

AKSOLEN New concept of solar energy

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Technology deployment	<p>AKSOLEN is an advanced concept of solar energy usage based on a large number of innovative solar micro-energy plants that are placed in a vicinity of a need for energy. AKSOLEN is collecting solar energy and efficiently transforming it into heat at temperature levels of around 700°C. This heat energy can either be used directly or stored in a heated container for later use. One way to use this energy is to produce electricity.</p> <p>AKSOLEN system is based on multiple technical inventions with pending patent protection!</p> <p>Major AKSOLEN advantages over other similar products are: High efficiency and power, independent of the position of Sun.</p> <ul style="list-style-type: none">□ Simplicity in achieving high-temperature levels.□ Efficient and practical heat storage system.□ Attractive usage scenarios in different fields of business - including somewhere usage of renewable energy was not possible until now."
Keywords	Solar energy storage, eco-innovation

BASIC CHARACTERISTICS OF AKSOLEN

01. Distribution of solar energy production, i.e. production of energy where it is needed.
 02. High energy independence on the local level, even on a household level.
 03. Possible industrial production of system components and competitive product price.
- AKSOLEN with a mirror size of the app. 25 m² produces the same amount of energy as 190 m² of PV panels.
 - AKSOLEN system has different applications. In the initial business plan, six most promising product groups, where AKSOLEN has high selling potential, were selected.
 - AKSOLEN products enable the quick return of investment for the buyers. The ROI varies for different products and different location of products - ranging from 0.75 years to 7.3 years. It is expected that the buyers will also receive green energy incentives or subsidies - this will additionally shorten the Return of Investment period.

STATUS AND PROJECT PHASES

Commercialization of AKSOLEN project will be conducted in four key phases

1. Preparation phase - in progress
2. Prototype creation phase - around 14 months
3. Prototype batch phase (20 pcs) - around 12 months
4. Commercial product exploitation

ATTRACTIVE INVESTMENT

- According to the initial financial plan, there is a potential of very high investment returns (IRR is around 115% in accordance with current projections) and high Net Present Value (app. 227 mil. EUR).
- To finalize this project successfully, the funds for further development and commercialization should be provided. The required investments per phase are:
Phase 1 - 80 000 EUR | Phase 2 - 700 000 EUR | Phase 3 - 3 000 000 EUR | Phase 4 - 1 500 000 EUR
- Due to high attractiveness of the renewable energy industry and high potential of this particular project, we predict that part of funding could be obtained from EU project funds, especially for Phases 2 and 3, for which we have started initial preparation. Further, in phase 4, where we require final investment in production machines and net working capital, a part of the funds could be obtained via leasing or other financial instruments.

Comments

Regarding Stage of Development	Development from prototype to final product
Language of communication	Croatian, English
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Notice	<i>Project co-funded by European Union funds (ERDF and IPA)</i>