В-Ридиум България
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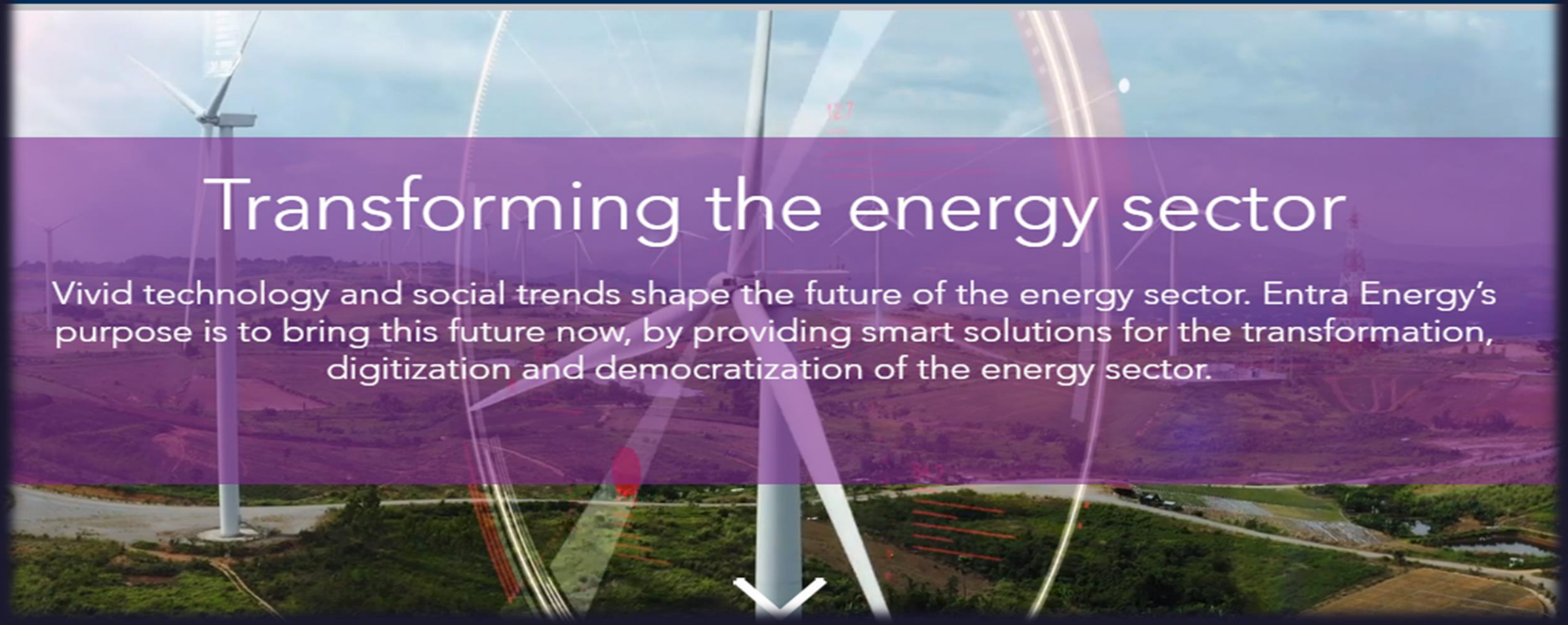
Ентра Енерджи

ОНЛАЙН ПРАКТИЧЕСКО ОБУЧЕНИЕ ЗА СТУДЕНТИ
„Професионална реализация в енергетика и ютилитис“



Transforming the energy sector

Vivid technology and social trends shape the future of the energy sector. Entra Energy's purpose is to bring this future now, by providing smart solutions for the transformation, digitization and democratization of the energy sector.

v-ridium Europe

v-ridium Europe is a utility-scale renewables developer that is on the path to becoming a renewables super major #AllIn

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.

Energy Sector Trends

Production goes renewable and distributed
Consumption increases and gets smarter and connected (IoT)
Grids needs to change and get smarter, more flexible but yet secured too..

- Coal retirement and GAS peaks challenges
- RES – Wind and Solar are dominating EU market with more than 40GWs new installed still far behind the EU target for energy neutrality by 2050. More and more DER are connected at DSO level
- More and more industries are going electrical. Industry 4.0, e-transportation, Evs.. are here to boom. Shifting huge fuel energy consumption to electricity from RES (preferably)
- TSOs start losing its ability to provide grid services of required size, when and where needed
- TSO lacks ability, flexibility and interest in micro regulation
- DSO is increasing its “generation under control“ - PV, wind, prosumers
- DSOs are impacted by EV charging flows
- IT technologies development allow for smarter grid - IoT, blockchain,V2G, 5G

New market arrangement and new technology is needed to allow and enable the target transformation to 100% RES in EU

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

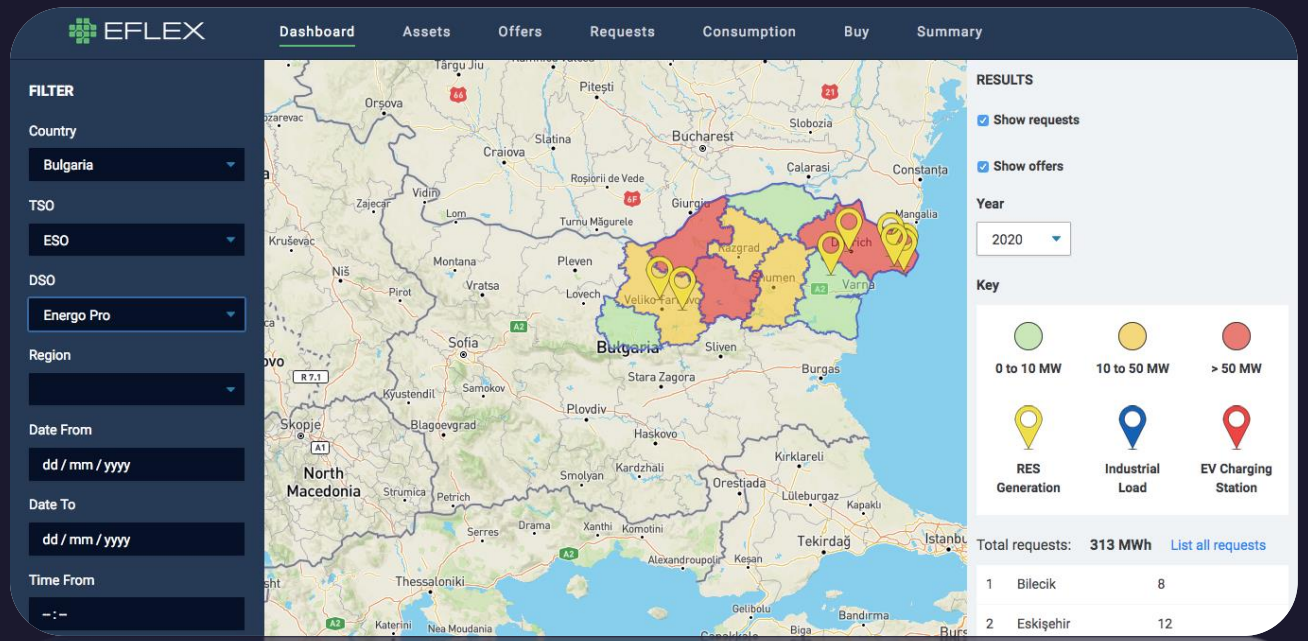
- ➢ Smart grid
- ➢ Distributed Generation
- ➢ Demand respond
- ➢ P2P energy transactions
- ➢ Prosumers behavior
- ➢ Curtailment management

FlexiGrid

Smart5Grid

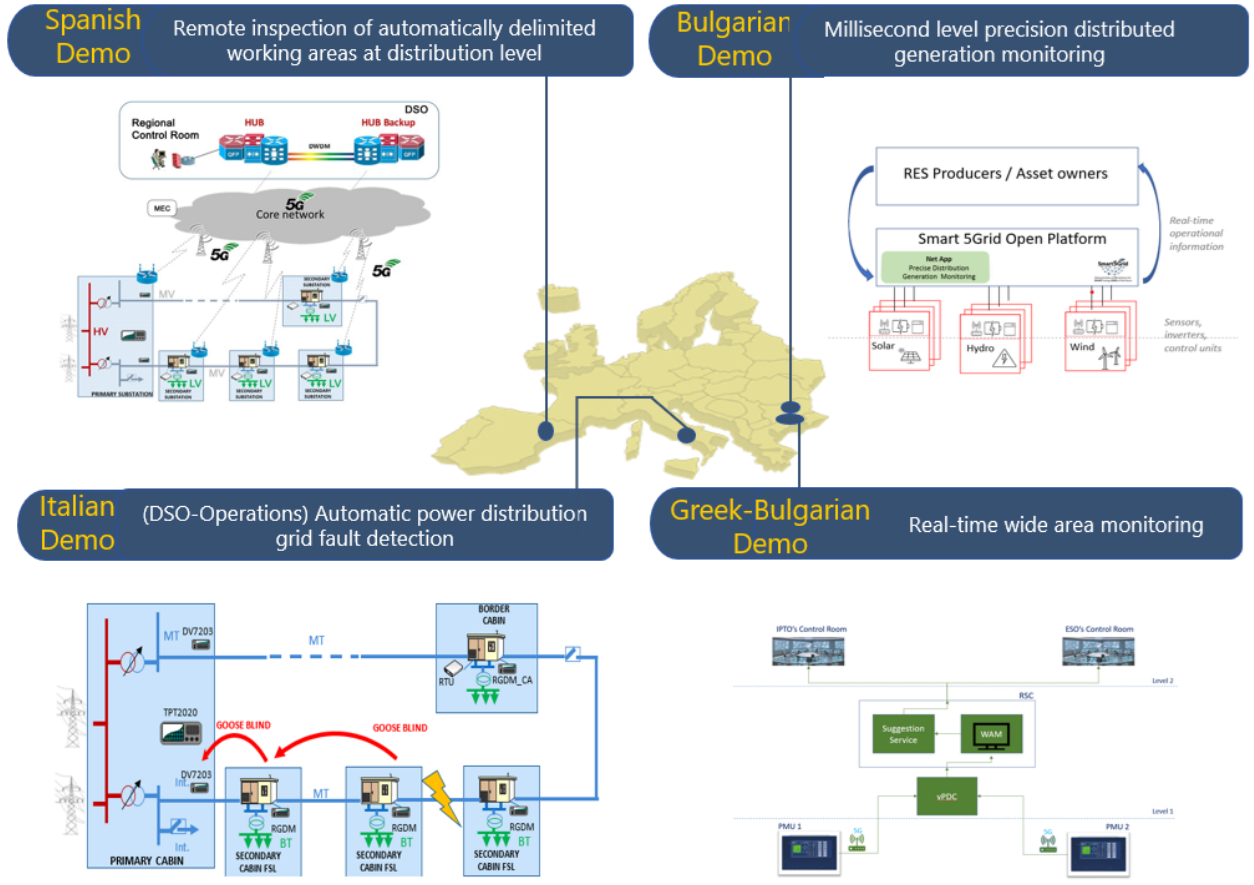
Flexibility markets as a solution

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



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 864048

5G as possible connectivity solution for flexible energy services to become commodity and go big scale



Smart5Grid

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.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016912

Career Opportunities I **Digital Technologies Specialist**

Domains of knowledge and interest:

IoT
Smart Grid
Big Data
Data science

Role requirements:

No professional experience needed
Personal, hobby experience in the area
Interest to grow or develop in this field

Career Opportunities I **Financial Engineering**

Domains of knolege and interest:

Valuation

Financial Modelling

Game Theory

Behavior economy science

Role requirements:

P&L / Balance Scorecard

Planning and Forecasting

Strategic and management functions

TEODOR BOBOCHIKOV

Leading towards success

+ 359 886 466 151

www.entra.energy

teodor.bobochikov@entra.energy

RALITSA RUMENOVA

Driving innovation & implementation

+ 359 888 676 820

www.entra.energy

ralitsa.rumenova@entra.energy

VERZHINIA IVANOVA

Facilitating projects execution

+ 359 896 267 008

www.entra.energy

verzhinia.ivanova@entra.energy

Thank you for your time and attention!

We remain available for any questions, discussions, initiatives and to exchange ideas in this domain!

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