Volco POWER

VISIONS OF A CLEANER FUTURE

2023 COMPANY PROFILE

www.volcopower.com

POWER

POWER SUPPLY

Development of business opportunities throughout Africa for power plant projects that include sales, design engineering, construction, installation, operations & maintenance, ownership of power plants.

Volco Power is committed to becoming a key contributor in Africa in supplying industries and surrounding communities with sustainable low cost electricity. Recognising that the continent is in dire need of new power generation. Volco Power develops highly profitable power generation projects and provides exceptional power plant operations & maintenance services to customers. These projects create substantial job opportunities with new skills development training.

COMPANY SUMMARY

Volco Power engages with a wide range of professional international contractors and sub-contractors that are used for fast reliable installation of Electrical, Natural Gas, Solar Power Plants . This enables Volco Power to deliver full turn-key solutions on power generation equipment worldwide, including:

- Due diligence
- Feasibility study reporting
- Detailed Design and engineering – electrical, mechanical, structural, civils, environmental
- Power plant shipping
- Power plant construction and installation
- Full training programs for local operations personnel

OFF-GRID LNG POWER SUPPLY CHAIN

GAS & POWER SUPPLY TECHNOLOGY FOR THE OFF-GRID CLIENT

To bridge the gap between the traditional utility grid and the needs of today's industry, Volco Power offers complete "End-to-End" off-grid power solutions and services. From the supply of natural gas and power generation units to comprehensive service contracts, Volco Power's solutions cover every aspect of your power and delivery system needs.

At Volco Power, our goal is simple; to reduce operating costs for our customers by providing a cheaper and cleaner on-site power generation solution to that of diesel.

CONTAINERIZED GAS & POWER SOLUTIONS

The Volco Power "Virtual Pipeline" LNG to power solution provides customers with an alternate option that reduces operating costs and emissions over the traditional off-grid power supply from diesel.
For remote locations, temporary power and/or long-term power supply needs, the use of containerized LNG and Power units ensure lower CO_2 emissions and more importantly a significant reduction in operating costs over diesel power.

Natural gas as fuel

Today's energy production is mainly focused on fossil fuels. However, the limited supply of these fuels as well as conventional technologies' negative impact on the environment and our climate have promoted a shift towards new energy policies. In favor of an improved global ecological balance, natural gas will replace other fossil fuels to produce clean energy.

LNG – Liquefied Natural Gas

As the name implies, it is traditional natural gas which has been cooled to the point of liquefaction. Liquefied natural gas is odourless, colourless, non-corrosive, and non-toxic. It is also denser than gaseous natural gas. In fact, liquefied natural gas takes up about 1/600th the space that the same amount of gaseous natural gas would take up. The considerable reduction in volume makes LNG much more efficient to transport and store than regular natural gas.

MOBILE AND MODULAR POWER SUPPLY

Containerized power and regasification units

Item	Power Out-put	Regasification
VP1000	1 000 kW	Up to 1 000m3/hour
VP1500	1 500 kW	Up to 1 500m3/hour
VP2000	2 000 kW	Up to 2 000m3/hour

Units are mobile and modular enabling the flexibility of supplying any power requirements no matter the location.

Power Container

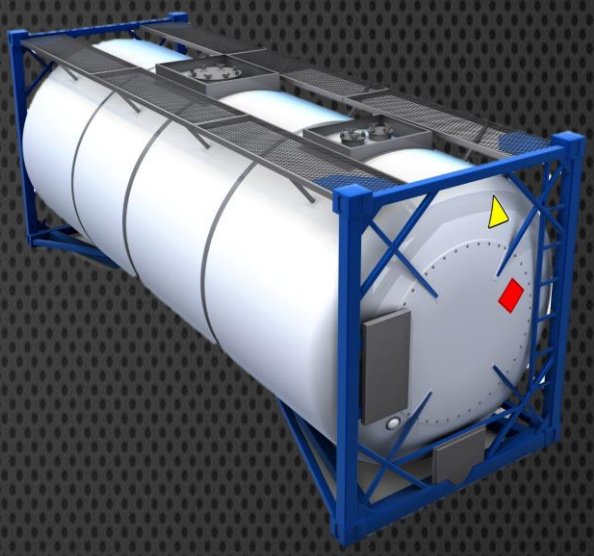
Factory pre-integrated and customizable per site requirements, the Containerized Series generator sets can provide significantly shortened lead time for installation, and a lower cost of ownership via a flexible design. These complete power systems are engineered and optimized for diverse power applications, compliant with ISO 9001 standards and produced in ISO 14001-certified facilities.

The Containerized Series generator sets are designed for harsh weather and strict acoustical standards, utilizing a standard 40' high cube container equipped with an array of innovative features, allowing the system to operate reliably even in the hottest environments – validated at ambient temperatures of up to 50 degrees Celsius.

No matter what your power demands and challenges are, our Containerized generator sets will meet your needs and expectations through a selection of pre-configured models and options. Customized solutions are also available with a wide selection of fuel systems, circuit breakers, controllers, filtration and cooling packages

LNG ISO CONTAINER

ISO Containers are designed with highly engineered thermal insulation and a rugged, durable construction that ensures low-pressure, low-temperature liquid has a safe journey when traveling long distances for extended periods of time. With versatility in mind, LNG ISO Containers are intermodal, optimized specifically for transporting Liquefied Natural Gas (LNG) worldwide by rail, sea, and road All containers comply with important codes and standards including ASME/DOT, RID, IMDG, ADR, ISO, and TPED.

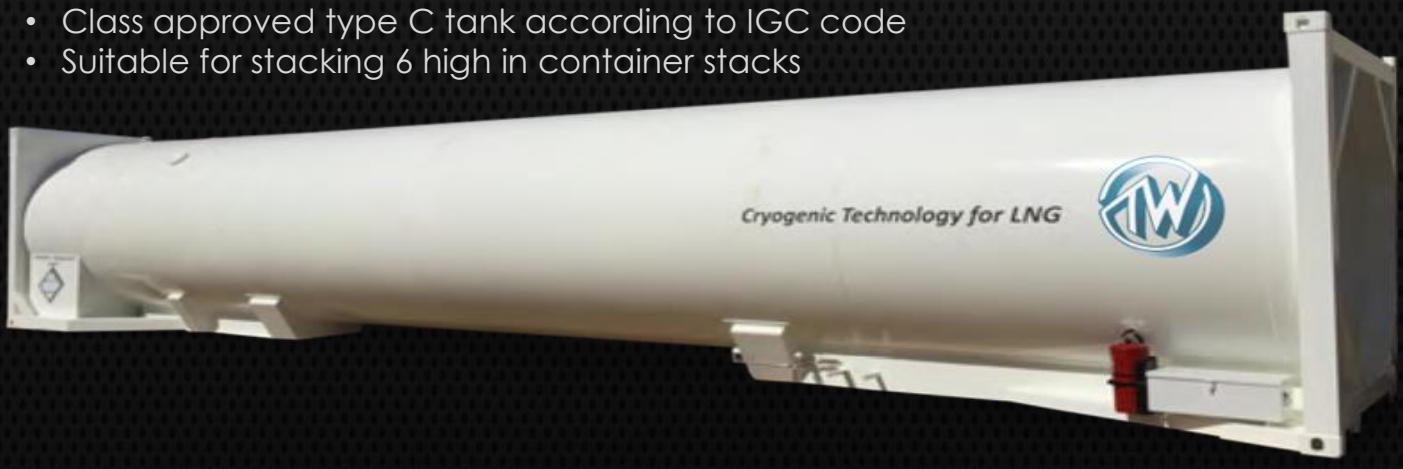


Benefits of Containerized LNG:

- No transfer of LNG from ship to storage
- Handling of containers is standard practice in container ports
- Uses existing infrastructure
- Fully Ex-proof; no electric installation on the container

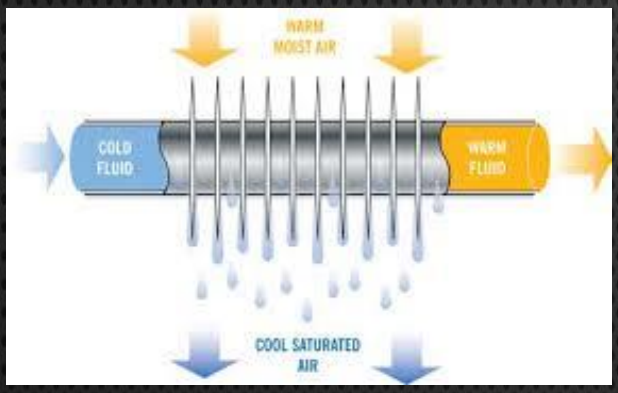
40' ISO LNG Tank Container:

- 33.4 m3 LNG at 82% filling rate
- Up to 80 days unattended holding time
- Dry quick couplings for liquid, vapor and safety valves with integrated break-away couplings
- Pneumatic ESD valves for liquid and vapor
- IMDG container for sea, rail and road transport
- Class approved type C tank according to IGC code
- Suitable for stacking 6 high in container stacks



REGASIFICATION CONTAINER

The regasification unit use ambient air to vaporize the LNG, known as Ambient Air Vaporizer's (AAV). LNG AAVs are of similar design to nitrogen vaporisers and comprise of several banks of finned tube cells. LNG is pumped through these cells and as it is vaporised, the gas is discharged at a temperature approaching ambient air temperature. A simple schematic of AAVs is shown as follows:



Natural draft: relies on wind and natural convective currents to move air over the units. As warm air comes into contact with the AAV cells, the air cools and becomes dense, causing it to flow downwards to the bottom of the cells. This causes the warm ambient air from the surroundings to be drawn through the top of the cells

VOLCO POWER SUPPLY CHAIN

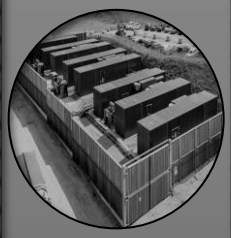
LNG is loaded on to containers at Supply Terminal and is loaded onto Container vessels

LNG Containers are supplied to the container terminal at the nearest port

LNG Containers are off-loaded and stored in port for up to 72 hours

LNG containers are loaded onto road carriers and transported to the clients site

LNG is regasified on site at the clients premises and supplied to the power plant



Power is generated on site

Volco Power is supported by a unique set of partners in the USA, Canada, Europe and South Africa that enables us to provide full end to end natural gas and power delivery solutions. With the support of our partners and affiliates, we can provide our clients with support services that extend to the delivery of cheap natural gas while enabling clients to drive down overall costs of operations.

Volco Power's ultimate strength lies in our ability, through our extensive management, engineering and international experience to deliver high quality services to the gas & power industry.

Volco Power is committed to becoming a key contributor in supplying industries and surrounding communities with sustainable low cost natural gas and energy. Recognizing that the continent is in dire need of new power generation, we are positioned to providing our clients with a complete end to end solution to delivering natural gas to new power projects and industrial off-takers

RENEWABLE AND ALTERNATE ENERGY POWER SOLUTIONS

To bridge the gap between the traditional utility grid and the needs of today's industry, Volco Power offers complete "End-to-End" Off-grid and Grid Tied Power solutions and services. From generation (Gas to Power, Solar, Wind, Battery Storage, Waste to energy) to transmission, distribution and revenue management systems, Volco Power's solutions cover every aspect of your power and delivery system needs.

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SOLAR HYBRID SOLUTIONS

Solar Photovoltaic (PV) system either ground mounted, at utility or embedded generation scale, that may incorporate energy storage system

It is possible to evaluate a bespoke roofing system to maximize the area of solar PV panels and provide a theft-proof PV array

The overall system can be configured to integrate distributed energy storage into a single storage 'pool', while Individual unit power consumption will be remotely monitored

Volco Renewables offers Standalone or Hybrid solutions depending on the client's electrical energy requirements and its objectives.

The electrical-generation technology options include:

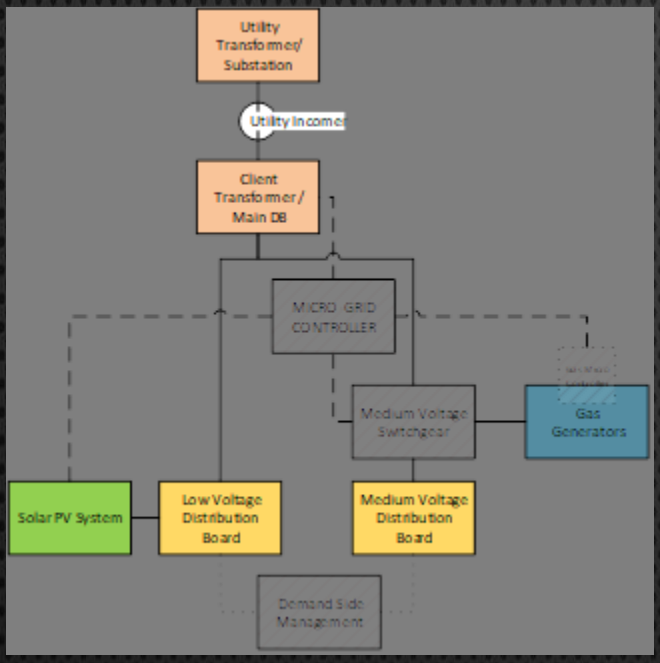
- Solar Photovoltaic
- Energy Storage Systems
- Gas generation (Piped NG, LNG, CNG, Dual Fuel Options)
- Steam Turbines
- Diesel and Dual Fuel generation

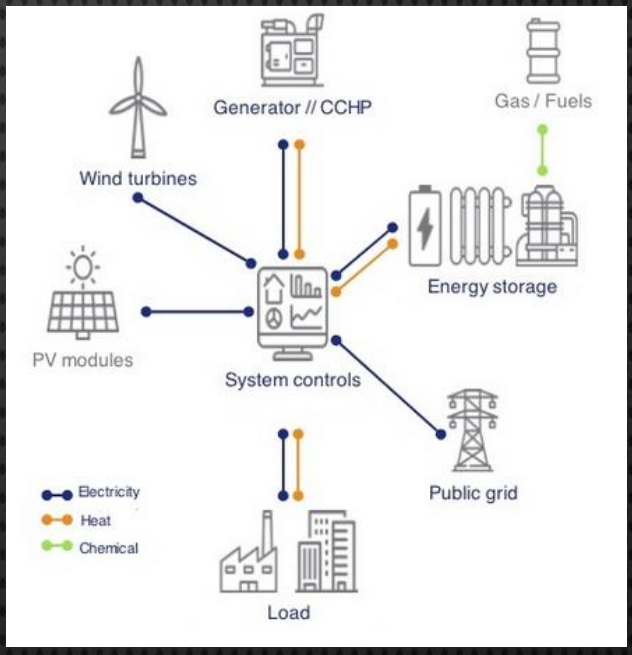
The technology mix is dependent on load profiles, high energy demand components, startup procedures, operational times, existing costs, and feasibility of solution proposed.

MICROGRID & REVENUE MANAGEMENT

Volco Power offer Microgrid and Revenue Management Solutions. The incorporation of Hybrid system is made possible through the design approach as well as the respective controllers and instrumentation.

Micro-Grid control systems are dependent on the complexity of the design and operational philosophy.





Every customer is different, and every project is unique. Volco Power specializes in bringing the right technologies together to configure custom solutions for a variety of applications, including:

- Energy management: peak demand reduction, back-up, photo-voltaic (PV) self-consumption, power quality.
- Transmission and distribution: capacity management, asset deferral, frequency regulation, harmonic suppression, voltage support, and power quality.
- Microgrid applications: grid management, PV integration, and grid enhancement.
- Thermal and renewable power generation: virtual spin (no emissions), ramp rate control, frequency regulation, time shifting, voltage support, curtailment avoidance.

CONSULTING SERVICES

POWER & INDUSTRIAL

- Framework Masterplan
- Conceptualization of projects
- Assessment of viability of projects
- Pre-Feasibility Assessments
- Feasibility Studies
- Business Development
- Business Advisory Services
- Financial Modelling
- Full Project Development (Power & Gas)
- Front End Engineering & Design (Power & Gas)

PROJECT DEVELOPMENT SERVICES

EARLY STAGE DEVELOPMENT SERVICES:

- Development of Framework Masterplans.
- Market and product research internationally
- Assessment of alternative technical power and fuel supply solutions
- Conceptualizing holistic project structures and technical and financial approaches, including the successful presentation thereof
- Selection and analysis of business opportunities
- Negotiation of supply agreements
- Development of Business Proposals and Presentations
- Development of Investment Grade Business Plans
- Development of Detailed Financial Models
- Directing early feasibility studies
- Sourcing development funding
- Networking, and development of business relationships, locally and internationally
- Developing & Sustaining key relationships
- Seek new customers in company target markets through research, direct marketing and networking with potential customers

DESIGN AND ENGINEERING, PROCUREMENT, CONSTRUCTION MANAGEMENT SERVICES

Volco Power, with its highly experienced and skilled partners, offers Design and EPCM services on a full turnkey basis for the complete lifecycle of project development from concept creation to operations and maintenance. Our Design Engineers work on systems and solutions that involve adapting and using complex mathematical and scientific techniques emphasizing the utilization of engineering physics and sciences to develop top notch solutions for our clients.

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