



Energy efficiency Improvement systems Energy cluster Lab One





INTRODUCTION





Polska **Strefa Inwestycji**



POMORSKA SPECJALNA STREFA **EKONOMICZNA**

GDAŃSKI PARK NAUKOWO-TECHNOLOGICZ



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About Us



- Lab One is an energy cluster operating within the ECM ecosystem that is revolutionizing energy production and consumption in an unprecedented way. We have created a decentralized, zero-emission energy system based on renewable energy sources (RES), hydrogen technologies, and advanced solutions such as blockchain and artificial intelligence (AI).
- As part of the Future Solution Lab One Research and Development Center, in collaboration with leading scientific institutions, we conduct research and implement modern technologies in the fields of hydrogen technologies, energy, and we also carry out programming work.
- Our main goal is the decentralization of energy production sources, the democratization of energy, and the decarbonization of daily life. We create environmentally advanced products that will help adapt to global climate change and rising energy prices.
- R&D Future Solutions is also the operator of the Molanote 6 Laboratory within the Pomeranian Special Economic Zone, where we provide services related to smart energy technologies.





Virtual prosumer – purchasing power and generating your own energy: Financial benefits of purchasing Lab One power and AirDrop

Modern global markets are turning towards investments involving the acquisition of property rights presented in the form of digital, secure smart contracts. This technological form guarantees the safety, transparency of investments, and their outcomes. Investing in the Lab One smart contract, which represents a portion of power in kW, allows for seamless tracking and settlement of generated green energy through the unique corporate portfolios of the ECM system. Additionally, it enables transparent ESG reporting.

Typo energy efficiency by replacing high-emission energy with clean, cluster-based energy in the energy mix offers the opportunity to embark on a sustainable development path. The energy production service offered by the ECM ecosystem also generates significant financial benefits and protects the group from the inflationary effect related to rising energy prices. The virtual prosumer principle allows for the use of funds obtained from the production of clean energy to cover existing energy costs. An additional benefit of owning property rights in Lab One is the AirDrop



Future Solutions Research and Developement Center

mechanism, which guarantees synergy with profits related to the development of the ECM ecosystem and the construction of additional energy clusters. Detailed data regarding the return on investment will be included in the financial analysis of the investment.



Digital System Operator - Model

Modern global markets are turning towards investments based on acquiring property rights represented in the form of digital, secure smart contracts. This technological approach ensures the safety, transparency of investments, and their outcomes. Through advanced IT technologies such as DLT supported by AI, ECM has created a unified solution enabling the settlement of both cluster participants and its individual components on the basis of IoT (Internet of Things), regardless of the location or energy carrier. The platform also facilitates the settlement of values such as certificates of origin, simplifying ESG reporting and defining a long-term path for sustainable development.

ECM Energy Wallet

The ECM energy wallet tool serves as the core element of the system. It enables users to build their own portfolio of power rights (kW) within the various available energy clusters and benefit from them. The wallet is the heart of the settlement system, and free Air Drop mechanisms ensure its proper functionality.

The SDTx smart contract is a digital representation of an agreement establishing ownership of power (kW) held by the user. Based on the SDT asset stored in the wallet and the recorded power volume, the system settles all resulting values.

Thanks to the digital representations of values, the ECM Ecosystem offers a new perspective on the usability of energy. The implemented mechanisms allow for transactions to be made in accordance with the nominal value parameter. The system enables the conversion of earned values into classic currency (USD) through ECM/ Exchange by burning the EC smart contract. ECM/Store is an e-commerce tool facilitating purchase transactions. The use of energy in other clusters within the ECM ecosystem is managed through the automated Energy Exchange Platform Tron. The system also allows for the relocation of earned values into new SDT power assets according to the SES mechanism. ECM solutions have enabled the creation of a new market-the power market.

ILAB One

SDT x (kW) smart contract



EC (kWh) smart contract

The values generated within the cluster are recorded in the digital representation of the Energy Coin (EC), which is based on a unit of energy (kWh) and reflects its financial value through the nominal value parameter assigned at the time of issuance. EC smart contracts serve as the internal settlement value of the system, and their digital nature has enabled new possibilities for utilizing the energy produced.

The future is here

he Research and Development Center is tasked with practically implementing the goals arising from the company's research, development, and innovation policy. Under the law, the R&D center will bring tangible benefits to the company in the form of tax reliefs and enable access to highly preferential financial instruments.

The company's main activity will be the development of new technologies for selected sectors of the company's operations, particularly: concentrating research potential and developing new solutions enabling sustainable development and improving ESG reporting outcomes, creating an ecosystem for open innovation in collaboration with scientific institutes and other partners with achievements in this field.



Research and Development Center – why you must have it.

By having a unit with CBR status within the group, an entrepreneur can gain the following

- – at a rate of 150% of qualified costs.

Exemption from property tax in relation to taxable items used for research and development activities.;

enterprise (size of the enterprise)

Benefits of owning and operating a R&D Center

The previously functioning innovation fund has been replaced by higher tax deductions, implemented within the framework of the research and development relief, known as the R&D tax relief

The CBR status allows for the **deduction of incurred qualified costs**:

In the category of wages and contributions due from wages, as well as materials, raw materials, expert opinions, consulting services, services for using scientific research equipment from unrelated entities, and depreciation deductions

In the category of maintaining patents, protection rights for utility models, and rights from the registration of industrial designs – at a rate of **150% of qualified costs** for MSP and 100% of qualified costs for large enterprises;

Under the R&D tax relief, the R&D-qualified costs category can also include depreciation of buildings, structures, and premises that are separately owned and used in research and development activities, as well as purchased expert opinions, assessments, consulting services, and equivalent services from entities other than research institutions, used for research and development purposes (which other entities cannot include as qualified costs);

The possibility to apply for preferential, dedicated financial tools for innovative activities – technology loans, technology premiums, partial write-offs of technology loans provided by BGK, etc., depending on the status of the











Sustainable development, ESG, and ecology

The ESG indicators included in the annual report enable a reliable assessment of the company in terms of sustainable development, a detailed check of the legality of its actions in the context of regulations related to sustainable development, as well as a comparison with competitors. Reporting includes, among other things, data on greenhouse gas emissions, the company's impact on the natural and social environment, and potential risks associated with the company's operations.

The ESG report will also show what ESG strategy the Investment in smart contracts and the construction of a company has adopted, how valuable it is and how aligned it power portfolio, along with participation in the corporate is with the sustainable development goals, and, most structure of a research entity in the form of CBR Future Solutions and the unique European-scale solution of the importantly, to what extent it is actually being implemented. This will require companies to present data Lab One cluster, provides an opportunity to establish oneself as a pioneer on the path to sustainable confirming environmentally friendly actions in areas such as development in its sector. Long-term solutions such as the circular economy and social responsibility efforts. ECM virtual prosumer system allow for the long-term establishment of a sustainable development path and a straightforward path to achieving zero emissions and cost optimization.







Operational activity:

Scope of services provided:

- Conducting research and preparing protocols for CE marking for all electrical products related to renewable energy and distributed generation,
- Preparing and carrying out laboratory accreditation for selected EMC and LVD tests, • Providing research and development services: training, consulting, and design services in the field of renewable energy, energy-efficient house installation, energy efficiency, and distributed generation.
- Cluster coordinator service (according to the ECM agreement).
- Design work and technological modeling of energy clusters.
- Big Data collection and analysis.
- Commercialization of renewable energy production solutions (vertical wind turbine with PAN).
- Improving energy efficiency.
- Licensing revenue from IT work (E-Vision system).

Projected revenue in the first year after achieving operational efficiency of Lab One: 1.450.000 PLN/362.500 USD

Production of green hydrogen:



- Estimated production value: 40,000 kg x 70 PLN = **2,800,000** PLN per year.

Oxygen production:



- The estimated production volume of oxygen is **120 tonnes** per year
- kg of oxygen equals 1.21 m³, with the average market price of 20 PLN/m³, this results in a production volume of 99,173 m³
- Estimated production value: 99,173 m³ x 20 PLN/m³ = **1,983,460 PLN**

Total revenue from production for the year 4.783.460 PLN/1.195.865 USD

TOTAL 6.233.460 PLN / 1.558.365 USD +AIR DROP ECM



Organizational Structure







Future Solutions

Research and Developement Center









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MOLANOTE



POMORSKA SPECJALNA STREFA **EKONOMICZNA**



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e-Vision is a complete software package for energy clusters that wish to integrate all the needs arising from proper energy production, distribution, and consumption optimization. Thanks to full integration with dedicated hardware platforms (such as meters, monitoring sensors, electrolyzers, fuel cells, gas cogenerators, photovoltaic panels, wind and water power production units, etc.), financial control platforms (FK), and the ability to operate both in Cloud and On-premise models, the solution ensures rapid deployment and provides a comprehensive solution for the Solaris Hydrogen power supply team. Simplifying the system, e-Vision manages the production process, storage, expenditure, and settlement.

This type of comprehensive system is aimed at small and medium-sized enterprises, energy clusters, and individual households. e-Vision plans to align with the prosumer, collective prosumer, and virtual prosumer models right from the planning stage. Many mechanisms typical of professional energy systems have been omitted in favor of solutions that minimize the amount of personnel required in the trading company and operator for system maintenance.

e-Vision is being developed within the ECM ecosystem by R&D Future Solutions. Its architecture has been designed to report parameters and information about the ongoing processes, particularly the quantities and values of energy produced within the cluster, to the DApp ECM system, which, through smart contracts, transfers the value to users' wallets. This solution ensures full automation of the settlement processes, guaranteeing transparency and the security of transactions.

e-vision process management in the cluster



Technical process management

- ➤ e- Vision EMS
- ➢ e- Vision SCADA

Business process management and energy management

- ➢ e- Vision DSR
- ➤ e- Vision MDM
- ➢ e- Vision BILING
- e- Vision RAPORTY
- e- Vision CUSTOMER CLOUD

The future is here









Future Solutions Research and Developement Center

The Future Solutions Research and Development Center is created by an extraordinary group of people. It includes specialists from various fields such as economics, finance, marketing, energy, chemistry, and cryptography. To ensure that the mechanisms applied in the ecosystem are intuitive and flawless, the creation of these systems is handled by a team of experienced IT professionals coding in a blockchain environment and working with AI



Jakub Goryszewski

CINO, Director at Molanote 6, Energy Specialist at CBR Future Solutions. MBA, over 20 years of experience in IT and over 10 years of experience in energy and R&D projects

prof. dr hab. inż. Piotr Doerffer

Researcher at the Gdańsk University of Technology and the Institute of Fluid-Flow Machinery of the Polish Academy of Sciences. Expert in the field of wind turbines

Piotr Schumann

Cryptography Specialist, AI with over 8 years of experience in international markets, co-founder of cryptographic solutions at IncBuilders USA

Izabela Krakowska

Specialist in chemistry, hazardous materials, gas purity measurements at CBR FS, with experience in PSG's Measurement and Telemetry Department. Graduate of the Warsaw University of Technology, Faculty of New Technologies and Chemistry. Internship at the University of Helsinki, Faculty of Science, and at the Institute of Organic Chemistry, Polish Academy of Sciences in Warsaw.



Co-Founder, creator of ECM, and CEO of CBR Future CEO of Energy Coin Market, CBR Future Solutions, with over Solutions. Master of Economics from the University of 10 years of experience in the recycling industry. Advocate of Gdańsk, specializing in International Markets and Global an eco-friendly lifestyle Economy, Economic Analysis.

Małgorzata Holiat

Internal Security within the ECM system. Master's degree from the Cracow University of Economics, specializing in Public Economy Hydrogen Technology Advisor. Graduate of Poznań University of and Administration, postgraduate studies at the Gdańsk University Technology and Warsaw University of Technology in Chemical of Technology: ISO Standards and Quality Management. Technology and Process Engineering. President of the Hydrogen Certifications: ISO 9001, ISO 45001, ISO 14001. Work: Ministry of Technology Institute State Assets, Department: Ownership Supervision over State Treasury Companies, Specialist in Strategic Significance

Anna Forrester

Graduate in Economics and Public Administration from Krakow University of Economics and Postgraduate in Professional Accounting from Monash University, Melbourne, Anna is Economics and Finance Advisor and has 20+ years experience working in corporate, public and non profit sectors.

Weronika Kosecka

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Advisor in relations with local government. Master of Polish Philology from the Faculty of Humanities at the University of Gdańsk. Polish state and local government official. In 2010–2011, Secretary of State at the Ministry of Sport and Tourism, and in 2011–2015, Voivode of Pomerania

Bartłomiej Okoń











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Cooperation:

HEXON

MB GROUP

BUDUJEMY ZAUFANIE ODNAWIAMY WARTOŚĆ

PRAWO | PODATKI | RACHUNKOWOŚĆ

SYSTEM

veriff V Ienal SOLARIS HYDROGEN

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