

#### Who we are?





## Our focus



**RES** development

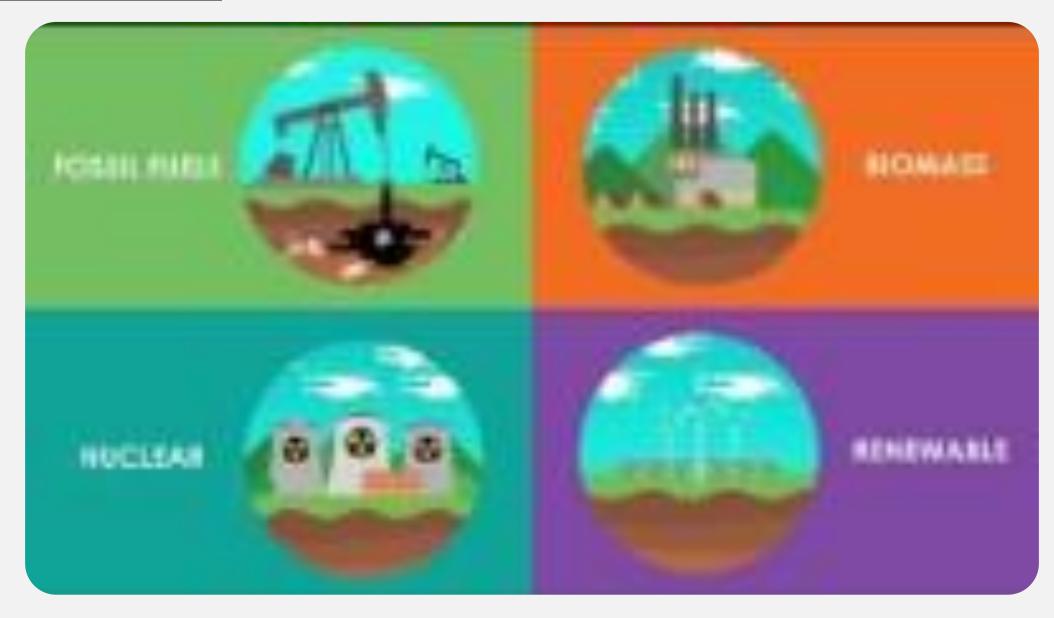


**RES** investments



Innovations in energy

### **Energy Transition Explained**



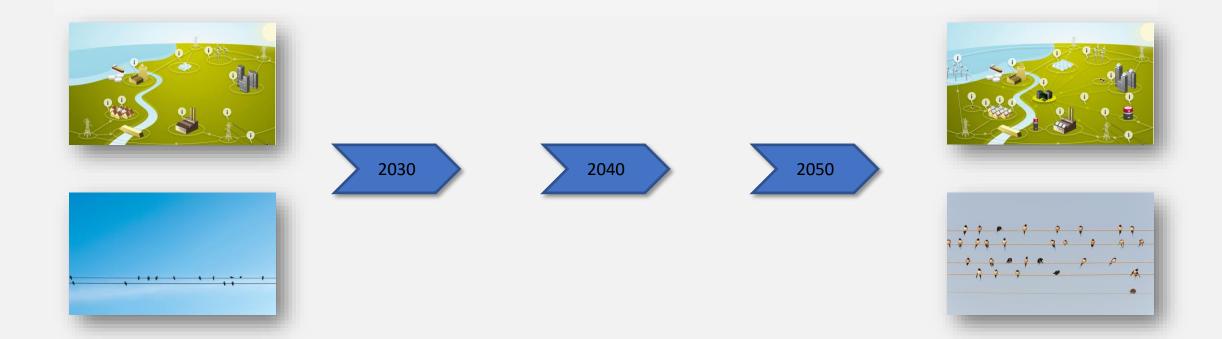
#### The way forward - much needed transformation

Energy innovation and transformation plays an important role in order to satisfy constantly increasing energy needs while fighting climate change.

The current fossil-fuel based energy systems are unsustainable and less and less capable to address the energy system challenges not only due to scarce resources, but also because of a negative impact on climate change. Therefore, the European council has unanimously decided that the EU requires to largely decarbonize its energy system by 2050.

Transformation of Energy sector requires innovation and transformation with high speed and fast deployment of new and smart solutions.

Energy research, innovation and transformation has an essential role to play in addressing the challenge of satisfying security of energy supply, competitiveness of the EU industry and ensuring affordable prices for the citizens.



#### Challenges and Solutions



#### Challenges:

- > Reducing energy consumption and carbon footprint
- ➤ Low-cost, low-carbon electricity supply
- ➤ Alternative fuels and mobile energy sources
- A single, smart European electricity grid
- ➤ New knowledge and technologies
- > Robust decision making and public engagement

#### Solution!

Many technologies, innovative market designs and solutions will paly a role in future energy grid.

#### Pivotal role of : Internet of Things | Digitalization of Electricity | Electrification

- > Smart grid
- Distributed Generation
- Demand respond

- > P2P energy transactions
- Prosumers behavior
- > Curtailment management

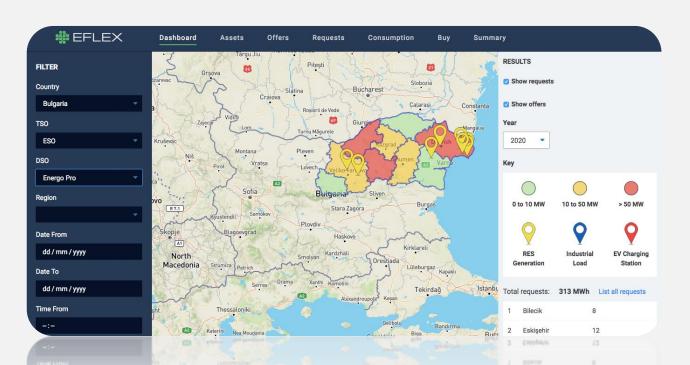




#### **Project Solutions**



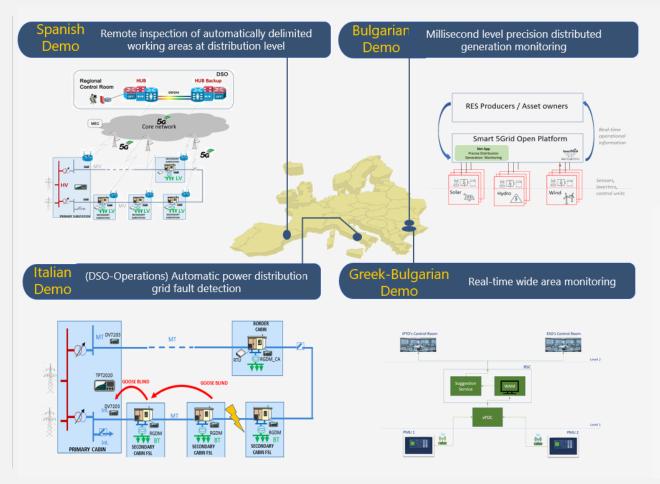
- Flexibility services
- Active management of production and consumption through forecasting, monitoring and energy trading
- Optimized grid investment by place and time.







Smart5Grid – Researches to demonstrate 5G as a possible connectivity technology/infrastructure for flexible energy services to become commodity and go big scale





The key demonstration activities include:

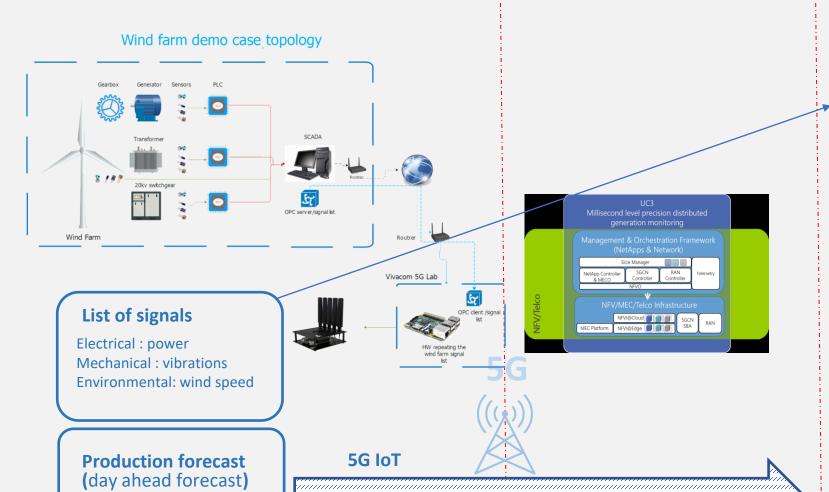
- Automatic Power Distribution Grid Fault Detection;
- Remote Inspection of Automatically Delimited Working Areas at Distribution Level;
- Millisecond Level Precise Distribution Generation Monitoring;
- Real-time Wide Area Cross-Border Monitoring.

# NetApp1: Performance measurement Maintenance

This will minimize the operational cost and potentially increase the wind farm's uptime and production.

# NetApp2: Monitoring and Control

This will allow for provision of ancillary and innovative flexibility services (voltage regulation, congestion management etc.) through flexible plant management.



### **ENTRA ENERGY**

#### Thank you for the time and attention!

Entra Energy team's passion is the energy sector transformation for a better future and we remain available for any questions, discussions, initiatives and to exchange ideas in this domain!

You can reach us through any of the team's contacts or on our website

https://www.entra.energy/and LinkedIn page ©

To follow the projects we've shown you, you can use the following QR code:

