



YPF
LUZ

WIND FARM

MANANTIALES BEHR

SOCIAL AND ENVIRONMENTAL IMPACT
COMMUNITY INFORMATION

1. Introduction

This document is a non-technical summary of the social and environmental impacts of the construction and operation of the Manantiales Behr Generation Complex, of YPF Energía Eléctrica S.A., hereinafter "YPF Luz".

The document describes how the construction of the park was developed and the potential environmental and social impacts that may be generated during its operation.

In addition, it clarifies the company's actions aimed at preventing, controlling and minimizing these impacts, and explains how environmental and social aspects are managed.

This document is part of the community relationship plan, which aims to keep employees, authorities and the community in general informed of all stages of the Park's operation. The plan details the communication actions with the different stakeholders, as well as the tools available for people to channel their doubts and concerns about the project.

2. Project design and construction

From the early stages of the development of new projects, YPF Luz is committed to acting responsibly with the communities. To this end, potential socio-environmental risks and impacts that may be related, directly and indirectly, to each of the stages of their projects are identified, evaluated and managed.

YPF Luz developed the Manantiales Behr Wind Farm for the generation of renewable energy, with a capacity of 99 MW. The energy generated by the park provides electricity to YPF SA and other private companies, through contracts entered into within the framework of the Forward Market (MATER) and the Argentine Interconnection System (SADI).

As part of the project, the following were contemplated:

- A transformer station.
- Assembly of 30 wind turbines.
- A main building.

The companies that were in charge of the construction of the park were Cartellone, INPRO and Vestas. Among them, they were in charge of the civil works and roads, which consisted mainly of the foundations of the wind turbines, the construction of the substation and electrical assembly. The company Vestas carried out the assembly of the wind turbines, commissioning and commissioning.

The Manantiales Behr Wind Farm has been operational since 2018.

3. Description of the complex and impacts identified

3.1. Description of the Wind Farm

The Manantiales Behr Wind Farm is located in the Manantiales Behr Deposit, Escalante department on Provincial Route 37, kilometer 9 of the province of Chubut; 40 km from the city of Comodoro Rivadavia. It has 30 wind turbines with a generation capacity of 3.3 MW each. The total approximate power of the Park is 99 MW, which has been divided for construction purposes into two identical stages of approximately 50 MW.

The energy from the wind turbines is transported through medium voltage lines to the Manantiales Behr Substation (S/E) where the voltage is raised and then transmitted in high voltage to the Escalante Substation.

To transmit all the energy from the Wind Farm, the Manantiales Behr 35/132 kV substation is linked to the Escalante 132 kV substation (Public network/grid connection point) with a high-voltage line of approximately 20.5 km in length.

3.2. Operation and Maintenance

The operation of the park is carried out from YPF Luz's Remote Operation Center (COR), located on the 3rd floor of YPF's Puerto Madero Tower, 365 days a year.

From the COR, all the information related to the operating conditions of the park is collected and analyzed, such as: quality of resource, capacity factor, communication with CAMMESA and transporters, among others.

The personnel working on site carry out tasks to support the operation and general maintenance of the park. For all equipment and facilities, maintenance strategies are implemented aligned with equipment manufacturer recommendations.

The Park has a general risk management and emergency prevention program for all the activities it develops, which is mandatory for both its own personnel and all contractors. YPF LUZ controls at all times that the storage, transport and final disposal of waste complies with legal requirements throughout its life cycle.

3.3. Identified impacts

Construction Stage

The work required the mobilization to the site of workshops, machinery and equipment of the Wind Farm. The components of the wind turbines arrived by ship at the port of Comodoro Rivadavia – Chubut and were transported with trucks to the project site.

The contractor companies were responsible for the correct management of their waste. YPF LUZ audited this management and requires the relevant documentation.

Adequate planning was carried out for the construction of roads and drains to avoid the impact of runoff and temporary accumulations. Efforts were made to quickly close the cable laying trenches.

As for noise, the main sources of production were those related to the operation of machinery involved and vehicular traffic.

On the other hand, the impacts on soils were related to the excavations to build the concrete bases that support the wind turbines. Special care was taken to minimize ground movement as much as possible.

Currently, through vegetation cover monitoring, it is observed how the affected areas begin to be rehabilitated passively, with the aim of reestablishing ecosystem components of the soil.

Operation Stage

The Park, built on a gas and oil field, has the highest installed power capacity factor in the country with 61.8% in the first fifteen months of operation.

It has a general risk management and emergency prevention program for all the activities it develops, which is mandatory for both its own personnel and all contractors. YPF LUZ will control at all times that the storage, transport and final disposal of waste complies with legal requirements throughout its life cycle.

The risk prevention and emergency prevention program seeks to reduce the risks of construction and operation to a tolerable and manageable level, both from the point of view of safety and the environment.

Regarding low-frequency electromagnetic fields and audible noise from wind turbines, compliance with Res SE No. 77/98 of the National Energy Secretariat will be verified.

Due to the importance of the impact measured by the bird record, the frequency and scope of monitoring are in line with the recommendations contained in the consultant's report to avoid causing adverse impacts on birds and to take corrective measures at home if necessary.

In this stage of operation of the Wind Farm, the environmental impact on air quality is positive since it contributes to the reduction of the emission rate of Greenhouse Gases (GHG).

As for surface water, groundwater and soils, no significant impacts on the quality of these environments are identified.

4. Social Investment

The Company's social investment and donations policy establishes the guidelines for the development of social responsibility initiatives and includes donations, volunteer activities, community relations and any social investment associated with environmental, social, community or institutional projects.

The social investment strategy is aligned with different United Nations Sustainable Development Goals (SDGs) to contribute to the global agenda.

The objectives of the social and environmental investment strategy are:

- To improve the quality of life and infrastructure of the communities where we operate.
- To contribute to improving the quality of education and the environment.
- Promote the efficient use of energy and renewable energies.
- Collaborate with other organizations to achieve sustainable change.

5. Quality, Safety and Environment

The Cañadón León Wind Farm Project has been designed and built in compliance with applicable national, provincial and municipal legal regulations, recommendations from equipment manufacturers and following the company's safety, health and environmental standards.

At the national level, the electricity generating industry is regulated by the ENRE (National Electricity Regulatory Entity), an entity that ensures compliance with strict environmental, health and safety standards specific to this industry.

YPF Luz implements the following monitoring plans at the plants:

- POAMS: Plan of Objectives and Actions Environment and Sustainability (includes Environmental Impact Assessment and Monitoring Plans)
- POASS: Health and Safety Objectives and Actions Plan (Includes Occupational Risk Assessment and Hygiene and Safety Plans)
- POAC: Quality Objectives and Actions Plan (includes audits and the implementation of the Integrated Management System)

5.1. Environmental Impact Assessment

The Environmental Impact Assessment Study of the Manantiales Behr Wind Farm was developed in accordance with the requirements of Law 5439 – Environmental Code of the Province of Chubut, decree 185/09 (Environmental Impact Assessment), ENRE Resolutions 555/01 and 197/11 regarding the Environmental Management Plan for Wind Generators. In addition, as part of the Citizen Participation process, it went to a Public Hearing (held in 2017 with the participation of interested parties).

In addition, the Manantiales Behr Wind Farm complies with the International Environmental and Social Performance Standards (IFC), having obtained Financing from the Inter-American Investment Corporation (IIC) on behalf of the Inter-American Development Bank (IDB).

5.2. Certifications

The Manantiales Behr Wind Farm has an Integrated Management System certificate, which includes the following standards:

1. ISO 14.001: Environmental Management System.
2. ISO 9.001: Quality Management System.
3. ISO 45.001: Occupational Health and Safety Management System.

6. Inquiries and complaints

The available consultation channels are listed below:

- Email: sugerenciasypfluz@ypf.com
- Contact form on website: www.ypfluz.com
- Leave a written inquiry with telephone number and postal address at the PELT

7. Ethics and Compliance

YPF Luz has a Code of Ethics and Conduct that guides the actions of all personnel on a day-to-day basis. It is applicable to directors and collaborators of YPF LUZ, as well as to third parties related to the Company.

Likewise, all employees and related third parties may make inquiries or report situations and/or behaviors that could constitute a real or potential breach of the provisions of the Code of Ethics

and Conduct through the YPF LUZ Compliance Channel. YPF LUZ adopts the necessary measures to maintain the anonymity and confidentiality of all communications received.

Access to the Compliance Channel is done through the following tools:

- Página Web: www.canalcomplianceypfluz.lineaseticas.com
- Correo electrónico: canalcompliance.ypfluz@kpmg.com.ar
- By phone: 0800-122-0278
- In person (only YPF Luz employees): through your boss or the Compliance and Audit management

8. Learn more

To access environmental, social and governance performance information, we invite you to read YPF LUZ's sustainability reports: YPF [Luz](#)