

Energy Storage Technology Demonstration Competitions – Summary of Phase 1 Winners

Lead bidder	Partner organisations	Title & outline of proposed energy storage demonstration project	Contact details for further information
Aston University	Altairnano; Renault UK; TML; ABB Ltd; Portastor Ltd; Sheffield University; Energy Cost Advisors; Western Power Distribution; G&P Batteries Ltd	<p>HB2G – Hybrid Batteries to Grid:</p> <p>Feasibility work for a proposed project which is to demonstrate a hybrid scheme with a mixture of second life ex-transportation batteries (which should be available at lower cost) with new battery technology (highly reliable and long life) to fulfil energy storage needs of both power and energy at lower cost while at the same time contributing to the development of commercial opportunities from automotive battery re-use.</p>	Contact: Dani Strickland Tel: 0121 204 3737 Email: d.strickland@aston.ac.uk
B9 Energy O&M Ltd	Lightsail Energy Inc; Fast Technologies Ltd; RES Ltd	<p>Making SENSE (Smart Energy Storage):</p> <p>Feasibility work for a proposed project to design, develop and demonstrate a 1MW / 6MWh commercial-scale Isothermal Compressed Air Energy Storage system (ICAES) to address challenges in the Northern Ireland electricity network.</p>	Contact: David Surplus Tel: 028 28263925 Email: d.surplus@b9energy.co.uk
Energy Cache Inc	N/A	<p>Gravitational Potential Energy Storage via Aerial Lift of Aggregate Material:</p> <p>Feasibility work for a proposed project to deliver the final</p>	Email: press@energycache.com

		design, construction, and testing of a 250kW, 2 hour capacity, commercial-scale demonstrator installation of a system to address bulk energy storage needs and rapid response capability.	www.energycache.com
Enrichment Technology Company Ltd	N/A	<p>Decentralized Energy Storage Solutions for Local Grid Applications:</p> <p>Feasibility work for a proposed project to install and test a flywheel-based energy storage system capable of providing maximum power of 1.2MW and maximum energy capacity of 200kWh to address national and local grid requirements.</p>	<p>Contact: Phil Taylor</p> <p>Email: phil.taylor@uk.enritec.com or</p> <p>Rainer vor dem Esche</p> <p>Email: rainer.vordemeesche@de.enritec.com</p>
EValu8-Transport Innovations Ltd	<p>Future Transport Systems; Lotus Engineering; Circontrol; Goodwolfe Energy; UK Power Networks;</p> <p>Anglia Local Enterprise Partnership;</p> <p>APT</p>	<p>EVEREST (Electric Vehicle Embedded Renewable Energy Storage and Transmission):</p> <p>Feasibility work for a proposed project to develop, test and commercialise modular storage solutions to defer electricity network upgrade costs when installing Plug-in EV rapid chargers, provide an integration hub for intermittent renewable generation, and reinforcement of the electricity distribution network.. The proposed energy storage device will in part use 'second Life' EV batteries as its primary storage medium.</p>	<p>Contact: Russell Fenner</p> <p>Tel: 01707 284740</p> <p>Email: russell.fenner@evalu8-ti.org.uk</p> <p>www.evalu8-ti.org.uk</p>
Highview Enterprises Ltd	Grain LNG; Costain Ltd.	<p>Isle of Grain Liquid Air Energy Storage Demonstration Project:</p> <p>Feasibility work for a proposed project to build a</p>	<p>Highview</p> <p>Press enquiries</p>

		<p>commercial scale – up to 6MW and 30MWh - demonstration plant to demonstrate Highview’s proprietary liquid air energy storage system and to demonstrate how</p> <p>the system efficiency can be optimised using low-grade waste heat and cold sources.</p>	<p>Toby Peters COO toby.peters@highview-power.com T: 0207 872 5800 Project/Technical enquiries</p> <p>Gareth Brett CEO gareth.brett@highview-power.com T: 0207 872 5800</p> <p>Emma Gibson Operations Manager emma.gibson@highview-power.com T: 0207 872 5800 www.highview-power.com</p> <p>National Grid Grain</p> <p>Gilly West Press Officer National Grid T: +44 (0) 1926 655373</p>
--	--	--	--

			<p>M: +44 (0) 7771 841038 E: gillian.west@nationalgrid.com</p> <p>Costain</p> <p>Graham Read – Communications Director</p> <p>graham.read@costain.com</p> <p>Tel 01628 842585</p> <p>www.costain.com</p>
Hydrogenics Europe NV	CNG Services Ltd; Electrochaea Denmark	<p>P2G BioMet – Power-to-Gas via Biological Methanation:</p> <p>Feasibility work for a proposed 1MW power-to-gas facility to demonstrate the conversion of surplus electricity into methane for storage and distribution via the existing natural gas grid.</p>	<p>Contact: Dominic Hofstetter, VP of Business Development, Electrochaea LLC</p> <p>Tel: +41 79 686 17 27</p> <p>Email: dh@electrochaea.com</p> <p>www.electrochaea.com</p>
Moixa Technology Ltd	<p>Kiwi Power Ltd; Good Energy Ltd;</p> <p>Northern Power Grid; G&P Batteries Ltd; Solar Fair ltd/AtmosClear SA;</p> <p>Aquion Energy Inc (USA)</p>	<p>MASLOW – Distributed energy storage for essential consumer and grid-scale network needs:</p> <p>Feasibility work for a proposed project to deploy 1MWh of storage across 750 domestic sites. The MASLOW system provides night storage for electricity through Meter Attached Storage, to power low voltage LED lighting and DC electronics during peak periods. The system ensures energy efficiency adoption, and can store energy from local solar or regional wind resources to provide back-up</p>	<p>Contact: Simon Daniel, CEO</p> <p>Tel: 0207 734 1511</p> <p>Email: Simon@moixaenergy.com</p>

		resilient power, helping to keep the lights and computing online.	www.moixatechnology.com
PassivSystems Ltd	n/a	PassivBellows: Feasibility work for a proposed project to demonstrate electrical and thermal storage at grid-scale in multiple domestic premises to meet consumer and grid-scale needs.	Contact: Mike Patterson Tel: +44 (0) 845 271 3535 Email: mike.patterson@passivsystems.com www.passivsystems.com
REDT UK Ltd	Scottish & Southern Energy Power Distribution; Gigha Green Power Ltd; EA Technology Ltd; Community Energy Scotland	Vanadium Redox Flow Battery (VRFB): Feasibility work for a proposed project to demonstrate and test a 1.2MWh flow battery storage system on the Isle of Gigha to store surplus wind energy for use in the local electricity network when required.	Contact: Gary Simmonds Tel: 0118-973-7769 Email: gary.simmonds@poweringnow.com www.poweringnow.com
Viridor Waste Management Ltd	Highview Enterprises Ltd	Liquid Nitrogen Cryogenic Energy Storage Demonstration Project: Feasibility work supporting the build and demonstration of a liquid nitrogen based energy storage and generation system (up to 5MW and around 20MWh) using waste heat from a landfill gas engine to increase system efficiency.	Viridor Contact: Ian Morrish Tel: 01604 813330 07775 731044 Email: IMorrish@viridor.co.uk Highview Contact: Toby Peters Tel: 0207 872 5800

			toby.peters@highview-power.com
Yuasa Battery Europe Ltd	n/a	Grid Reinforcing Operation of Uninterruptible Power Supplies: Feasibility work for a proposed project to demonstrate a 2-3MW, 4MWh energy storage system based on using industrial lithium ion batteries in existing uninterruptible power supply equipment and infrastructure.	Contact: Peter Stephenson Tel: +44(0)1495 354069 Email: peter.stevenson@yuasaeurope.com