

Development Strategy of the HyEnergy Capital Group for 2025-2028

1. Introduction

The HyEnergy Capital Group aims to achieve a dominant position in the hydrogen technology sector, modern energy solutions, and molecular diagnostics. Our strategy for 2025-2028 focuses on technological innovation, market expansion, and organizational structure optimization. The market environment and conditions resulting from the Green Deal and EU directives, including RED III, mean that the entire industry will require supplies of green hydrogen, methanol, and carbon dioxide. HyEnergy S.A.'s proprietary biomass gasification technology in a plasma environment allows us to meet industry needs in this area with highly economically viable parameters.

The HyEnergy Group also includes the DNA Research Center Ltd., a company specializing in molecular and genetic diagnostics, enabling business diversification and increased resilience to market changes. As part of our strategy, we plan further development in genetic prevention and preventive diagnostics, aligning with global trends in personalized medicine and the prevention of cancer and genetic diseases.

2. Mission and Vision

Mission

Our mission is to deliver innovative and eco-friendly technologies that enable the efficient use of renewable energy sources, reduce CO₂ emissions, and develop a hydrogen- and methanol-based economy. Within the Capital Group, we also advance molecular and genetic diagnostic methods, contributing to improved quality of life and public health.

Vision

We strive to become a leader in green hydrogen production technology and molecular diagnostics, supporting the global energy transition and the development of preventive medicine.

3. Key Strategic Areas

3.1. Product

Current Status

HyEnergy S.A. possesses unique biomass gasification technology in a plasma environment, enabling the production of hydrogen and biogenic CO₂. These are raw materials for producing e-methanol, green fertilizers, LOHC (Liquid Organic Hydrogen Carrier), and synthetic fuels (BTL - Biomass to Liquid). This technology ensures significantly lower energy consumption compared to electrolysis and enables CO₂ sequestration.

Simultaneously, the DNA Research Center offers advanced genetic testing, supporting medical diagnostics in cancer, metabolic, and genetic diseases.

3.2. Customers

Potential customers of HyEnergy S.A.'s products and technologies include:

- Chemical, petrochemical, and food industries.
- Automotive and metallurgical sectors.
- Waste management companies.
- Local government units.
- Renewable energy infrastructure operators interested in hydrogen production integration.
- Companies utilizing innovative CO₂ sequestration methods (geosequestration (AGS, Advanced Geological Sequestration), non-flammable plastics, CCU (Carbon Capture and Utilization), carbonate mineralization, CO₂-binding concrete, etc.).
- In the medical services sector: clinics, hospitals, medical facilities, and private individuals.

3.3. Business Model

- Sale of products: green hydrogen, e-methanol, and biogenic CO₂.
- Licensing of hydrogen technologies.
- Sale of equipment in the Hydrogen-as-a-Service (HaaS) model, enabling installation leasing.
- Design, integration, and implementation services for the chemical and energy sectors.
- Research and development in collaboration with scientific institutions.
- Sale of molecular diagnostic services.
- Sale of molecular diagnostic tests.

4. Strategic Goals for 2025-2028

- Launch at least 3 special-purpose vehicles (SPVs) for hydrogen/methanol projects and secure funding for their installations.
- File at least 3 key patents related to plasma gasification technology.
- Enter 3 new foreign markets.
- Start green hydrogen or methanol and CO₂ production at 3 installations with a combined annual capacity of at least 3,000 tons of hydrogen and 30,000 tons of CO₂.
- Secure an industry investor or strategic partner for the DNA Research Center.

4.1. Planned Development and Tasks

- Construction of a full-scale technology demonstrator.
- Development of a plasma process research and development center.
- Expansion of raw materials for hydrogen production, including wood waste, lignin, coal, agricultural waste, plastic waste, and biomethane. The company plans to develop its own IP in this area.
- Launch of plasma reactor production in Poland.
- Protection of intellectual property through new patent filings.
- Collaboration between the DNA Research Center and clinical institutions in cancer diagnostics and lifestyle diseases, as well as joint projects in this area.

4.2. Financing

- Internal financing and capital from private investors.
- Funding from EU and national programs (e.g., SMART Path, National Fund for Environmental Protection and Water Management (NFOŚiGW), INNOvation Fund).
- Issuance of green bonds for specific projects.
- Securing strategic partners.
- Financing from venture capital, equity crowdfunding, or token issuance.
- Collaboration with large energy corporations or industrial plants for co-financing projects.

4.3. ESG (Sustainability)

HyEnergy S.A. is committed to operating in line with ESG principles:

- Environmental: CO₂ emission reduction, 100% renewable energy use by 2027, minimization of industrial waste.
- Social Responsibility: Collaboration with local communities, job creation in the green energy sector, education on sustainable energy and genetic prevention.
- Governance: Financial transparency, compliance with EU regulations on green energy and health protection, development of ethical management standards.

4.4. Marketing and Educational Plans

HyEnergy S.A. plans:

- Educational campaigns on hydrogen technology and genetic prevention targeting industry, local governments, and investors.
- Organization of conferences and webinars promoting green hydrogen, CO₂ sequestration, and molecular diagnostics.
- Intensification of digital marketing efforts (LinkedIn, industry technology portals).
- Industry partnerships to increase awareness and acceptance of new technologies.

4.5. Risk Management

To ensure effective strategy implementation, we identify key risks and mitigation mechanisms:

- Regulatory: Monitoring changes in EU green hydrogen policies and genetic diagnostic regulations.
- Competition: Investments in innovation, development, and IP protection to ensure technology uniqueness.
- Technological Issues: Parallel development of alternative hydrogen production methods and new diagnostic techniques.
- Raw Material Availability: Diversification of biomass and waste sources for gasification.
- Changes in Genetic Diagnostic Reimbursement Systems: Close collaboration with regulatory institutions and industry associations. Advocacy for new financing models for genetic testing and increased funding for genetic prevention.

5. Key Strategic Pillars

5.1. Creation of SPVs for Hydrogen and Methanol Projects and CO₂ Emission Reduction

- Establishment of SPVs responsible for building hydrogen and methanol production installations in collaboration with industry partners.
- Collaboration with the chemical, energy, and transport industries to ensure market uptake of products.
- Securing funding from EU, national, and private investors.

5.2. Development of Innovative Technologies and IP Building

- Development and implementation of new inductive gasification technologies in a plasma environment.
- Creation of new patents and development of IP in green hydrogen, methanol, and synthetic fuel production.
- Collaboration with scientific institutions to develop new technologies.

5.3. Licensing of Hydrogen/Methanol/CO₂ Production Installations

- Licensing to industry entities.
- Equipment leasing under the "Equipment-as-a-Service" (EaaS) model.
- Contribution of licenses or intangible assets as non-material contributions to SPVs.

5.4. Partnerships with Medical Institutions and Joint Research Projects

- Partnerships with medical institutions.
- Expansion of sales channels.
- Joint projects in genetic diagnostics, cancer prevention, and personalized treatment using AI.

5.5. International Expansion through Joint Ventures (JV)

- Creation of JVs with strategic partners in Europe, North America, and Asia.
- Building an international hydrogen and methanol production and distribution network.
- Participation in international initiatives for hydrogen technology development.

5.6. Simplification of the Capital Group Structure

- Consolidation of subsidiaries to enhance management efficiency.
- Cost optimization through the reduction of unnecessary structures and processes.
- Implementation of modern management tools and operational automation.

6. Summary

The HyEnergy S.A. strategy for 2025-2028 is based on dynamic development through investments in new technologies, building strong partnerships, and organizational optimization. The integration of ESG principles, marketing expansion, and risk management strategies strengthen our approach to sustainable development and transparent, responsible management. The inclusion of molecular and genetic diagnostics as a second key pillar of the HyEnergy Group will enable growth in the healthcare sector and personalized medicine.