AISTOR

SMART AI BASED STORAGE SYSTEM

> *AISTOR offers Artificial Intelligence Based Smart Storage, Battery Management System, and Renewable Energy Integrated Home/Public Building Battery*

AISTOR will develop an innovative artificial intelligence controlled lithium-ion based smart storage system of size 0-2 KW for residential units, public and private buildings and offices for electricity cuts, especially for disaster (earthquakes, floods and fire risks) management and recovery purposes. AISTOR is an artificial intelligence energy storage and management system that provides the needed energy and management in emergency situations such as a power outage, earthquake, flood and fire in houses, offices and hospitals. Compared to existing products (e.g., Tesla Powerwall), AISTOR will be much cheaper, will have a modular design energy efficiency and remote control via embedded AI based decision-making capabilities. AISTOR will be piloted in two disaster risky areas: a public/residential buildings in Istanbul and in BEIA building in Bucharest, Romania for renewable energy integrated innovative smart storage system where an 30 kWp roof-top solar panel is already installed.

Project Duration

01.11.2020 - 30.04.2023

Project Budget

Total Budget: € 500,000.00.-

Funding: € 257,500.00.-

Project Coordinator

BATRON ENERGY (TURKEY)

Project Partners

BEIA (Romania)

Project Website

www.be-aistor.com

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ERA-Net Smart Energy Systems

ERA-Net Smart Energy Systems Joint Call 2019 (MICall19)

This project has been awarded funding within the ERA-Net SES Joint Call 2019 for transnational research, development and demonstration projects. EUR 16.5 Mio of funding have been granted to 14 projects active in 15 regions and countries.

This project has received funding in the framework of the joint programming initiative ERA-Net Smart Energy Systems. The initiative has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements no. 646039 and no. 755970.

**Joint Programming for Flourishing Innovation –
from Local and Regional Trials towards a Transnational Knowledge Community**

www.eranet-smartenergysystems.eu

Main Objectives

- Integrating storage with existing grid and renewable energy to provide more flexibility to the network
- Reducing the costs of storage
- Managing the variability and uncertainty such as short-circuits and high voltages caused by earth-shake junction breaks and phase-neutral ground contacts
- Managing the power failures and to provide energy during emergency situations such as earthquake, fire, flood disasters and high energy consumption rates

Expected Key Results

Technology

- Residential storage system with lithium based battery
- Renewable energy integration
- Grid and stored energy management
- Remote energy management
- Cloud database system

Market

- Specifications and implementation guidelines for the development of products and services
- Medium and long term scenarios for storage&renewable energy
- Economic benefits including storage and renewable energy
- Three main groups: design&production company, distribution companies and installation service network for the business model
- Estimation of USD 17.5 billion market size by 2024
- Targeting of 1% share of the market size by 2026

Adoption

- Clean energy emphasis in brochures and descriptive documents
- Live demonstrations in key application areas
- Dissemination&Sharing of the early adopters' experiences

AISTOR

BATRON ENERGY INC

Beia CONSULT INTERNATIONAL