

Portfolio: Smart Grid Services






Two goals of the portfolio Smart Grid Services

- 1 Implementation of research and development projects related to the development of activity
- 2 New services and functionalities based on infrastructure of TAURON Group as well as acquired knowledge and experience

STRATEGIC RESEARCH AGENDA

THREE DEVELOPMENT OBJECTIVES

-  **C1** Development of the Smart Grid Infrastructure
-  **C2** Management of the Smart Grid Infrastructure
-  **C3** New Businesses based on Smart Infrastructure

KEY AREAS OF THE PORTFOLIO

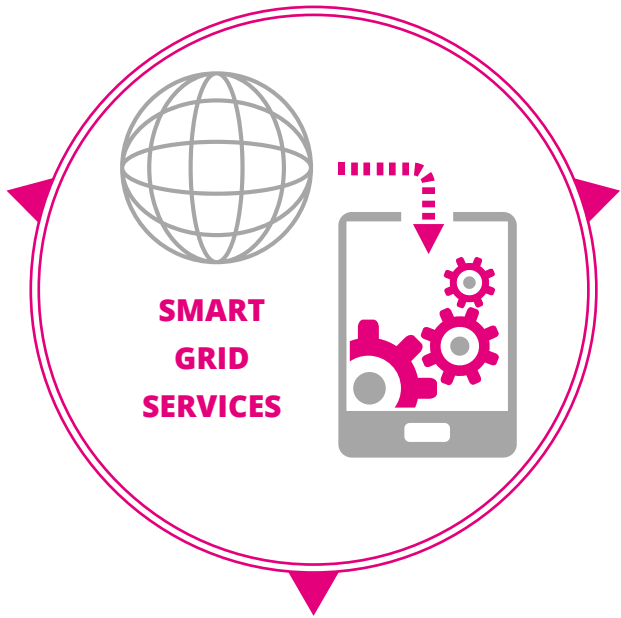
- improvement of reliability indicators of electric power grid performance;
- **improvement of reliability** of heat network performance;
- **improvement of quality** of electricity;
- **automation and digitisation** of electric power grids and heat networks;
- **development** of AMI infrastructure;
- **cyber security**;
- **integration of scattered sources** with the electric power grid;
- **grid adjustment** to the needs associated with the development of electromobility;
- **development of electricity storage facilities**, including the facilities based on the battery second life;
- **Implementation of projects** related to Smart Home, Smart Factory, Smart City;
- **development of competence** in the scope of DSM, DSR.

C1

DEVELOPMENT OF THE SMART GRID INFRASTRUCTURE

- OB1** Metering and communication infrastructure and management systems
- OB2** Automatic operability of the electric power grid and heat network
- OB3** Cyber security and protection of metering data

- OB1** Development and integration of new technologies in the AMI area and creating the conditions for activation of consumers/prosumers
- OB2** Development of digital tools for management of electricity and heat



C2

MANAGEMENT OF SMART GRID INFRASTRUCTURE

- OB1** Reliability of supplies and electricity quality
- OB2** Active monitoring of electric power grids and heat networks
- OB3** Integration of scattered generation with the electric power grid and heat network as well as management of a large number of electricity consumers

C3

NEW BUSINESSES BASED ON SMART GRID INFRASTRUCTURE

- OB3** Development of products and services based on the Internet of things
- OB4** Cost-effective energy storage systems