



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 609532.



## **ener2i Innovation Voucher Competition Belarus – 2. Call 2-axis tracker installation**

### **Objectives**

Background goals description: The original design, based on 2-wheel drive (biaxial) electro-mechanical systems for orientation array of solar modules perpendicular to the direction of solar radiation (2-axis tracker installation). Improved solar power generation energy by 30-40% for a two-axis tracking system and 20-25% for single-axis relative to the fixed structure. More concretely: preparation of a computer model, development of electrical project, create a design documentation, develop a high-performance low-power solar unit for the purposes of the autonomous power supply

### **Expected next steps/outcomes**

- Preparation of a computer model for the metal construction and the drive control system
- Development of an electrical project, writing the algorithm operation
- Formation of the detailed specification of equipment and metal structure
- Correction of errors found in the computer model, debugging algorithm control box, design improvement
- Create a design documentation of the general form for manufacturing of the prototype
- Preparation of conclusions on the possibility of installation of structures on the roofs of residential buildings

### **Company description**

Unitary enterprise "MediuM". Since 2011 actively engaged in the development and implementation of alternative energy projects. To date, the company focused on the development of solar and wind energy systems in the Republic of Belarus, from the feasibility study projects to installation and start-up power plants in commercial operation and their subsequent service

### **Research Partner**

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