

Speech by the General Secretary For Energy & Mineral Resources, Ms. Alexandra Sdoukou, at the 24th National Convention of the Institute of Energy for South-East Europe (IENE) "Energy & Development 2019"

Electromobility and Smart Networks, Smart Cities, Smart Islands

Ladies and gentlemen,

The world is moving fast, often at a frenetic pace, which makes it difficult to fully assimilate the changes taking place, and therefore to best manage the present or the future, which – let's be honest – is already here.

In this context, we need to examine where Greece stands, at which point does the country find itself, in terms of the present, but mainly in terms of the future.

Unfortunately, we are far behind, far behind a future which ought to be "smart" to address the new challenges at a global scale.

This needs to be at a global scale, as it is expected that two thirds of the world's population will be living in cities by 2050.

Did you know that a new London is created every month, as 10.000 people are moving to cities every 60 minutes?

The pressure on urban infrastructure is tremendous, and cities do not have the time to adapt to such rapid rates of growth.

Consequently, finding ways for cities to better serve their citizens has become a priority.

The whole concept of "smart" goes through a broadened digital technology, which ought to have the citizen at its center in order to work, therefore the unique character of each city.

Why all this interest?

Because a "smart city" concerns investments in its main networks, such as transport, water supply and sanitation, waste collection, lighting and energy/heating of buildings, as well as other sectors, such as safety and prevention, tourism services, information, etc.

That means that this is a huge market.

The number of cities with a clear smart city strategy has nearly doubled in the last two years (from 87 to 153). However, 90% of cities overall still lack a comprehensive smart city strategy.

Even then, strategy is just the first step – implementation is what truly counts.

We hear of many impressive smart city projects around the world.

London provides its citizens and visitors with a series of everyday digital conveniences, such as public benches with free Wi-Fi, air quality measurement sensors, and plenty charging points for electric vehicles.

In Duisburg, Germany, the municipality cooperates with Microsoft in order to build Smart Homes for the elderly. The collected information will indicate whether an accident has taken place inside the house, whether the stove has been left on, etc., and this data will only “leave” the house if the owner or their relatives wish it so.

Connecting the concept of “smart” with energy:

First of all, in the big picture, I believe that the energy market is currently going through its most critical moment historically, a period of transition.

The driving force behind this transition are the high environmental standards set by the European Union aiming at addressing climate change and promoting “green” development.

Therefore, we are all being called at this moment to lay the foundation for our country to be able to develop environmentally friendly energy infrastructure.

Networks play a principal role in this new landscape.

And Distribution Network Operators are the main players in the transition to the advanced systems of the future, in the development of smart infrastructure, smart cities and islands.

1/ Smart networks

In this day and age, telecommunication and information technologies provide great opportunities for efficient network designs, so that these networks become “smart” and best integrate an increased production by Renewable Energy Resources (RER).

Currently, the biggest challenge for networks around the world is the scattered production by RES, which is being rapidly channeled to our homes, offices, enterprises, agricultural lands, and even our cars.

The complexity of managing such a large number of scattered energy resources is exactly why an immediate upgrade of all networks using state-of-the-art technology is required.

We need to design according to our status a smart network which:

- allows consumers to play a significant role in the optimal operation of the system,
- informs the consumers on the cost of energy,
- gives consumers the opportunity to change the way in which they consume energy, as well as allows and facilitates the connection of RER stations to the network, so that production can take place locally and not centrally, thus minimizing losses,
- and provides for the management of the production, containment, saving etc. of electricity.

2/ Smart cities

Currently, **over 70%** of air pollution comes from cities, making major urban centers the main culprits for the greenhouse effect.

It is precisely for this reason that upgrading electricity distribution networks to “smart” networks paves the way for the creation of “smart” cities.

The cities which distribute energy in an environmentally friendly way will play a leading role in the fight against climate change and for sustainable urbanization.

3/ Smart islands

Our national energy planning could not but include the upgrading of the electrical systems of our islands.

An energy upgrade of our islands would lead to a drastically reduced cost of production of the electrical systems of Non-Connected Islands, therefore to significantly reduced costs for services of general interest (SGIs) and the corresponding charges borne by Greek households through their electricity bills.

Our goal is not just a significant reduction of the operational costs, which would benefit Greek households and Greek economy, but also that every Aegean island develops in terms of energy and that the operation of polluting oil units is greatly reduced.

There are currently 4 major projects in development in accordance with the 10-year plan set by the Independent Power Transmission Operator (ADMIE) for the connection of islands:

Connection of the Cyclades (phases 3 and 4)

Connection of Crete

Connection of the Dodecanese

Connection of the Northeast Aegean islands

In addition to these projects, our goal is that small islands that are not part of this connection plan to develop hybrid systems of electrical power production, that is, RER stations combined with electricity storage systems.

Two hybrid stations are already in operation in Greece: one in Ikaria and one in Tilos.

At the same time, as you may know, in the draft law we have removed the obligation to report the compensation costs for hybrid stations in the production permits for such stations issued by the Regulatory Authority for Energy (RAE).

With this regulation, 180-190 investment proposals for the development of hybrid stations in various islands will finally be able to move forward.

The support scheme for these stations will be put to public consultation immediately afterward, and it will then be published in order to be approved by the Directorate-General for Competition, so that investments for the development of hybrid stations can move forward.

A new strategy for research and innovation

In order to materialize our vision for smart networks, smart cities, and smart islands, our priority within our framework of actions will be a greater emphasis on research and innovation programs by the Hellenic Electricity Distribution Network Operator (DEDDIE).

We have asked DEDDIE to enhance its participation in national, European, and international programs which focus on integrating new technologies in networks.

We also expect it to consist of staff with expertise on the subject, as well as to make use of the country's scientific resources so that the necessary technical know-how and experience is developed for the smart networks of the future.

I would now like to say a few words about my favorite subject, electromobility.

First of all, I would like to share with you a story told to me by a group of friends who visited Berlin recently:

25 individuals from Greece who recently visited the German capital were able to move across the city center using only two cars.

In Berlin, car hire companies implement car sharing programs where you can find an electric vehicle parked at any part of the city and ready to use through an application that you can download on your phone. With charging stations at every central point, this is a model of a smart city providing innovative solutions for the transport of its citizens and visitors while at the same time reducing environmental harm.

You may have heard that our Ministry, together with the Ministries of shared competence, has an ambitious plan regarding electromobility.

We have formed an Interministerial Commission, (and I mention this Commission because I believe that the main problem in our country is coordination, which is why every policy needs to have proper project management), which has already begun collaborating with all the relevant bodies and the market for the implementation of specific measures.

The first direct evidence of its work can already be seen.

I am referring to the tax incentives we have included in our tax bill.

The thinking behind these incentives is rewarding businesses that care about sustainable development.

For instance, a business that wants to replace its fleet with clean vehicles should be rewarded for it, thus its members should not be taxed for the company use of a clean vehicle.

Accordingly, a 30% discount should be awarded to businesses that want to purchase and install charging stations.

The provision organizing the market in the law of the Ministry of Environment and Energy is equally important.

We have collaborated with the Parliament so that the State sets an example with their mode of transport, and from the start of the new year, several members of the Parliament will be using electric cars.

Our Ministry will soon introduce electromobility to its daily life as well.

We are already processing a package of measures and incentives, based on successful models from other countries which we can attempt to implement here.

Ladies and Gentlemen,

I now wish to come back to my original point, of the world moving fast.

This government refuses to sit and watch the world pass it by, especially as it regards the future of the country.

Smart cities and islands are essentially living organisms, transforming into hyper-connected entities, getting feedback from data analytics, artificial intelligence, the internet, and many other modern technologies.

Smart solutions implemented in cities and islands can lower electricity bills, reduce road traffic, protect the environment, attract talent, and provide better services and advanced medical care, security, and education to citizens.

They can attract investments and create new jobs. They can offer us better governance in general.

Smart solutions are the best possible solutions, so let's all roll our sleeves and work towards that direction.