TECHNOLOGICAL & INDUSTRIAL ALLIANCES | MALAYSIA AND ASEAN

ASEAN POWER GRID DEVELOPMENT, ENERGY INFRASTRUCTURE AND DATA CENTERS

01. COLLABORATION MODEL

Future Literacy Group (FLG) develops infrastructure, energy, and industrial investment opportunities in Malaysia and Southeast Asia, combining project origination, market development, investment opportunity structuring, capital mobilization, and institutional and commercial relationship building.

Its activity focuses on the infrastructure that underpins ASEAN's economic and energy integration, with special attention to the development of the **ASEAN Power Grid (APG)**, the expansion and modernization of national power grids, the integration of renewable energy and storage, and the infrastructure required for the growth of data centers and new industrial hubs.

The ASEAN Power Grid: a new generation of regional infrastructure

ASEAN's energy integration requires much more than cross-border interconnections. Its development entails a coordinated transformation of generation, transmission, and distribution infrastructure, alongside new storage capacities, demand management, digitalization, and cross-border electricity trading.

The region will need to mobilize substantial investments to expand and modernize its power grids, develop onshore and submarine interconnectors, and connect major renewable generation hubs with new industrial and digital demand centers.

+$300,000M
ESTIMATED INVESTMENT IN POWER GRID EXPANSION AND MODERNIZATION, 2025–2040

$27,000M
ESTIMATED INVESTMENT IN ASEAN POWER GRID INTERCONNECTORS THROUGH 2040

2045
ASEAN POWER GRID REGIONAL INTEGRATION HORIZON

Source: International Energy Agency (IEA), Financing the ASEAN Power Grid and Southeast Asia Energy Outlook 2026; ASEAN.

Two major development vectors

- **1. Regional energy integration:** Development of power interconnections, transmission and distribution grids, high-voltage infrastructure, submarine cables, substations, energy storage, and grid management and flexibility systems.
- **2. Growth of data centers and digital infrastructure:** Expansion of data centers, high-capacity computing facilities, and digital platforms requiring reliable power supply, grid connection capacity, backup systems, cooling, water, connectivity, and energy efficiency solutions.

Both vectors generate complementary needs across generation, electrical infrastructure, equipment, engineering, technology, and specialized services.

Objective of integrating technological and industrial partners

FLG seeks to establish alliances with Spanish and European companies that contribute technology, engineering, equipment, and specialized capabilities to participate in the development of these infrastructures in Malaysia and Southeast Asia.

The model contemplates different collaboration formats: joint opportunity identification and development, participation in studies and projects, integration of technological solutions, consortium development, collaboration with local operators and developers, and joint access to commercial and contracting opportunities.

WHAT FLG BRINGS TO ITS PARTNERS

- Opportunity origination and initial assessment.
- Identification of developers, operators, and institutional stakeholders.
- Development of commercial relationships and local alliances.
- Alignment of technical and industrial partners.
- Identification of contracting, investment, and financing pathways.
- Support in commercial and strategic market development.

02. TECHNOLOGICAL AND INDUSTRIAL CAPABILITIES SOUGHT

TECHNOLOGICAL & INDUSTRIAL DOMAIN	CAPABILITIES AND SOLUTIONS SOUGHT
1. Energy generation and supply	• Solar photovoltaic generation and other renewable energies. • Floating PV solutions and structures for renewable installations. • Distributed generation and hybrid systems. • Integration of renewable generation into grids and industrial facilities. • Energy supply solutions for large consumers.
2. Power grids and regional interconnection	• High- and medium-voltage transmission and distribution lines. • Substations, transformers, and electrical equipment. • Onshore interconnectors and submarine cables. • Protection, control, and power electronics systems. • Electrical engineering, grid integration, and grid modernization. • Connection infrastructure between generation, grids, and major consumption centers.
3. Energy storage and flexibility	• Battery energy storage systems (BESS). • Batteries and backup power solutions. • Microgrids and hybrid systems. • Demand management and grid flexibility. • Power supply continuity and quality systems.
4. Data centers and digital infrastructure	• Electrical infrastructure and grid connection for data centers. • UPS systems, storage, and power backup. • Power distribution, protection, and power management. • Cooling, energy efficiency, and thermal management. • Monitoring, automation, and intelligent facility management. • Auxiliary water, connectivity, and industrial utility infrastructure.

TECHNOLOGICAL & INDUSTRIAL DOMAIN	CAPABILITIES AND SOLUTIONS SOUGHT
5. Digitalization, engineering and specialized services	• Energy management systems (EMS) and monitoring. • Automation, control, and asset management. • IoT and digital solutions for grids and industrial facilities. • Techno-economic feasibility studies and planning. • Conceptual, basic, and detailed engineering, FEED, and technical assistance. • Environmental and social impact assessments (EIA/ESIA). • Engineering for industrial, logistics, and auxiliary infrastructure.

Technical capabilities will be integrated into opportunity development led by FLG, from initial identification and assessment through feasibility studies, engineering, commercial development, technical assistance, and future execution phases.

03. FLG: INTERNATIONAL ORIGINATION AND EXECUTION CAPACITY

Future Literacy Group is a firm specialized in strategy, market development, and opportunity origination at the intersection of critical technologies, strategic infrastructure, security, and capital mobilization.

+12 Yrs	+€400M	+300	+200
ECOSYSTEM TRACK RECORD	INFLUENCED OPPORTUNITY VOLUME	ENGAGED ORGANIZATIONS	LPS AND COMPANIES MOBILIZED

04. COMMERCIAL EXECUTION AND STRATEGIC OPERATIONS

Market development and contracting

- Opening of regulated markets across Europe, the United Kingdom, and North America.
- More than €1.2M in defense contracts secured for growth-stage technology companies.
- Generation of recurring public-sector revenue worth £240,000 per quarter.
- Participation in international capital transactions and strategic alliances exceeding £60M.

Technology policy and strategic infrastructure

- Participation in the development of Spain's national digital roadmap (España Digital 2026).
- Contribution to institutional and sector consensus around EuroQCI and the National Quantum Communications Plan, with €22M associated with initiatives such as PC3.
- Leadership of public-private strategy in international standardization and space communications infrastructure initiatives alongside NASA-JPL, JAXA, and Google, including introducing the Solar System Internet vision into ESA 2040 pillars, support for DTN technologies, etc.

05. PRESENCE IN BUSINESS ASSOCIATIONS AND STRATEGIC NETWORKS

Leadership of active public-private strategy within business organizations, foundations, and specialized groups:

- **AMETIC, digital industry consortium of Spain (Spain):** Vice-Presidency of the Innovation and Entrepreneurship Commission.
- **INNOVA IRV Foundation (Spain):** Advisory Board.
- **Interplanetary Internet Special Interest Group (North America–Japan):** Strategy Group.
- **Silicon Valley Defense Group (North America):** International Board.

06. INTERNATIONAL PRESENCE AND CONTACT

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TECHNOLOGICAL & INDUSTRIAL ALLIANCE DEVELOPMENT IN ASEAN

Integration of technological, industrial, and engineering capabilities in the development of energy infrastructure, regional grids, and data centers in Malaysia and Southeast Asia.

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Future Literacy Group — Build better futures in present.