



## ENVIRONMENTAL STATEMENT 2019





### ENVIRONMENTAL STRATEGY



Through the implementation of a management system as per ISO 14001 & ISO 50001 standard requirements, **TERNA ENERGY S.A.**, is committed for the following:

- Achievement of interested parties' satisfaction to the highest level and conformance to contractual requirements and current "good practice" rules.
- Minimization of the environmental impacts from its operations.
- Reduction of energy consumption and greenhouse gas emissions in its buildings and installations, aiming at sustainable development.

Above commitments are based on the following principles:

- Conformance to the applicable legal and other requirements.
- Protection of the environment and the ecosystems.
- Prevention of environmental pollution, reduction of the produced waste and assurance of a secure and environmentally safe way of waste management and disposal.
- Saving of natural resources through the re-use and recycling of materials, the supply of recycled materials and the use of recycled packaging.
- Responsible use of energy, research and limitation of any energy waste factor in its activities and improvement of the energy performance, maintaining in parallel quality and employees' health and safety.
- Provision of training for Quality, Environmental Protection, Energy Saving and Occupational Health and Safety Issues.
- Protection of ancient monuments, cultural heritage, flora and fauna, by adopting environmental friendly methods and technologies.

## ENVIRONMENTAL MANAGEMENT SYSTEM



Aiming at the minimization of adverse environmental impacts and the maximization of the positive ones, **TERNA ENERGY** implements an Environmental Management System in accordance to the requirements of ISO 14001:2015 standard. The system has been certified by an Accredited Certification Body. In the frame of the system implementation the company systematically monitors and manages the produced waste.

It is worth to be noted that no environmental incident has been reported within 2019.



# ISO 50001:2011 CERTIFICATION & PERFORMANCE OF ENERGY INSPECTIONS

Developing a systematic approach concerning energy performance and supply and use of energy and setting as a target the increase of energy efficiency and the improvement of energy use, **TERNA ENERGY** has been certified in 2019, according to the international standard ISO 50001.



The certification has been initially given for the waste processing unit in Epirus, the biogas production unit in Adendro Thessalonikis and the operation of the company's offices. Certification is planned to be extended to the rest of the company's operations.

In the frame of installing and implementing the Energy Management System, energy inspections have been carried out by specialized personnel, for energy mapping, energy consumption allocation per consumption sector, energy consumption analysis and determination of energy saving suggestions.



#### **ENVIRONMENTAL AUDITS**

The company performs environmental audits in frequent intervals within the year, in order to check the level of conformance with legislation requirements, working practices and ISO 14001 standard requirements, as well as their level of implementation. Environmental audits are planned and performed by the Department of Quality, Environment and Occupational Health and Safety, identify the improvement points and

propose corrective actions. 19 audits in the operating units and 27 audits in the projects under construction (renewable energy projects) have been carried out in 2019. In addition to the internal audits, external audits are performed by the Certification Body.

## TRAINING PROGRAMS

In order to raise awareness to the company's employees in environmental protection issues, training programs are carried out each year for all employees and cooperators.







#### **GREEN ENERGY**

Renewable energy installations produce energy with very low environmental footprint and with significant advantages for the environment, economy and society, preventing at the same time  $CO_2$  emission to the atmosphere.

#### **MONITORING OF PRODUCED WASTE**

Quantities of produced waste from all projects are monitored and documented. Indicative quantities of waste for 2019 are shown in the below table.

HAZARDOUS WASTE			
CATEGORY OF WASTE	TYPE OF WASTE	QUANTITY	
Lubricants (Lt)	Liquid	10729,60	
Old tyres (Pcs)	Solid	1710	
Electric lamps (kgs)	Solid	-	
Oil-Gas Filters (kgs)	Solid	2346	
Contaminated plastic containers	Solid	3351,60	
Contaminated absorbent materials			
(fabrics, blinds etc) (kgs)	Solid	9680,80	
Glues	Liquid	672	

NON -HAZARDOUS WASTE			
CATEGORY OF WASTE	TYPE OF WASTE	QUANTITY	
Paper (kgs)	Solid	60	
Electrical Scrap (kgs)	Solid	3700	
Metal Scrap (kgs)	Solid	5840	
Urban waste (kgs)	Solid	637	
Plastic Scrap (kgs)	Solid	2233	



#### **ACTIONS FOR THE ENVIRONMENT**

#### MINIMIZATION OF IMPACT TO THE FLYING FAUNA



Within 2018, the company has started the installation of specialized equipment in the wind farms, for the reduction of the impacts in flying fauna and specifically in projects for which there is relevant provision in the approved Environmental terms document. Flying fauna monitoring plan has been implemented, during 2019, in Perfikokorfi wind farm in Municipality of Irakleio, Crete, through the installation of a camera and radar automation system with artificial vision technology that detects and documents the flying birds in real time and executes collision prevention activities, such as emission of warning sounds that change the birds route and halt or slowing down of the wind turbine.

#### REDUCTION OF ELECTRIC ENERGY CONSUMPTION



In the frame of environmental and energy management systems implementation, and having as a main target the reduction of electrical energy consumption, the company has decided the scheduling of actions for the replacement of incandescent electrical lamps with LED lamps. This will start from the offices' buildings and the units of biogas production in Adendro Thessalonikis and waste processing in loaninna.



#### SIGNIFICANT PROJECTS

#### **AMARI RETHYMNO HYBRID STATION**

The approval of the Environmental Terms of the project "Amari Rethymno Hybrid Station" promoted by TERNA ENERGY, was approved in 2019.

"Amari Hybrid Station" is a prominent green investment prototype project. "Amari Hybrid Station" is a prominent green investment prototype project. The total amount to be invested is expected to reach €280 million, and more than 1,000 jobs will be created during the construction period. It is worth noting that the domestic added value of the investment exceeds 60% and is expected to reach €170 million.

The implementation of this project is a decisive step in addressing Crete's energy deficit. At the same time, it will generate a number of parallel benefits to the local communities and to Crete in general, as it will create benefits to the municipalities of Rethymno, Amari, Sitia and their communities, as well as to the Organization for the Development of Crete, for a total amount of € 4.6 million annually during the twenty-five year period of the contractual agreement.



## EPIRUS REGION MUNICIPAL SOLID WASTE PROCESSING FACILITY

In March 2019, Epirus Region Municipal Solid Waste Processing Facility has been put in Commercial Operation.

The project implements a significant part of the Regional Planning for Municipal Solid Waste Processing, according to the National Planning for Waste Management and the European

Legislation. The project is co-funded by NSRF resources.

The facility reduces the environmental footprint of the regional waste management and offers environmental benefits as:

- It complements solid waste processing with "on the source" management systems that will be developed and contributes to the achievement of the national targets for recycling.
- Maximizes recycling and composting.
- Promotes the production of green energy.
- Satisfies the environmental sensitivity of the citizens with the establishment of a new ecological and environmental mentality in waste processing

The Waste Processing Plant will be processing 105 thousand tons of wastes on annual basis through the Sewage Treatment Plan, will be recycling at least 17,000 tons of appropriate materials and will be producing green energy of 10,800 KWh per Green Energy year with the capacity to satisfy the needs of 3,000 families and generate savings of 12,000 tons of CO2. In the same time, through the collection and processing of the waste organic fraction, a quantity of 25.000tn/year of Type A Compost is produced, which has multiple uses in soil restoration, road works etc.



## CONSTRUCTION OF WIND FARMS IN EVIA MUNICIPALITY

The project for the construction of 9 wind farms (total power 118,65 MW) has been initiated in the beginning of 2019. 5 wind farms are located in Municipality of Kymi-Aliveri and the rest 4 in Municipality of Karystos.

The installation and operation of the wind farms is not expected to have a negative impact on the social and economic environment of the area or to disrupt any existing human activity. On the contrary, it is estimated that the projects will influence positively the economic-social environment of the local area.

