

April / 19



ENVIRONMENTAL STATEMENT

2018



ENVIRONMENT STRATEGY

The activities of **TERNA ENERGY** contribute substantially to the proliferation of green energy, the creation of a model based on clean energy and finally the use of a modern model of Sustainable Development.



ENVIRONMENTAL MANAGEMENT SYSTEM

Having as goal the minimization of adverse environmental effects and the maximization of positive effects, **TERNA ENERGY** applies an Environmental Management System based on the requirements of the ISO 14001:2015 International Standard. The System is certified by an Accredited Certification Body. In the context of implementation of the System, a systematic monitoring and management of the produced waste is performed.

The basic commitments of **TERNA ENERGY** are:

- To provide its services with methods and practices that ensure the protection of the environment
- To monitor, apply and review, on a constant basis, the National and Community Legislation which is related with Environmental Management
- To maintain the production equipment in excellent condition, taking care of its regular maintenance – repair – renovation, so that it can cover the modern production methods and prevent Adverse Environmental Effects
- To provide continuous training in Environmental matters
- To use raw materials and consumables of known and recognized quality that meet the quality requirements of customers and the Legislative Requirements that are related with Environmental Management
- To achieve the Objectives it sets regarding the Environment, through their effective monitoring and appropriate management
- That the company name is inseparable from Environmental Awareness

ENVIRONMENTAL INSPECTIONS

Both on an annual basis and at regular intervals during the year, the company performs environmental inspections, which check the degree of compliance with the labor Law, protocols and methods, the requirements of the ISO 14001 International Standard, as well as their degree of implementation. The environmental inspections are performed by the Department of Health, Safety and Environment and identify the points that require improvement and propose corrective and preventive actions. In 2018, 22 internal environmental inspections have been performed in total, in all of the facilities of the Group. Furthermore, external inspections are also performed by the Certification Body.

GREEN ENERGY

The facilities of RES plants produce green energy with particularly low environmental footprint and particular benefits to the environment, economy and society, preventing at the same time the emission of CO₂ which would otherwise be released into the atmosphere.



EDUCATIONAL PROGRAMS

In the context of awareness of the staff regarding environmental protection matters, educational programs are conducted every year which regard all the employees and associates of the company.



MONITORING OF THE PRODUCED WASTE

The quantities of the produced waste by all projects are monitored and recorded. Below are listed the quantities for 2018 as they have been declared in the Registry for Waste Producers.

HAZARDOUS WASTE		
WASTE CATEGORY	TYPE OF WASTE	QUANTITY
Lubricants (Liters)	Liquid	16017
Old Tires (Pieces)	Solid	-
Light Bulbs (Kilograms)	Solid	55
Oil - Diesel Filters (Kilograms)	Solid	5021
Plastic Polluted Packages	Solid	716
Polluted Absorbents (Cloth, Tow)(Kilograms)	Solid	17538
Accumulators (Batteries)(Kilograms)	Solid	5102
Toner (Pieces)	Solid	-

NON-HAZARDOUS WASTE		
WASTE CATEGORY	TYPE OF WASTE	QUANTITY
Paper (Kilograms)	Solid	149
Electric Scrap (Kilograms)	Solid	321.5
Iron Scrap (Kilograms)	Solid	192885
Urban Waste (Kilograms)	Solid	570
Plastic Scrap (Kilograms)	Solid	7562
Copper (Kilograms)	Solid	-
Cables (Kilograms)	Solid	-

IMPORTANT PROJECTS

OPERATION OF THE EPIRUS WASTE TREATMENT PLANT

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The Epirus Waste Treatment Plant has been designed with the objective to receive 105,000 tons/year of mixed waste, achieving the recovery of recyclable materials, the production of electric power and compost-type soil conditioners. The trial operation period started in the fourth quarter of 2018. Focusing on environmental awareness and the compliance to the legislative and regulatory requirements:

- Training courses for the personnel have taken place regarding environmental management matters, both during the construction, and during the operation of the plant.
- Educational programs - presentations are performed for the raise of environmental awareness of schools, Universities and bodies that visit the plant.
- A responsible person for the monitoring of implementation of environmental conditions has been appointed with information, at the same time, of the competent environmental authority.
- There is a protection of the streams that pass through the external points of the plant with systematic monitoring; for this reason no pollution has been observed in them.



HYDROELECTRIC POWER PLANT OF “DAPHNOZONARA– SANIDI”

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This hydroelectric project is a continuous flow point project. In order to preserve the ecosystem the following measures have been taken:

- Regarding the fish fauna, a fish route has been constructed in the form of quayside which includes a series of successive tanks upstream and downstream the dam.
- The method that is used for the management of debris is the method of hydraulic flushing (which is unique in Greece) and guarantees the flow of solid runoff downstream the project.

Between August and November 2018, Civil Engineering Works have been performed for the repair of damages that have been caused by the repeated extreme floods of river Acheloos between 2015-2018.

The works have been performed downstream the dam and regarded the repair of the Energy Discharge Basin and the Debris Flushing Canal. For their implementation, a mobile plant of production of conventional concrete operated in the area of the repair site as well as a grout production plant in the area alongside the dam. After the completion of the works both plants were removed from the space. During the course of the works heavy-duty equipment and machinery were used (earth-moving machinery, presses, tank-vehicles, cranes, etc.)

The works were successfully completed in a two-month period, before beginning of the rainy period of this year. From these works, waste of a total quantity of 172 tn have been disposed to properly certified bodies.



REDUCTION OF IMPACTS ON THE FLYING FAUNA

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In 2018, the Group began the installation of specialized equipment in wind farms, where this is provided for by the approved environmental conditions, for the reduction of the impacts on the flying fauna. More particularly, at the Derverni Wind Farm a program of monitoring of the gallinaceous fauna has been implemented, through the installation of an automatic system of cameras and radars with computer vision technology. The system detects and records of birds in flight in real time and performs actions for the prevention of collision through the emission of warning sounds and intimidating sounds in order to divert the birds away, as well as for the slowdown or immobilization of the wind turbine in the case that all other actions cannot prevent the collision.

