# Connecting every corner of Greece through energy









| Profile                                       | 4   |
|---|-----|
| The Network                                   | 5   |
| Services                                      | 6-7 |
| Objectives and vision, strategies, priorities | 8-9 |
| Quality of Services                           | 10  |
| Quaranteed Services                           | 11  |
| Our people                                    | 12  |
| Research and Innovation                       | 13  |
| Corporate Social Responsibility               | 14  |



HEDNO was established in May 2012 after the spin-off of the Distribution segment of PPC S.A. under Law 4001/2011, in compliance with the European Union Directive 2009/72/EC.

The Company is a 100% subsidiary of PPC S.A. responsible for operating the Hellenic Electricity Distribution Network and, as such, responsible for the uninterruptible electricity supply of the entire country.

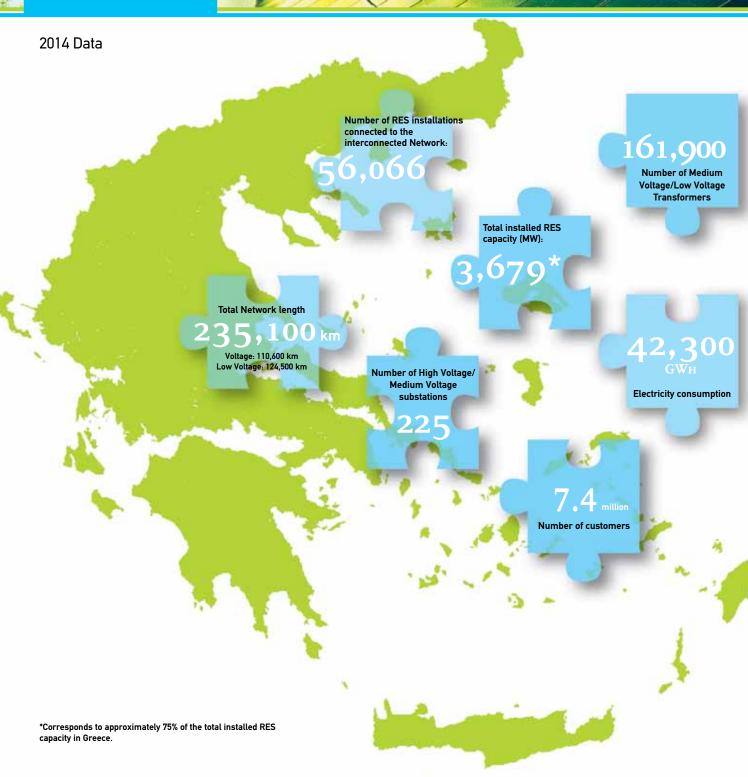
Through the Medium and Low Voltage networks, HEDNO delivers electricity to 7.4 million customers, while the Company manages the High Voltage networks in Attiki and in the non-interconnected islands. In terms of number of consumers served, HEDNO is the fifth largest Distribution Company in EU.

The total length of HEDNO's network lines reaches 236,000km, i.e. 6 times the earth's perimeter. HEDNO's fundamental mission is to ensure the proper operation, maintenance and development of the Distribution Network and the unhindered access to it, as well as to manage the electricity systems of the non-interconnected islands.

The Company employs directly about 7,000 individuals (regular and temporary staff) and indirectly through the cooperating contractors about 5,000 individuals.









#### Network development

HEDNO schedules, plans, and implements the Distribution Network development taking into account the prospective load demand, the needs for connection of new users, the improvement of the network quality, efficiency, and security indices as well as the needs for renovation, modernization and adjustment of the infrastructure to the natural and urban environment.

#### **Network access**

Irrespective of the choice regarding the current or future electricity retailer, each new or existing consumer should address HEDNO for topics related to the connection to the Distribution Network. HEDNO ensures the implementation of the relevant works based on the applicable terms, conditions, and bills.

The most important works include:

- New electricity supply connection
- Increase/decrease contracted capacity of electricity supply
- Supply relocation
- Unification/separation of supply connection points
- Removal of electricity supply
- Other technical issues regarding connections

#### **Network operation**

HEDNO has under close observation the status of the infrastructure and takes all necessary actions in order to ensure compliance to specific technical specifications for the Network, with a view to achieve smooth and secure operation and to provide customers with the best possible power quality.

#### Consumption metering

HEDNO is responsible for installing, operating and maintaining the metering equipment necessary for the operation of the Distribution Network. To this end, HEDNO collects and validates meter data and provides the respective electricity retailers with the measured consumption data necessary for customer billing.



#### **Network Maintenance/Fault Restoration**

In order to offer optimal supply of electricity in terms of quality, HEDNO makes every effort to reduce the number and duration of supply interruptions. To this end, Network maintenance and reinforcement is systematic, while all fault incidents are rectified as soon as possible.

#### **Vulnerable Customers - Social Supply Tariff**

Each consumer meeting the relevant requirements can submit through the web site www.deddie.gr, either in person or through his electricity supplier, application for accession to the group of Vulnerable Customers or Social Supply Tariff beneficiaries.

HEDNO passes on the relevant applications to the responsible authorities for audit, while the customer can monitor the progress of the application through the website www.deddie.gr.

#### Connection of RES and CHP Generation Units

HEDNO is responsible for examining the possibility of connecting Renewable Energy (RES) Generation Units and Combined Heat and Power (CHP) Generation Units to the Distribution Network. For the cases where this possibility exists, HEDNO looks after the implementation of the works relevant to the connection of the interested producers.

#### Non-Interconnected Islands Management

As Operator of the non-interconnected islands, HEDNO ensures the reliable, efficient and secure operation of each individual electricity system. Furthermore, HEDNO takes all necessary measures in order to mitigate the environmental impact and to ensure the optimal participation of RES and CHP production units.



Effective Distribution Network operation, maintenance and development throughout the country, as well as the operation of the electricity systems of the non-interconnected islands constitute the fundamental mission of HEDNO.

The Company plays a key institutional role in the Hellenic electricity market. For that reason, HEDNO aims at contributing decisively to the smooth operation of the Hellenic electricity market and, by extend, to the development of the country and the improvement of the citizens' quality of life.

HEDNO is a modern European company with one of the lowest operating costs on European level and very satisfactory quality of services.

The Company's vision is to achieve the best possible combination of quality services and low cost, giving in any case first priority to the environment, promoting the wider objectives for its protection.

HEDNO's strategy is particularly based on the application of new technologies ("smart grids", remote metering, remote services, automations, etc.) that offer the means for achieving the main goals.

#### strategic priorities

Radical modernization of the existing Network and its transformation to a "Smart System" that continually optimizes management of the connected consumers and producers, constitute the fundamental pursuits of HEDNO.

Compared to the existing, the new System will be superior in terms of performance and reliability, while being more customer-centric and at the same time more economical for the electricity sector in total. HEDNO is committed to implement in the course of the following years all necessary works, through which "smart grids" will transform from vision to reality.

These include automation and control projects, the computerized Geographical Information System (GIS) of the electricity Distribution Network, management and operation infrastructure of the non-interconnected systems, with a view to achieve greater Renewable Energy penetration and expansion of the use of smart meters and relevant technological equipment.





Core pillar of HEDNO's strategy is its commitment to improve power quality.

The most commonly used index internationally is SAIDI (System Average Interruption Duration Index), which reflects the average interruption duration per customer on a yearly basis.

HEDNO systematically strives to achieve constant improvement in the specific index, while further reduction of the duration of interruptions constitutes part of the Company's mid-term planning.

Improving power quality and enhancing HEDNO's services being part of the general framework of its efforts, the Company realizes investments of over €250 million per year with a view to reinforce and modernize the Distribution Network and offer faster and more effective services to consumers throughout the country.

Direct and bidirectional communication with the customers is achieved by developing modern call centers, such as customer service information center 11500.



| System Average<br>Interruption Duration<br>Index (SAIDI) |      |  |
|--|------|--|
| 2009   | 392' |  |
| 2010   | 316' |  |
| 2011   | 264  |  |
| 2012   | 248' |  |
| 2013   | 247' |  |
| 2014   | 237' |  |
| 2015   | 229' |  |
| 2016   | 218' |  |
| 2017   | 204' |  |
| 2018   | 188' |  |
|  |      |  |



The Company guarantees that all provided services are concluded within certain deadlines.

#### Regarding new connections

- Communication of offer for new electricity supply within 15 days when no Network expansion is necessary or within 20 days when expansion works are needed.
- Construction of new electricity supply connection within 20 days when no Network expansion is necessary or within 40 days when usual expansion works are needed.
- Connection of new meter in existing electricity supply point within 4 days.

#### Regarding quality of current

- Reinstatement of meter's fuse within 4 hours.
- Examination of and response to complaint regarding supply voltage quality within 30 days.
- Restoration of Medium Voltage consumer electrical supply following disconnection with responsibility of the Network within 12 hours.

#### Regarding works on meters

- Reconnection within 2 days following settlement of debts.
- Disconnection or reconnection within 3 days after submission of relevant request by the consumer.
- Reliability check of the meter within 20 days following relevant request by the consumer.

#### Regarding communication

• Written response to complaints or questions within 15 (in case on-site inspection is not necessary) or 20 days (when on-site inspection is necessary).

HEDNO pledges to observe the time limits for providing the respective guaranteed services and offers reimbursement to beneficiaries, as collateral in case of non-conformance to them.

The aforementioned time limits regard working days. The prescribed period for satisfying requests is considered to begin from the applicable date during which the request came to the knowledge of the Company's respective department and any prescribed requirements have been covered (e.g. payment of customer's contribution).

Detailed information regarding the program "Guaranteed Services" can be found in HEDNO's website (www.deddie.gr).



HEDNO has today about 7.000 regular and temporary employees.

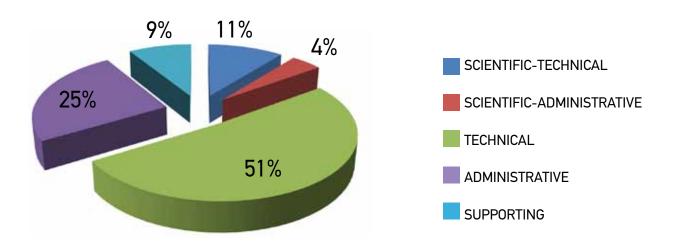
Employees are allocated to the various HEDNO local offices throughout the country, have specialized knowledge and training in their respective fields and belong to various disciplines (mostly technical).

HEDNO ensures safety and health of employees by adopting appropriate practices, having as keystone continuous training with regard to these matters.

HEDNO endeavors to develop human resources through continuous training, aiming at updating the knowledge, improving skills and individual conduct and the consolidation of the company's culture, as it evolves within a constantly changing environment.

To this purpose, the Company has two modern training centers in Athens (Anixi) and Florina and cooperates with distinguished external scientific institutions, by means of which employees' knowledge is updated and enriched in tandem with the developments in technology and science, while the principles of current management methods are instilled through training courses.

#### **DISTRIBUTION OF HEDNO'S EMPLOYEES**





Research and development with emphasis on innovation and introduction in the Hellenic electricity market of new design, operation and management practices for electricity Distribution Network constitute a fundamental part of HEDNO's strategic framework.

It is the role of HEDNO as electricity Distribution Network Operator of the interconnected system and of the non-interconnected islands that underpins the development of expertise and the acquisition of experience regarding relevant operating practices.

The developing field of "smart grids" creates new opportunities for HEDNO to contribute to the productive reconstruction of the country, with particular emphasis to new technologies and the exploitation of the domestic scientific human resources, while cooperating with international institutions and Companies. HEDNO is an active member of EDSO for Smart Grids (European Distribution System Operators' Association for Smart Grids) and the European Technology Platform for Smart Grids, institutions that aim at promoting decisively the roll-out and the development of "smart grids". At the same time, HEDNO participates in several other European and international organizations such as Eurelectric, CIGRE, CIRED, etc.

Within the general framework of HEDNO's strategy, the Company participates in various research activities through European and national cooperation, with particular focus on fields such as Network operation and management, optimal integration of RES in the Network, production and load forecasting, Network development and upgrading, introduction of new technologies, remote metering of electricity consumption, electric vehicles.

To the same end, pilot projects are undertaken for testing new technologies as well as operation and management models, in order to achieve increased RES penetration while ensuring secure operation and respecting the environment.

In Greece, HEDNO is in close cooperation with academic educational institutions and research centers for jointly implementing research projects and other significant tasks.





Sustainable development constitutes an integral part of HEDNO's strategy.

Corporate social responsibility is inseparable from HEDNO's goal to play a central role in the development of the country and in improving the citizens' quality of life, through reliable and efficient Distribution of electrical energy, with a focus on people and environment.

In this respect, main objective of the Company is to contribute decisively to the integration of RES production in its networks.

Investments in "smart grids" realized by the Company allow greater and more efficient integration of RES in the energy balance, thus contributing significantly to the reduction of polluting gas emissions and to the improvement of quality of life.

HEDNO is constantly engaged in minimizing the environmental implications concerning Distribution Network and in saving energy through the continuous reduction of Network energy losses, the meticulous design and construction of the Network, the undergrounding of selected lines mostly in urban areas, and the systematic use of environment-friendly materials, such as twisted cables and polymeric insulators.

Furthermore, in cooperation with competent bodies and organizations, HEDNO enhances the Distribution Network in areas under protection by installing appropriate, custom-made constructions.

The Company implements an integrated waste management program, as well as a program for reducing the environmental footprint of its buildings through energy savings and reductions in waste volume.

## WHAT HEDNO DOES FOR:

#### The economy

Operates and develops an adequate and reliable Distribution Network throughout the country.

Offers continual access to the Network to all interested citizens and businesses.

Supports the labor market and the economy through the investment and operational expenses realized as part of its role.

#### The customer

Operates the electricity Distribution Network throughout Greece, ensuring secure and smooth electricity supply.

Performs taking care appropriate their metering equipment. on the Network and restores its operation following a fault within the shortest possible interval.

Upgrades timely
the Network
infrastructure in
order to satisfy
customers' needs.
Connects all
customers
(consumers
and producers)
taking care of
their metering

Measures the consumption and production of customers connected to the Network, thus facilitating the operation of the Electricity Market.

#### The future

Promotes "smart grids" and "smart meters", constantly enhancing service quality.

Pursues actively environmental protection and is engaged in achieving the maximum possible RES integration in the Network.

Adopts a sustainable development strategy in the field of electricity networks.

Invests in education, research and innovation.





### Connects through energy every part of our life

