

cenpro. **ENERGY**

Cenpro Energy Co. sal. (CeC)

The Green evolution



Overview

Company profile:

Cenpro Energy is established in Lebanon by a group of experts with the objective of offering professional services and delivering **turnkey sustainable energy smart system solutions** supported by solid and vast knowledge and business exposure of its members.

Seeking the opportunity at hand, Cenpro Energy leads the way for a sustainable future by offering optimum smart solutions to achieve a **green Environment with reduced gas emission** as well as the certification for green buildings based on LEED standards. This is executed in a cost effective manner while reducing fuel consumption, achieving zero-carbon and a significant decrease in air pollution.

The Objective:

Cenpro Energy delivers turnkey sustainable energy system smart solutions for **Commercial, Residential, and Industrial projects**. Renewable Energies are the future source for producing electrical power. Extensive research and investments are ongoing to develop and improve the available technologies in this field enhancing the benefit from Solar, Wind, Biomass and Geothermal energies and adopting a **'greener' lifestyle** throughout the future.

“Offer end-to-end custom energy solutions”

Overview cont'd

The Opportunity:

- The use of **Renewable Energy Systems, heat recovery and environmental solutions** in Lebanon and the Middle East region is undergoing tremendous growth following the trend worldwide, which is estimated to double in the USA and many European countries. The Lebanese Government plans to have 12% of its electricity from renewable energy by year 2020
- Cenpro Energy aims to **enhance the renewable energy culture** in the Middle East and promote the use of solar energy as a primary source of electricity. Cenpro Energy works with reputable and experienced international specialized companies as technology partners. Cenpro energy provides smart energy solutions and services for commercial, residential, industrial and individual clients including:
 - The supply of products for integrated high quality, practical, feasible and attainable energy systems matching the clients requirements and the physical/climate conditions of the applied locations.
 - The provision of studies for complex and large scale projects.



“Focus on a Clients Centric approach”

Overview cont'd

Technology Partners:

To meet the local and the regional market needs, Cenpro is cooperating with selective international reputable and experienced companies having suitable products and services as well as **providing integrated Smart energy solutions** based on a turnkey/ EPC projects taking into consideration the state of the art technologies, high quality product and competitive pricing.

The Target Market:

Cenpro Energy is based and **operates in Lebanon** with the intention to extend its activities and services to **Syria, Jordan** and to the Gulf countries.

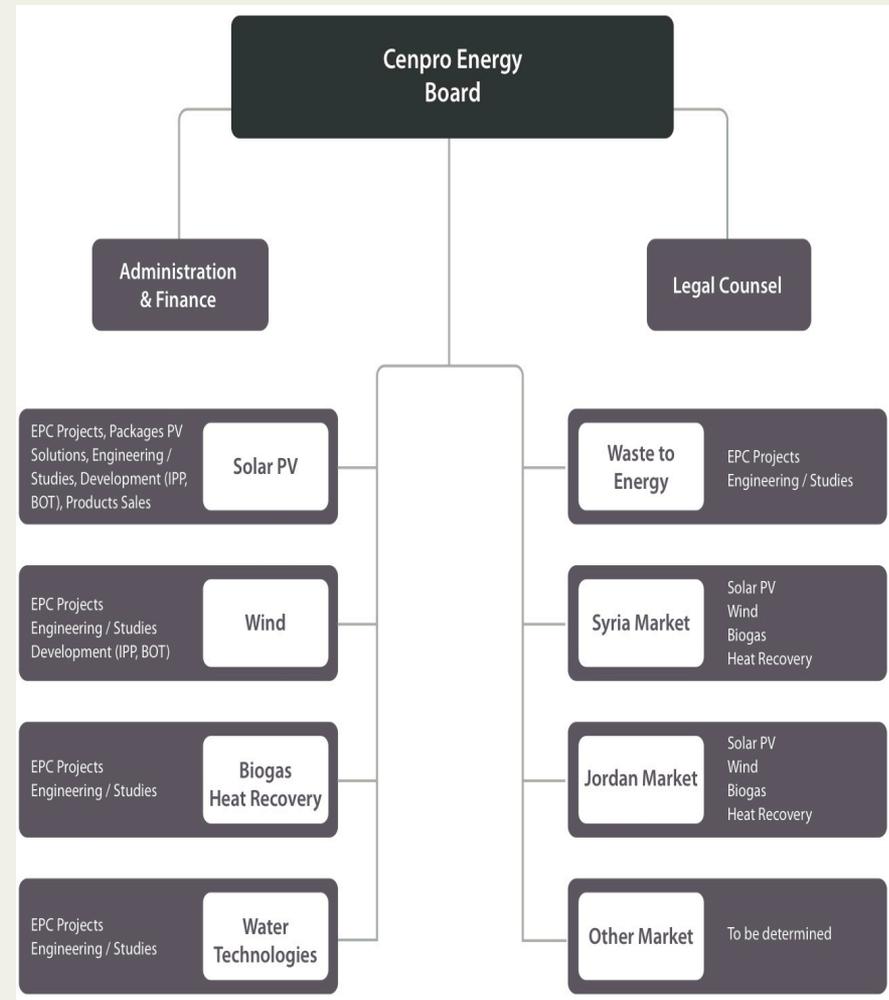
“Innovative vision in line with International standards”



Organizational Structure

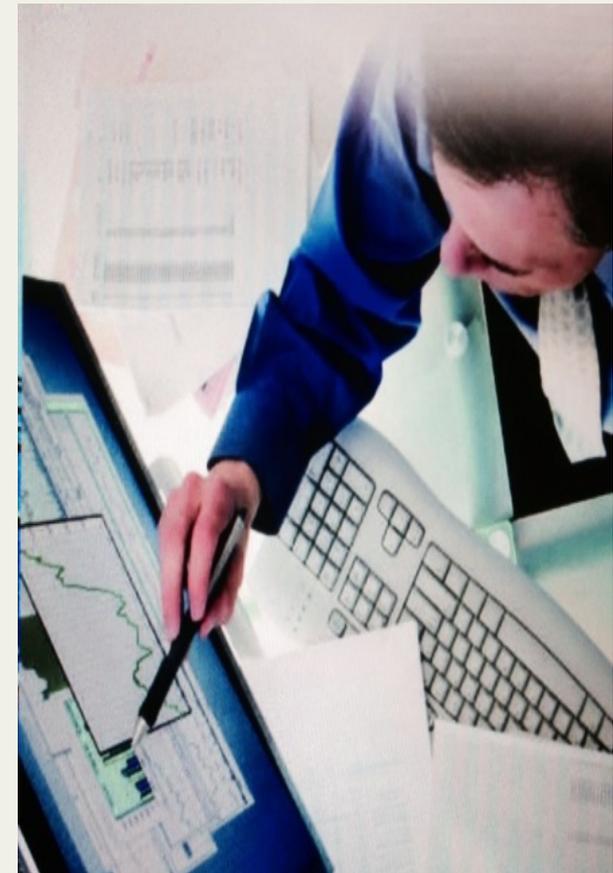
Scope of Activities:

- Market assessment and trend
- Opportunities identification
- Projects assessment and definition
- Project team structuring
- Projects financial viability
- Projects success viability
- Preparation of proposals and bidding
- Preparation of feasibility studies
- Corporate decision making
- Projects planning and budgeting
- Investment planning and strategy
- Cash flow and budgeting
- Engineering and state of the art equipment
- Selection of optimized solutions
- Project sourcing and procurement
- Projects implementation and handing over to clients
- Business partnership
- Technical, commercial and contractual valuation
- Environmental assessment and solutions
- Environmental risk and health effect



Business Lines

- Cenpro Energy covers the below items based on direct sales of products/equipment, turnkey/EPC contract basis or as services to potential clients. Furthermore, Cenpro Energy acts as an agent for international companies who are capable of implementing EPC contracts. Other activities will be added to the operations as per market demand.
- **Projects:** Based on EPC contracts
 - Solar PV system, ground and roof installation
 - Wind Energy Systems
 - CSP (solar thermodynamic) and CPV (Concentration photovoltaic)
 - Biogas and Biomass
 - Heat recovery system and low energy consumptions
 - Low temperature distillation technology for sea water desalination
- **Engineering/Studies:**
 - Energy conservation and management in buildings
 - Green buildings (LEED certified)
 - Energy and Environmental Modeling
 - Energy management systems (ISO 50001)
- **Packages SolarKit Solutions:**
 - Solar PV ground and roof application ready for installation (1 to 10 KWp)
- **Development:**
 - Evaluation of opportunities
 - Business planning and financial funding
 - Plant construction on IPP or BOT basis
 - O&M
- **Products and Sales:**
 - Solar street lighting and Led lighting system
 - Out of shelves solar products



“ Contributing to the world fight against global warming phenomena”

Business Solutions and Associations

To meet local and regional market needs, Cenpro Energy cooperates with selected International Reputable and experienced companies with market leading products and services as well as providing **integrated smart energy solutions** based on **turnkey/EPC projects** taking into consideration state of the art technologies, high quality products and competitive pricing.

In addition to its qualified staff, Cenpro Energy is supported on a partnership basis with specialized companies for various type of projects and products:

- **EPC Projects:**
 - **SB Solar:** for solar PV, wind and CSP
 - **Turboden:** for heat exchangers and waste heat recovery system
- **Engineering and studies:**
 - **Moroni & Partners:** for solar PV, wind and CSP
- **Solar Modules:**
 - Monocrystalline and polycrystalline silicon panels
 - High efficiency thin film solar cells
 - Organic photovoltaic cells
- **Inverters and batteries chargers:**
 - Coming soon
- **Batteries:**
 - Coming soon
- **Mounting system:**
 - Coming soon
- **Other solar products**



“ We value each project and relationship”

Activities and Services

- Cenpro Energy's members possess extensive knowledge of over 30 years in Middle East/ Gulf market. The company **provides small and large scale energy solutions** to cover a wide range of application for energy recovery and production. This includes engineering, studies and construction know how to integrate and custom-fit energy solutions meeting an **optimized return on investment in line with clients requirements and International standards.**
- During its operation Cenpro Energy conducts and implements various professional and high-end quality activities leveraging its competitive edge and capabilities:
 - **Engineering**
 - **Sales and supply**
 - **Installation**
 - **Commissioning**
 - **O&M**
 - **Energy management and validation**
 - **Environmental Modeling and Studies**
 - **Assets management and assessment for performance improvement and upgrading**
 - **EPC turnkey projects implementation**
 - **Development of energy solutions and projects**



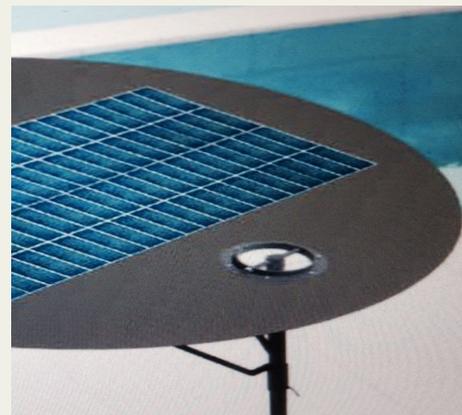
“ Our greatest achievement is the satisfaction of our clients”

Sector Coverage

Cenpro Energy is based and operates in Lebanon with plans to extend its activities to Syria, Jordan and the Gulf countries.

Cenpro energy covers a large spectrum of sectors. Targeted clients include but are not limited to:

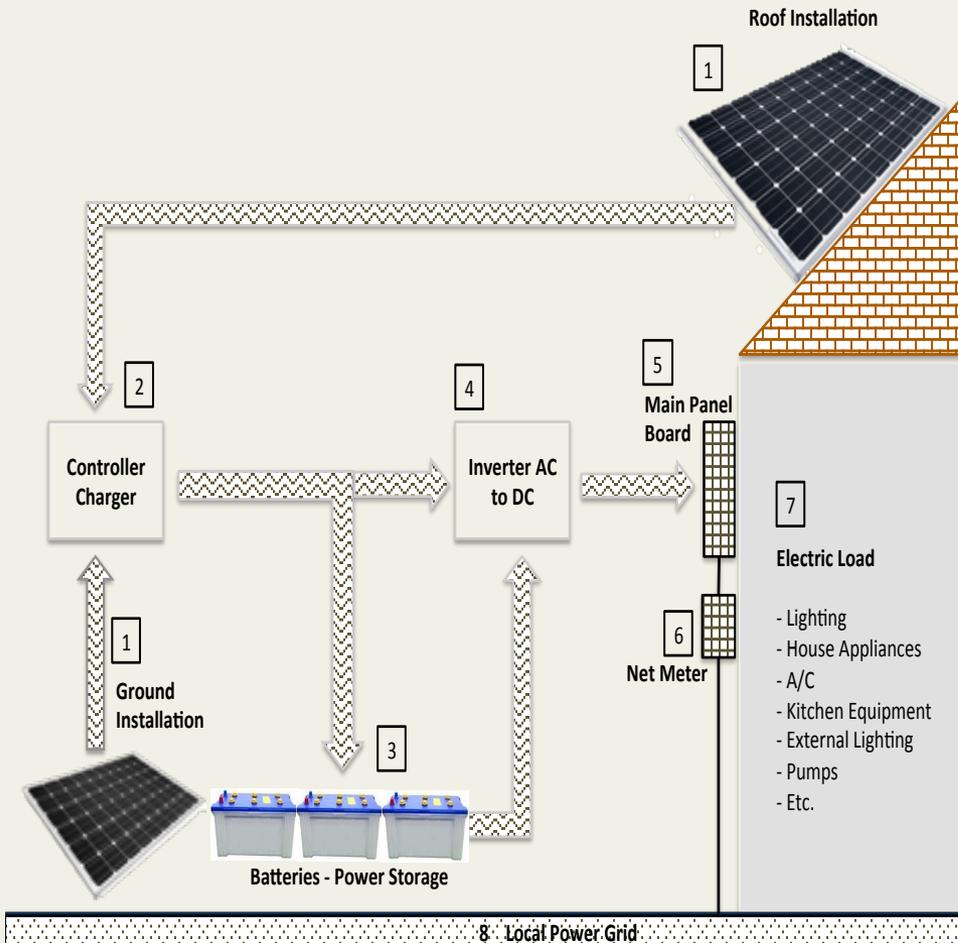
- **Ministry of Electricity projects**
- **Utilities and Municipalities**
- **Large institutions**
- **Developers**
- **Consultants, Contractors and individuals**
- **Telecom, remote areas**
- **Industrial**
- **Oil & Gas**
- **Residential/ buildings**
- **Hospitals**
- **Isolated areas Electrification**
- **Schools and Universities**
- **Green houses**
- **Parks and parking**
- **Warehouses**
- **Agro projects**



“Participate in the development of clean energy”

SolarKit with Power Storage

SolarKit solution for small scaled solar PV roof and ground application for individual houses ready for installation and connection to the Grid (1-2-3-4-6- up to 10 kwp)



Power Availability:

- 12 hours from grid
- 6 hours direct from solar collectors
- 6 hours from batteries



Components:

1. Solar Modules: Energy Collectors
2. Controller Charger: For charging batteries and feed the inverter with DC power
3. Batteries: Power storage for night use, 6 or 12 hours
4. Inverter: To convert DC power to AC ready for electricity use

Function:

- During Day:
 - Supply electricity to electric load
 - Charging batteries
 - Surplus power supply to the grid
- During Night (grid on): Power supply to load from the grid
- During Night (grid off): Power supply for selected load from batteries (6 or 12 hours)

Relevant Items:

5. Main Panel Board: For power distribution inside the building (by customer)
6. Net Meter: Supplied by the ministry/utility company
7. Electricity Load: By the customer inside the building
8. Local Power Grid: Supply of electricity to feed electric load

“Go green and save in your electricity bill”

“Using Natural and Green Resources”

