FEUP Business Project

# Introduction

FEUP (Ultra-Powerful Energy Provider) is an innovative company founded by three young entrepreneurs in Ouagadougou, Burkina Faso. Its mission is to provide green, reliable, and accessible electricity through hybrid solar panels capable of producing energy under sun, rain, and wind. The company primarily targets large production plants both within and outside the country. It leverages the region’s high solar potential and strategic installation over water bodies to maximize energy capture while optimizing space. FEUP aims to become a key player in sustainable electrification in West Africa and a leading energy provider for high-demand industries and infrastructures.

# 1. Company Overview

- Name: FEUP

- Legal form: LLC (3 equal partners)

- Initial capital: €30,000 (with plans for extension through investors)

- Sector: Renewable energy and industrial supply

- Objective: To provide clean, continuous, and tailored electricity to large national and international industries

# 2. Market Study

- High energy demand from production plants and infrastructures  
- Few competitors using floating hybrid solar structures  
- Target clients: agri-food factories, mining operations, textile industries, cement factories, local authorities, etc.  
- Opportunities: public subsidies, green financing, regional export potential, long-term industrial contracts

# 3. Feasibility Study

Technical:

* • Installation of floating hybrid solar panels on rivers near industrial and rural areas  
  • Energy storage systems adapted to continuous industrial needs  
  • Potential integration into the national grid and regional interconnection for export

Financial:

* • Estimated initial investment: €150,000 (to improve infrastructure to meet industrial demand)  
  • Seeking public and private funding, and partnerships with large corporations  
  • Expected return on investment within 5 to 7 years through long-term contracts

Organizational:

* • Technical team dedicated to maintenance and supervision of industrial installations  
  • Commercial team specialized in B2B relations with factories and institutions

# 4. Technical Study

Technology:

* • Hybrid solar panels (photovoltaic + integrated wind power)  
  • Floating installations to reduce land usage and increase panel lifespan  
  • Real-time monitoring systems for optimized production

Capacity:

* • Modular units scalable to several megawatts depending on industrial contracts  
  • Storage solutions (Li-ion batteries or other green technologies) to ensure continuity

# 5. Opening Balance Sheet

Assets

|  |  |
| --- | --- |
| Assets | Amount (€) |
| Tangible assets | 120,000 |
| Incorporation expenses | 5,000 |
| Working capital requirement | 25,000 |
| Initial cash | 10,000 |
| Total Assets | 160,000 |

Liabilities

|  |  |
| --- | --- |
| Liabilities | Amount (€) |
| Share capital | 30,000 |
| Loans | 100,000 |
| Suppliers / Debts | 10,000 |
| Equity | 20,000 |
| Total Liabilities | 160,000 |

# 6. Financial Ratio Analysis

- Debt ratio = Loans / Equity = 100,000 / 20,000 = 5 (high, financial leverage should be monitored)  
- General liquidity ratio = Current assets / Current liabilities (requires more specific data)  
- Estimated profitability: gross margin on industrial contracts expected around 30%  
- Payback period: estimated at 5 to 7 years with B2B contracts

# 7. SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)

## Strengths

- Innovative hybrid solar technology (solar + wind + rain)  
- Floating panel installations optimize space and improve performance  
- High solar potential in West Africa  
- Strategic targeting of industrial clients with high energy demand  
- Real-time monitoring and modular scalability

## Weaknesses

- High initial investment and infrastructure costs  
- Strong dependence on external financing and loans  
- Technical complexity of floating installations and hybrid systems  
- Limited brand awareness as a new company

## Opportunities

- Growing demand for clean and continuous energy in Africa  
- Access to green financing and public subsidies  
- Regional energy export through interconnection  
- Potential strategic partnerships with large industrial corporations

## Threats

- Market entry of large international energy companies  
- Technological risks and maintenance challenges in hybrid systems  
- Climate variability affecting production  
- Regulatory or policy changes impacting renewable energy incentives