the single windfarm decommissioning estimates, is **1.362.196 €**. The unit cost per turbine calculated on 231 turbines is 5.896 €. The **decommissioning cost estimates** appear inconsistent between the windfarms. The unit cost for the decommissioning (indicatively calculated on the actual number of turbines of each windfarm) ranges between 1.195 € for Nebrodi windfarm and 6.532 € for Rocca Ficuzza in Sicily up to 14.274 € for Sant'Agata windfarm, in Apulia. It is outside the scope of this assessment to estimate the costs of the decommissioning. However, also considering other windfarms decommissioning cost estimates examples, which range between 25k € and 90k€ per turbine, ERM considers **the decommissioning costs largely underestimated** and recommends further analysis on this point.	Not applicable



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