

network enterprise europe



Business Support on Your Doorstep

Technology Offer - Profile Template

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European Commission

Technology Offer Profile

The following table can be used as a template for drafting a Technology Offer. Please be sure to refer to the Profile Drafting Guidelines for what information you should include in each field.

Please note:

- Fields marked with asterisk (*) are mandatory
- Fields that can be ticked should only have one selection when drafting the profile unless specified under the field title.

FIELD	Field to be populated
Title *	Converting surplus wind energy for heating.
Internal Reference	
Summary * (1-500 characters)	A small enterprise from the Republic of Karelia, Russia has designed a technology of accumulating electric energy of a wind power station (WPS) using solid phase heat accumulator, which enables increasing WPS efficiency by 20-40%. The technology provides energy for heating and hot water supply at low cost. The company is looking for partners for technical cooperation.
Advantages and Innovations * (50-2000 characters)	<p>The innovation of the offer lays in using surplus electric energy of WPS for heat accumulation in a solid phase heat accumulator made of soapstone.</p> <p>Allowable heating range up to 500-600⁰C makes it possible to create compact solid phase heat accumulators, based on equal integrated thermal storage. Solid phase heat accumulators are less in size than water accumulators. Appropriate territorial borders of potential connection make 30-90 km and depend on added voltage. For small consumers, territorial borders are 2-3 times less.</p> <p>In case of using solid phase heat accumulators for heating, WPS efficiency can be increased by 20-40 %. Application of solid phase heat accumulator that can use solid fuel as supplementary power source increases the reliability of power supply.</p>

<p>Stage of Development *</p>	<p><input checked="" type="checkbox"/> Already on the market</p> <p><input type="checkbox"/> Available for demonstration</p> <p><input type="checkbox"/> Concept Stage</p> <p><input type="checkbox"/> Field Tested / Evaluated</p> <p><input type="checkbox"/> Project Already Started</p> <p><input type="checkbox"/> Project in Negotiations - Urgent</p> <p><input type="checkbox"/> Proposal under development</p> <p><input type="checkbox"/> Prototype available for demonstration</p> <p><input type="checkbox"/> Under development / lab tested</p>
<p>Comments regarding Stage of Development</p>	
<p>Description *</p> <p>(100-4000 characters)</p>	<p>Modern WPSs have two main disadvantages:</p> <ul style="list-style-type: none"> - They work full-load only a part of time, and the rest of time they are underloaded or stand idle, - In high wind, the energy produced by WPS is delivered directly to consumers and, if the electric accumulator is undercharged, to recharge it. When the accumulator is fully charged and electric power exceeds the energy needed by consumers, surplus energy is dissipated into the atmosphere. <p>The Russian company developed a technology for surplus energy conservation by using solid phase heat accumulator. The design of the solid phase heat accumulator, made of a natural mineral – soapstone, enables simultaneously or/and consequently receiving energy from electric mains and/or WPS. Soapstone can stand very high-temperature without changing its mechanical and structural properties.</p> <p>Moreover, some models of heat accumulators may also use biofuel or gas as extra energy source. The reliability of performance of heating systems based on different sources is very high. It is also possible to choose an optimal energy source for a certain time of day.</p> <p>The energy source can be switched automatically, using embedded program, by adjustment to external conditions.</p> <p>Solid phase heat accumulators increase the efficiency of autonomous energy sources up to 40%. When the wind load is great, the buildings equipped with solid phase heat accumulators get low cost and reliable heat supply and hot water supply.</p> <p>The company is looking for partners for cooperative development and testing it, and adaption to the customer`s needs .</p>

<p>IPR Status *</p> <p>Note: Multiple fields can be selected.</p>	<p><input type="checkbox"/> Copyright</p> <p><input type="checkbox"/> Design Rights</p> <p><input type="checkbox"/> Exclusive Rights</p> <p><input type="checkbox"/> Other (registered design, plant variety, etc.)</p> <p><input type="checkbox"/> Patent(s) applied for but not yet granted</p> <p><input checked="" type="checkbox"/> Patents granted</p> <p><input type="checkbox"/> Secret Know-how</p> <p><input type="checkbox"/> Trade Marks</p>
<p>Comments Regarding IPR Status</p>	<p>4 patents RF 2004, 2004, 2004, 2008</p>
<p>Technology Keywords *</p>	<p>4.1.1. Heat storage</p> <p>4.1.2. Heat transport and supply, district heating</p> <p>4.2.7. Heating, ventilation</p> <p>4.5.10. Wind energy</p> <p>4.5.8. Unconventional and Alternative Energies</p>
<p>Market Keywords *</p>	<p>6.8. Energy Conservation Related</p> <p>6.5. Alternative Energy</p> <p>4) Wind energy</p> <p>8.2. Industrial Automation</p> <p>1) Energy management</p> <p>9.3. Services</p> <p>1) Engineering services</p> <p>9.8. Utilities and Related Firms</p> <p>4) Other utilities and related firms</p>
<p>Responsible *</p>	<p>Spitsyna Olga</p>
<p>Sector Group</p>	<p><input type="checkbox"/> Aeronautics & space</p> <p><input type="checkbox"/> Agrofood</p> <p><input type="checkbox"/> Automotive, transport and logistics</p> <p><input type="checkbox"/> Bio Chem Tech</p> <p><input type="checkbox"/> Creative Industries</p> <p><input type="checkbox"/> Environment</p>

	<input type="checkbox"/> Healthcare <input type="checkbox"/> ICT Industry and Services <input checked="" type="checkbox"/> Intelligent Energy <input type="checkbox"/> Maritime Industry and Services <input type="checkbox"/> Materials <input type="checkbox"/> Nano – and Microtechnologies <input type="checkbox"/> Services and Retail <input type="checkbox"/> Sustainable Construction <input type="checkbox"/> Textile and Fashion <input type="checkbox"/> Tourism and Cultural Heritage <input type="checkbox"/> Women entrepreneurship
Restrict Dissemination to specific countries	United States Peru Germany Cuba Congo, the Democratic Republic of the Congo Chad Canada Brazil Austria Argentina Antarctica Angola Algeria
Type and Size of Client *	<input type="checkbox"/> Industry SME <= 10 <input checked="" type="checkbox"/> Industry SME 11-49 <input type="checkbox"/> Industry SME 50 – 249 <input type="checkbox"/> Industry 250-499 <input type="checkbox"/> Industry >500 <input type="checkbox"/> Industry MNE >500 <input type="checkbox"/> Inventor <input type="checkbox"/> Other <input type="checkbox"/> R&D institution <input type="checkbox"/> University
Year Established	2006
NACE keywords *	E 40.1 : Production and distribution of electricity
Turnover	<input type="checkbox"/> <1M

(Euros – Millions)	<input checked="" type="checkbox"/> 1-10M <input type="checkbox"/> 10-20M <input type="checkbox"/> 20-50M <input type="checkbox"/> 50-100M <input type="checkbox"/> 100-250M <input type="checkbox"/> 250-500M <input type="checkbox"/> >500M
Already Engaged in Trans - national Cooperation?	<input checked="" type="checkbox"/> Yes (In Merlin tick the check box for yes) <input type="checkbox"/> No
Additional Comments	
Certification Standards	
Languages Spoken *	Russian, English
Client Country	Russian Federation
Type and Role of Partner Sought *	<p>Type of partner sought SME</p> <p>Specific area of activity of the partner construction, electrical installation works, production or (and) selling of heating equipment</p> <p>Tasks to be performed Joint adaptation of the proposed heating systems to local conditions. Joint improving of technical and economic parameters of heating systems based on solid-phase heat accumulators.</p>
Profile is Opened for Expressions of Interest?	<input checked="" type="checkbox"/> Yes (In Merlin tick the check box for yes) <input type="checkbox"/> No

<p>Type and Size of Partner Sought</p> <p>Note: Multiple fields can be selected.</p>	<p><input type="checkbox"/> SME < 10</p> <p><input type="checkbox"/> SME 11-50</p> <p><input type="checkbox"/> SME 51 – 250</p> <p><input type="checkbox"/> 251-500</p> <p><input type="checkbox"/> >500</p> <p><input type="checkbox"/> MNE >500</p> <p><input type="checkbox"/> Inventor</p> <p><input checked="" type="checkbox"/> R&D institution</p> <p><input type="checkbox"/> University</p>
<p>Type of Partnership Considered *</p> <p>Note: Multiple fields can be selected.</p>	<p><input type="checkbox"/> Commercial agreement with technical assistance</p> <p><input type="checkbox"/> Financial agreement</p> <p><input type="checkbox"/> Joint venture agreement</p> <p><input type="checkbox"/> License agreement</p> <p><input type="checkbox"/> Manufacturing agreement</p> <p><input type="checkbox"/> Research cooperation agreement</p> <p><input type="checkbox"/> Services agreement</p> <p><input checked="" type="checkbox"/> Technical cooperation agreement</p>
<p>Attachments</p>	<p>To be added in Merlin</p>