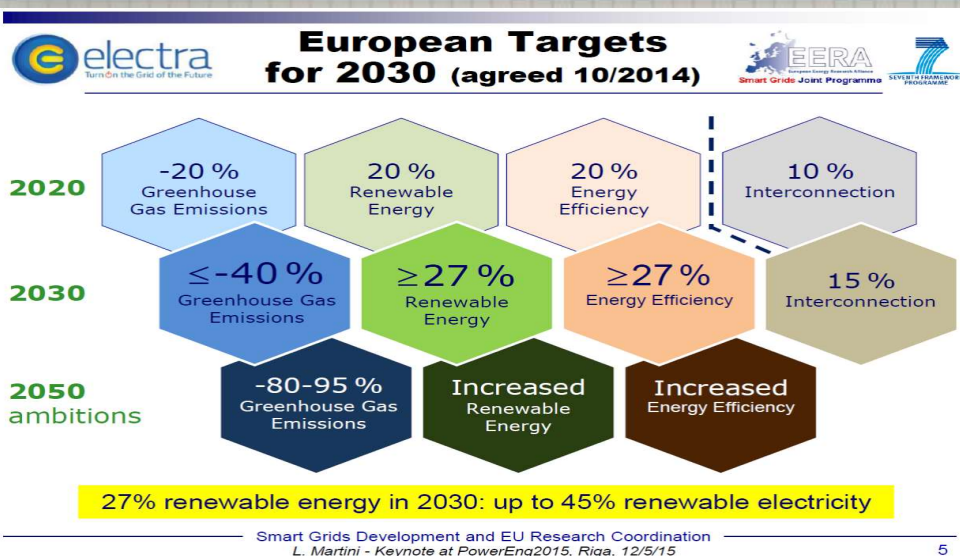


*“Digitalization of energy systems leads to  
innovation, growth and jobs”*

*Nikos Hatziargyriou  
Chairman of the Board and CEO,  
Hellenic Electricity Distribution Network Operator  
HEDNO*

# The digital transformation of energy systems is a fact



Technology is the key to achieve these targets and execute transition to zero - carbon economy

Transition to an energy market that will both meet high environmental standards and offer high quality services at a low cost can only be achieved through the use of smart grids, which is why smart grids are at the heart of the strategy planning of Electrical Energy Distribution Companies like HEDNO

For this purpose, smart grids at the center of the strategic planning of the modern Electricity Distribution Corporations. Smart Grids open the way for the transition towards the advanced systems of the future

The potential that digitalization brings to the energy industry is vast.

# Digitalization changes the whole value chain



The digital utility of the future captures opportunities all along the value chain.

Distributed energy resources enabled by big data-driven alignment of supply and demand

Data-driven asset strategies including preventative and condition-based maintenance and predictive outage

Smart grid and smart pipes allow automated controls to improve network resiliency, safety, and efficiency

Customer interactions governed by analysis of customer journeys, segmentation, and personalized communication

Platform supports distributed energy resources and marketplaces

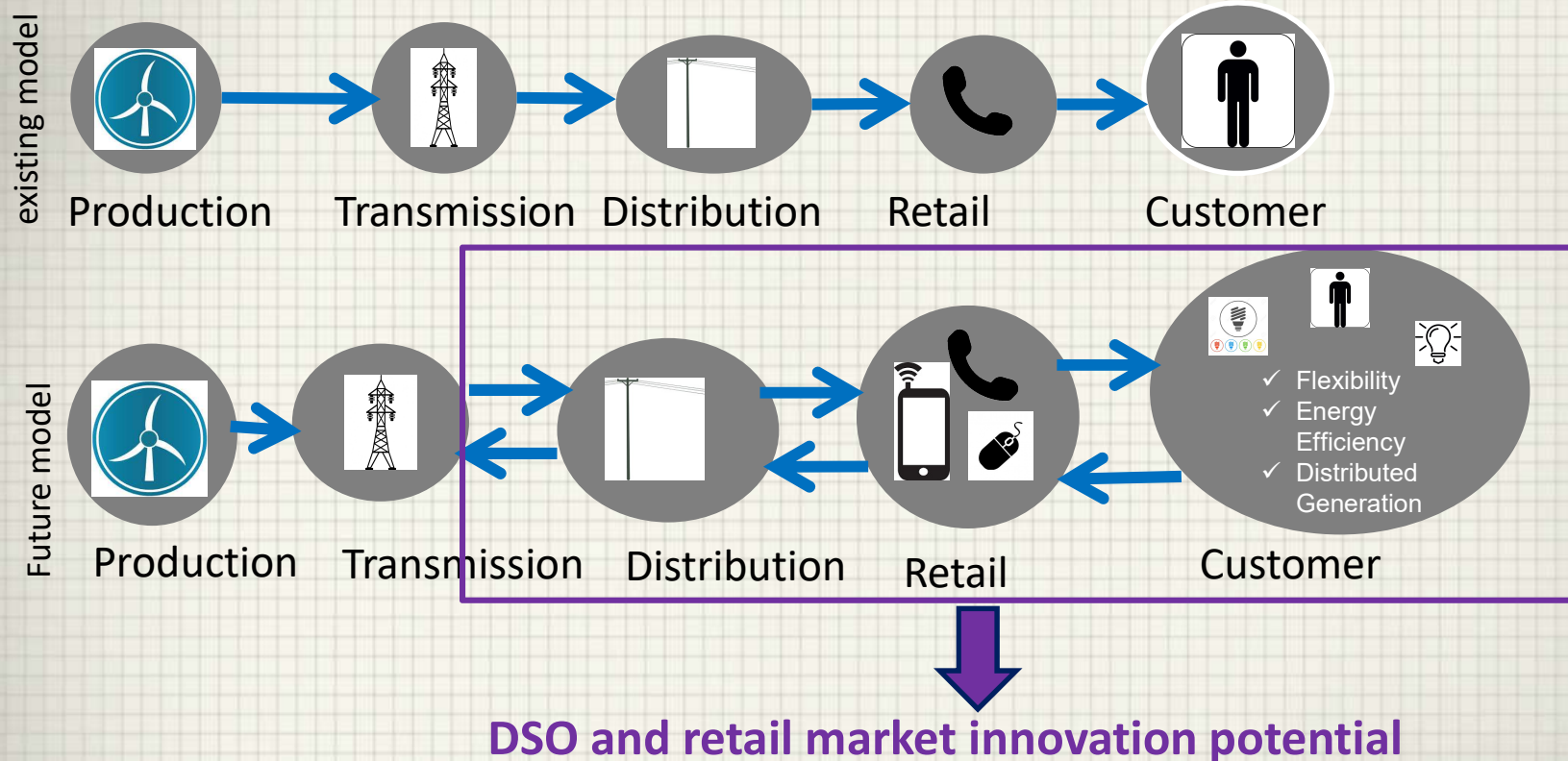


McKinsey&Company

DSOs (Distribution System Operators) are becoming Data Centric companies

They are transformed from traditional grid operators to ICT-IT technology and data operators

# And Smart Grids open the way for New business models and unleash DSO and retail market innovation potential

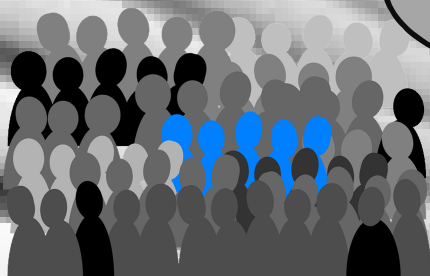


New business opportunities are created through the development of new applications and solutions for Smart Grids

# HEDNO is moving towards this new era



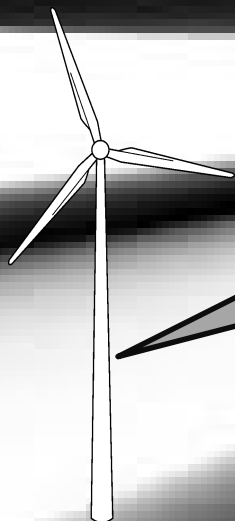
7,000  
employees



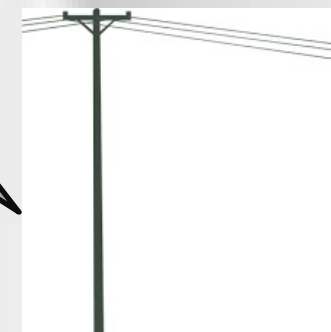
7.4 million  
customers



RES  
Capacity: 3,790  
MW  
Amount: 56,491



Total  
Network  
Length  
236,000km



**Hellenic Electricity Distribution Network Operator**

# Through a strategic transformation plan emphasizing on innovation



**HEDNO is committed to implement all necessary investments and innovation projects in order to bring smart grids from vision to reality – both in the interconnected and non-interconnected island networks**

## **HEDNO's Transformation Plan (2015-2020):**

1. Modernize Attica network Control Centers
2. Establish Island network Control Centers
3. Modernize network control centers in the rest of the Country
4. Upgrade remote metering equipment of the regional networks
5. Set up a Geographic Information System (G.I.S.)
6. Set up a new web-based Customer Service System
7. Set up remote customer service systems
8. Upgrade Network Development Planning
9. Build infrastructure in Non-Interconnected Islands to implement NII Code
10. Develop "Smart Island", Pilot project – Further expansion plan
11. Apply remote metering for LV customers, Pilot project - Further expansion plan
12. Re-organize supply chain

We participate in various research projects through European and national partnerships, and with a particular focus on fields such as the optimal integration of RES into the Network, the production and load forecasting, the Network development and upgrading, the remote metering of electricity consumption, etc.

To the same end, pilot projects are undertaking 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.

**We are encouraging closer cooperation** with academic institutions and research centers for jointly implementing research projects and other significant tasks.



# Contributing significantly in reigniting the Greek Economy



## Smart Grids lead to innovation and economic growth:

According to Eurelectric, investments in the European Electricity Distribution Networks will reach 400 billion euros by 2020 and the total number of employment positions to be created directly and indirectly from the development of Smart Grids are estimated to reach 3 million across Europe. According to relevant studies, 25 sectors of the European economy will benefit from the development of Smart Grids, from the IT industry to the wholesale trade sector and logistics while they rapidly improve competitiveness.

Smart Grids contribute to the enhancement of exports, while they increase domestic sales of products and services related to them.

## HEDNO plays a crucial role in realizing the multiple economic benefits of smart grids

Smart Grids constitute one of the main drivers for economic growth based on international experience. Through HEDNO's 1.25 billion investment plan (2014-2018)- that focuses on the transition of the Network in to a Smart Grid- new business opportunities are created for many Greek businesses especially SMEs that are now given the opportunity to develop new applications and solutions.

Smart Grids will provide many opportunities to the R&D sector as well, since Greek universities and research centers will be able to cooperate with us and develop their know-how related to this sector.

Last but not least, Smart Grids will improve services provided to customers (consumers and/or producers) with simultaneous reduction of cost and more efficient use of energy and greater protection of the environment through increased integration of RES.



*We connect*

*People  
Businesses  
Infrastructures  
Information  
Technologies*

*THANK YOU VERY MUCH.*