Business Case
-
Decarbonizing Maritime, Aviation & Methanization through Containerized E-Fuel Technologies

Agenda

1. Introduction & Decarbonization Context
2. Core Innovation: Gravitational Power Systems
3. Containerized Technology Modules
4. Integrated Circular Ecosystem
5. Financial Engineering & Business Models
6. Target Markets & Applications
7. Compliance & Deployment Framework
8. Vision & Next Steps

Introduction - From Gravity to Green Molecules: Containerized Decarbonization Systems

Subtitle :

A modular approach to produce green electricity, water, hydrogen, CO_2, and e-fuels for maritime, aviation, and industrial applications.

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The Challenge

Subject:

- Global Decarbonization Imperative

Key Points:

- Maritime & aviation sectors emit over **2 billion tons of CO_2 annually**
- Traditional renewable systems depend on sunlight or wind
- Need for **continuous, autonomous, off-grid energy** solutions
- Circular ecosystem enabling e-methanol, e-methane & e-crude

The Core Technology

Title :

- **Harnessing Gravity for Continuous Green Power**

Description :

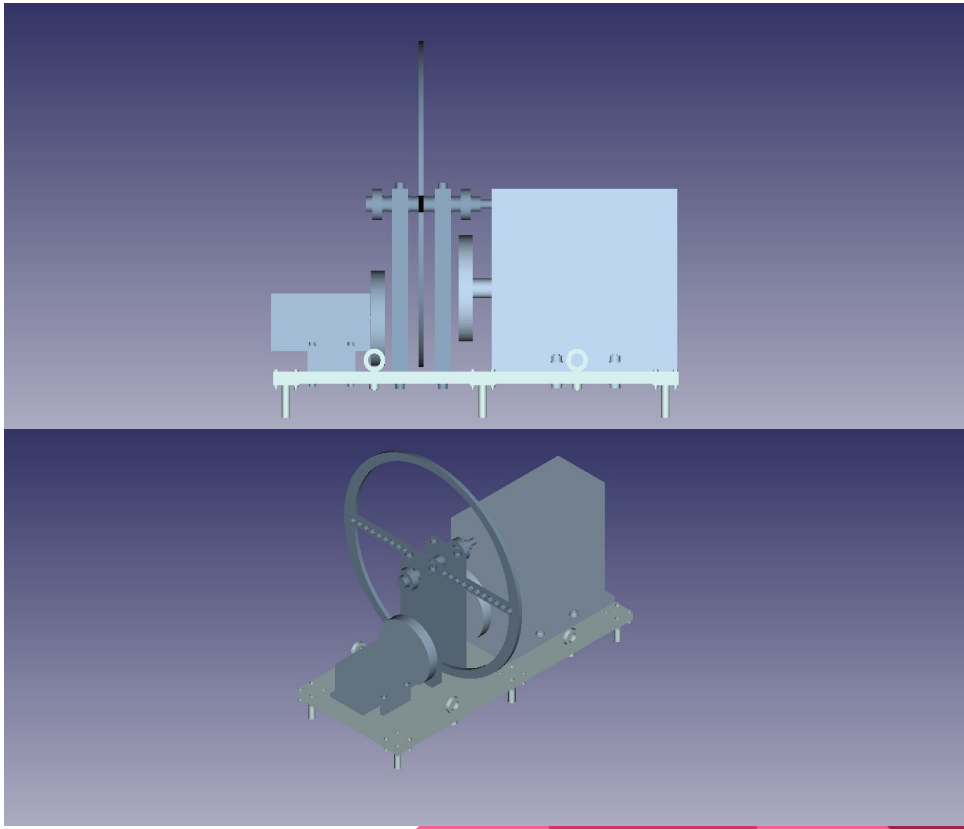
- Flywheel-based gravitational power unit
- Provides **≈4 kW stable electricity output**
- Autonomous 24/7 operation — no weather or fuel dependency
- Compact & modular — container-ready design

Technical Specs :

- Input: 550W | Output: 7 kVA
- Weight: ~139 kg | Size: 940×700×810 mm
- Price: €11,400 | Deposit: €5,700

Visual Suggestion:

- Gravity → Flywheel Rotation → Alternator → Electricity



Containerized Green Power Generation

Subject :

- Sustainable Power Generation Using Gravity

Applications :

- Off-grid electricity for industry, housing, or agriculture
- Replacement for diesel generators
- Power for data centers and continuous-load systems

Advantages :

- Zero fuel cost, zero emissions
- Continuous baseload power
- Minimal maintenance

Containerized Water Production

Subject :

- Atmospheric Water Generation (AWG)

Process :

- Flywheel electricity powers AWGs
- Condenses moisture from air
- Produces pure, drinkable water

Benefits :

- Fully off-grid and self-sustaining
- Ideal for arid or remote regions
- No reliance on traditional water sources

Containerized Hydrogen Generation

Subject :

- Generating Green Hydrogen from Air-Derived Water

Process :

- AWG provides feedstock water
- Electrolyzer powered by flywheel energy
- Produces H_2 + O_2

Applications :

- Fuel for mobility, industry, and e-fuel synthesis
- Supports hydrogen infrastructure development

Containerized CO_2 Capture

Subject :

- Direct Air Capture (DAC) of Atmospheric CO_2

Process :

- Powered by gravitational flywheel electricity
- Extracts and concentrates CO_2 from air

Outcome :

- Negative-emission operation
- CO_2 feedstock for e-fuel synthesis

Containerized E-Fuel Synthesis

Subject :

- Synthetic Fuels via Sabatier & Fischer–Tropsch Reactors

Technologies :

- Sabatier → e-Methane (CH_4)
- Fischer–Tropsch → e-Crude, e-Methanol, e-Diesel

Inputs :

- Green H_2 (electrolysis)
- Captured CO_2 (DAC)
- Flywheel electricity

Outputs :

- Renewable, carbon-neutral fuels for aviation & maritime sectors

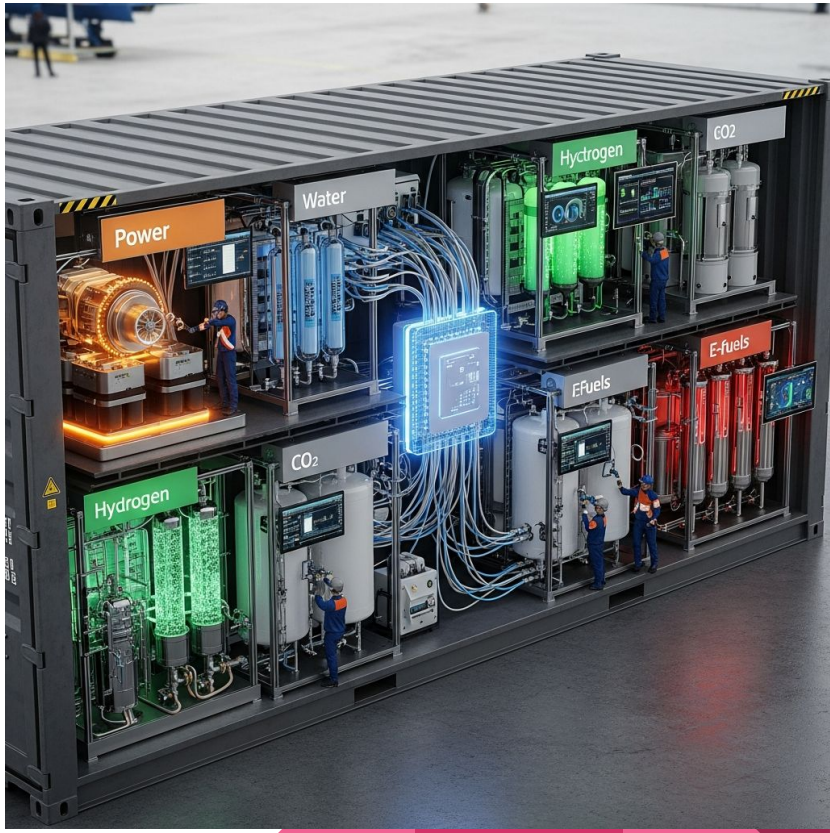
Containerized Digital & Control Systems

Subject :

- Containerized Digital Integration

Role :

- Interconnects all modules (power, water, hydrogen, CO_2, e-fuels)
- Ensures interoperability and process optimization
- Enables remote monitoring and predictive maintenance



Integrated Circular Ecosystem

Subject :

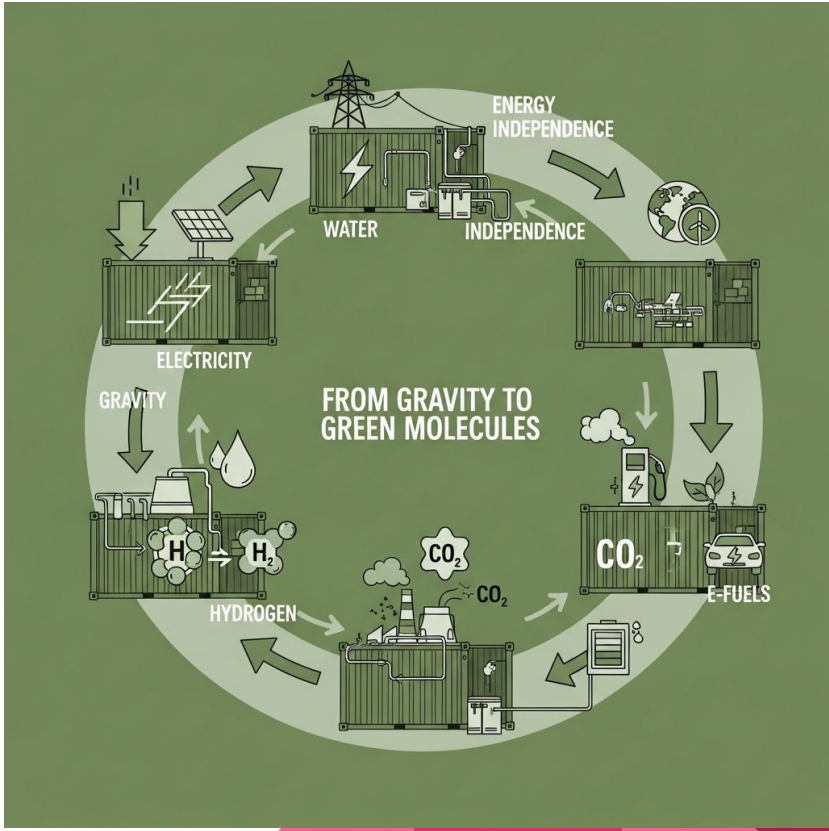
- From Gravity to Green Molecules

Diagram Suggestion :

- **Gravity → Electricity → Water → Hydrogen → CO_2 → E-Fuels → Energy Independence**

Description :

- Each containerized process feeds the next, forming a **closed-loop circular economy** powered entirely by gravity.



Financial Engineering

Subject :

- Project Financing Models

Options :

- **Project Finance:** ROI per kWh produced
- **Green Bonds / ESG Funds:** SDG & carbon-aligned investments
- **Leasing Models:** Energy-as-a-service
- **Carbon Credits:** Monetization via CO_2 capture & e-fuel
- **Strategic Partnerships:** Utilities, governments, industries

Target Customers & Sectors

Subject :

- Who Benefits from Gravitational Systems?

Primary Customers :

- Renewable energy developers
- Water & environmental tech firms
- Hydrogen & e-fuel producers
- Industrial manufacturers
- Data centers
- Aviation & maritime operators
- Governments & smart cities

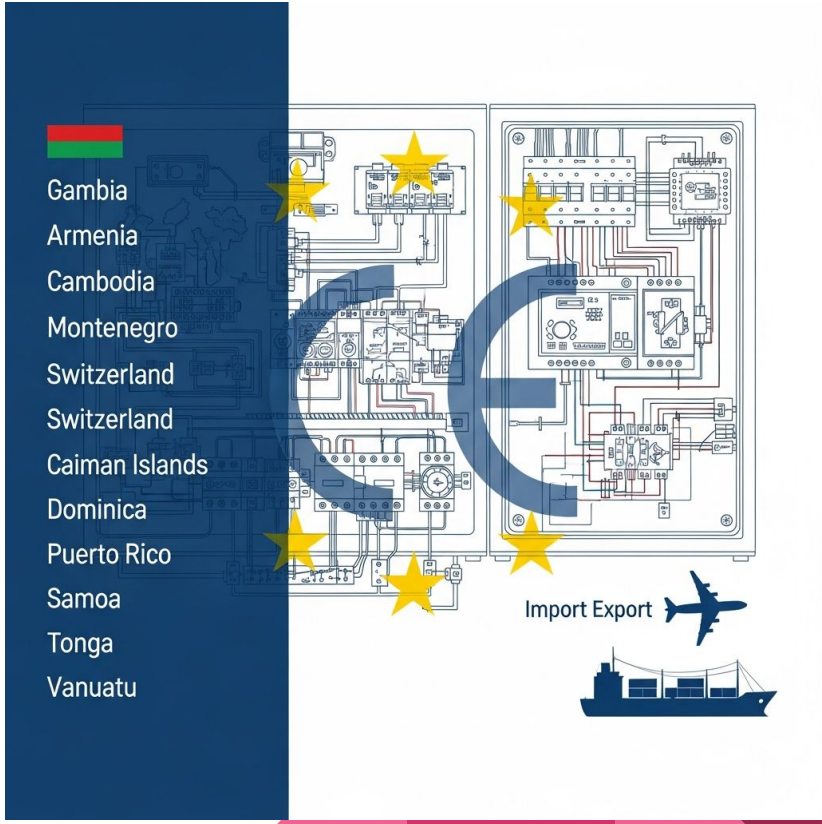
Compliance & Authorization

Subject :

- Deployment & Legal Framework

Notes :

- CE marking / EU authorization required
- Eligible countries: Gambia, Armenia, Cambodia, Montenegro, Switzerland, Cayman Islands, Dominica, Puerto Rico, Nauru, Samoa, Tonga, Vanuatu
- Buyer handles import/export & local compliance
- Electrical control panels designed by certified engineers



Vision & Closing

Subject :

- Harnessing Gravity to Power the Future

Vision Statement :

- By transforming gravity into clean electricity, we enable a fully circular, carbon-neutral ecosystem — producing **water, hydrogen, and e-fuels** with zero fossil input.

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