Innovate Ukraine Round 2 project list

Project title	Project summary	Partners
AeroVault: High-Efficiency CAES to Power Ukraine's Recovery	AeroVault enhances compressed-air energy storage by integrating phase-change thermal storage with a high-efficiency expander, to achieve high-efficiency, fossil-free operation. A 500kW pilot in Zakarpattia region will provide resilient village-scale backup power while significantly reducing CO_2 emissions.	Aston University Association of Independent Environmental Protection Experts Enskild Tech Ukraine LLC International Center for the Development of SMART Society
AI-Powered, Nanotech-Enabled Microgrids for Communities and Critical Infrastructure in Ukraine	An AI-governed clean energy microgrid integrates laser-enhanced solar PV, real-time optimisation, and a zero-upfront service model tailored for post-conflict recovery zones. Designed for resilient humanitarian use, it provides uninterrupted clean power to critical services.	John Pontin Trust Cranfield University Open Climate Fix Limited Foundation Energy Act for Ukraine Iknet Novinano Lab LLC Innovation Law Laboratory LLC
AIRFUSE-SAW: All-Iron Redox Flow Utility for Sustainable Energy: Phase 2 – Solar, Arbitrage and Wind Integration	This initiative advances an innovative long-duration energy storage using a patented all-iron redox flow battery to support clean energy transition and grid resilience. A 1 MWh pilot will demonstrate energy arbitrage for improved reliability and co-location benefits at solar and wind sites.	Dpsun Limited Growth Pole R.Flo Kness Group LLC Eco-Optima LLC
BioSolar Nexus: Decentralized Energy-Food-Waste Innovation for Crisis-Affected Settlements	This project develops a modular system that delivers clean energy, sanitation, and food production for displaced and off-grid communities in Ukraine. By integrating solar PVT, anaerobic digestion, energy storage, and biogas-fuelled combined heat and power (CHP), it transforms human, animal, and food waste into renewable electricity, thermal energy, clean cooking gas, and nutrient-rich digestate for agriculture.	Aston University Future Cycle Limited National Council for Sustainable Development Climhouse Energy
Build Ukraine Back Clean: FOAK Carbon Capture demonstration on cement kiln	Tree Associates has developed a novel carbon-capture technology that condenses CO_2 directly from high-temperature cement kiln exhaust without using chemical solvents. A demonstration plant in Ukraine will test the system by capturing five tonnes of CO_2 per day from an operating clinker kiln, helping to reduce major industrial emissions.	Tree Associates Ltd Ivano-Frankivskcement
EcoVenturi: Sustainable Cooling for Digital Infrastructure	Using the patented TOVENVOR system, EcoVenturi offers a circular, compressor-free cooling solution for data centres. The system delivers refrigerant-free cooling while generating electricity via microturbines, reducing emissions and producing usable electricity.	Unitech Software Limited Aston University Keyvolt.Energy
Energy-on-the-Go: Mobile Energy Shop and Mini Kits for Blackout Recovery 'EnergyGo'	This solution delivers mobile, community-driven energy access to areas in Ukraine affected by blackouts. Using deployment vans, portable energy kits, and temporary sharing microgrids, it creates flexible, modular community power systems that	Dx Cells Technologies NGO GoLocal

	provide reliable electricity without requiring expensive household investments.	
Low-carbon biomethane production from crop residues and break/cover crops: integrating sustainable farming practice and CO2 utilisation	The project advances industrial R&D to convert crop residues and cover crops into biomethane through advanced anaerobic digestion. It enhances the entire value chain, including feedstock collection, pre-treatment, digestion optimisation, product distribution, and CO_2 recovery and utilisation, to deliver higher and more efficient biomethane output.	University of Southampton Bioenergy Association of Ukraine (UABIO) PJSC Ukrainian Technological Company
MERIT: Miscanthus Energy for a Resilient and Inclusive Transition	The MERIT Project repurposes abandoned land to grow biomass for renewable energy and sustainable construction materials. It supports energy security, land rehabilitation, rural job creation, and retains reconstruction funds domestically.	Terravesta Assured Energy Crops Limited Liverpool John Moores University LLC Miscanthus Technology Frendt LLC
PELLETEC	PELLETEC brings mobile pelletising technology to farms in Ukraine, transforming leftover agricultural residues into compact, high-quality fuel on-site. The approach turns crop waste into clean energy, helping improve air quality, enhance soil health, and boost local energy independence. It offers small and mid-sized farms a low-cost bioenergy solution that cuts waste, transport needs, and environmental harm.	Dpsun Limited Nsc Issar- National Scientific Center, Institute for Soil Science and Agrochemistry Research Kyiv-Tampere PJSC Ukrainian Technological Company Schaider GmbH
Re-power Ukraine: Plasma-driven energy independence	This initiative is introducing and scaling a compact plasma system that can safely and efficiently treat hazardous waste in Ukraine. Using high-temperature plasma, the system converts waste into clean syngas energy and reusable vitrified material for construction, without producing toxic emissions.	Cranfield University Eco+Logic Ekomeistrai So United-Ukraine Future Cycle Limited Center for Information-Analytical and Technical Support of Nuclear Power Facilities Monitoring NASU Pulsar
Sustainable Heat Pump Innovation for Environment and Local Development with R290 Refrigerant	This project develops and field-tests locally manufacturable R290 propane-based green heat pumps systems in Ukraine for homes, schools, hospitals, and industrial facilities. The technology advances Ukraine's energy recovery by providing efficient, environmentally compliant, and cost-effective heating solutions.	Dpsun Limited United-Ukraine Vito Group The Institute of Environmental Geochemistry NASU
Sustainable Thermo Solutions	Sustainable ThermoSolutions introduces Simple Heat, an innovative local energy system that integrates sustainable heat storage with circular waste management. Developed to support Ukraine's urgent recovery needs, it tackles key challenges in thermal	Eco Research Ltd Eco+Logic Labdaribas Fonds Help Ukraine

	energy storage, the reuse of construction debris, and the provision of reliable heating for vulnerable communities.	Center for Information-Analytical and Technical Support of Nuclear Power Facilities Monitoring NASU Foton-SK Pulsar Powertech Energy Ltd National Council for Sustainable Development
UA Unity Hub: Next generation, net-zero centres for rural and remote communities	The UA Unity Hub will pilot Ukraine's first dome-shaped, low-carbon, autonomous community hub at the Tepla Gora Eco Centre in the Carpathian Mountains. Modular and easy to assemble, it delivers sustainable off-grid infrastructure for rural and conflict-affected areas, integrating advanced engineering with innovative energy technologies.	Futures Advisory Limited Calling Bridge Limited Tepla Gora Foundation; Geodesic.Life LLC NGO 001 Institute of Engineering Thermophysics NASU