

The background of the slide is a blue gradient with a large white 'K' shape. Inside the 'K' and on the blue background are several grayscale images of Karadeniz Powership ships. The ships are large, multi-deck vessels with numerous smokestacks and complex piping. One ship in the top right of the 'K' is labeled 'KARADENİZ POWERSHIP RAUF BEY'. Another ship in the middle of the 'K' is also labeled 'KARADENİZ POWERSHIP RAUF BEY'. A third ship in the bottom left of the 'K' is labeled 'KARADENİZ POWERSHIP RAUF BEY'.

KARPOWERSHIP

KARPOWERSHIP

PRESENTATION

October, 2017

KARPOWERSHIP

Energy Flagship of Karadeniz Holding



ONE OF THE LEADING HOLDING COMPANIES

- Established in 1948
- 2,200+ employees
 - Global reach
- Active in various industries:
Energy, Finance,
Real Estate, Tourism



INTEGRATED ELECTRICITY GENERATION AND TRADE COMPANY

- Developer of Powership concept
- Current installed capacity domestic and international in excess of 3,000 MW
- First electricity exporter in Turkey



IN-HOUSE EXPERIENCE AND KNOW-HOW

In-house experience and capabilities;

- Design and Construction
- Operation and Maintenance
 - Fuel Management
 - Site Preparation
- Contract Management

DOMESTIC MARKET

General Information

- Generation capacity: 454 MW
 - 264 MW in operation
 - 190 MW under construction
- The first private wholesale company and cross border electricity trader
- 24 MW of the geothermal electricity generation is operational
- 10 MW of solar power plant is under construction
- 140 MW of geothermal power plant is under construction
- Domestic generation portfolio includes:
 - Natural Gas
 - Heavy Fuel Oil
 - Geothermal
 - Solar
- Received the following awards from Istanbul exporters associations:
 - First place 2006, 2010
 - Second place 2008
 - Third place 2007, 2009, 2014





INTERNATIONAL MARKET POWERSHIP



WHAT IS POWERSHIP?

- A floating power plant, either self propelled or barge mounted
- Can operate on both Natural Gas/LNG and Heavy Fuel Oil
- Has the lowest cost of electricity and highest efficiency
- Delivered in 90 - 180 days ready to generate electricity



INTERNATIONAL MARKET

Powership Fleet : 2,700 MW completed

5,300 MW under construction

Our Fleet

- Karpowership designed and constructed its "Powership" project in order to establish the world's first floating power plant fleet
- The project "Power of Friendship" serves to fulfil the urgent electricity needs of all countries in the world in the most cost competitive manner
- 13 Powerships 2,700 MW completed
- Operating the Powership Fleet across Middle East, Asia, Africa and the Mediterranean
- 5,300 MW in the construction pipeline as new Powerships with capacities ranging between 30-620 MW ready to be deployed every 2-3 months



POWERSHIP

All Purpose Energy Supply

EMERGENCY



Capacity: 10-100 MW

Contract Term: 6 months - 1 year

Delivery: 3-4 months

Fuel: Diesel

POWERSHIP SOLUTION INTERMEDIATE SHORT / MEDIUM / LONG TERM



Capacity: 30-620 MW

Contract Term: 1-25 years

Delivery: 3-6 months

Fuel: HFO / NG / LNG

LONG TERM



Capacity: 500-1500 MW

Contract Term: 10-25 years

Delivery: 36-60 months

Fuel: Hydro / Coal /
NG / LNG

INTERNATIONAL MARKET

Powership One-Stop Solution Partner



FAST TRACK

- 30-400 MW delivered within days
- No major site preparation required
- No completion or construction risk
- Delivered ready for power production



HIGH EFFICIENCY

- Delivering highest efficiency
- Utilizing Dual Fuel engine technology
- Suitable for base load and peak shaving
- Significant savings per kWh



ECONOMICAL

- Primary fuel is the low cost low Sulphure HFO instead of more expensive Diesel
- Lowest cost of delivered mobile power
- Multi fuel flexibility (NG/LNG/HFO)
- Immediate impact for sustainable growth
- Guaranteed availability and efficiency



INTEGRATED

- Delivered Ready to Operate – Plug & Play
- On-board HV substation
- Direct grid connection
- On-board fuel storage
- On board accommodation
- No land infrastructure



WE ARE CURRENTLY CONTRACTED TO SUPPLY AND HAVE BEEN GENERATING

15% OF LEBANON

13% OF GHANA

10% OF ZAMBIA

30% OF NORTH SULAWESI, INDONESIA

55% OF EAST NUSA TENGGARA, INDONESIA

80% OF AMBON, INDONESIA

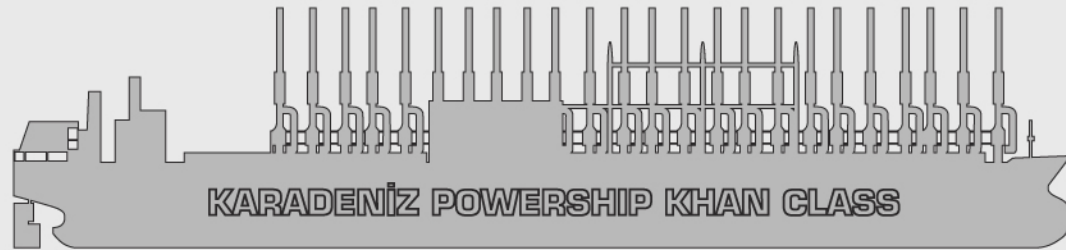
10% OF MEDAN, INDONESIA

***15% OF SOUTHERN IRAQ (2007 – 2016)**

OF TOTAL ELECTRICITY DEMAND

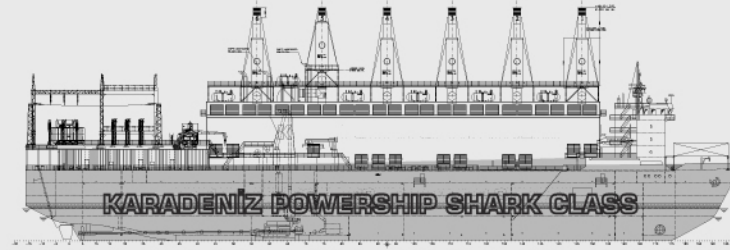
POWERSHIP CLASSES

KHAN CLASS



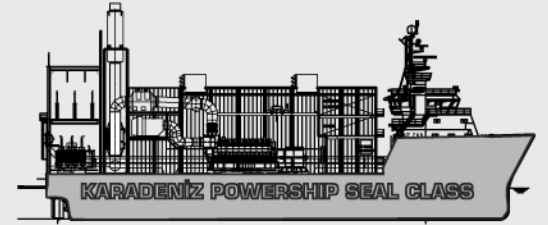
>300MW

SHARK CLASS*



100-300MW

SEAL CLASS*



30-100MW

WHALE CLASS*



>300MW

ORKA CLASS



100-300MW

MERMAID CLASS



30-100MW

***Regas facility on board**



Country: TBD

Client: TBD

Capacity: 216 MW

Class: Shark



Country: TBD

Client: TBD

Capacity: 104 MW

Class: Dolphin

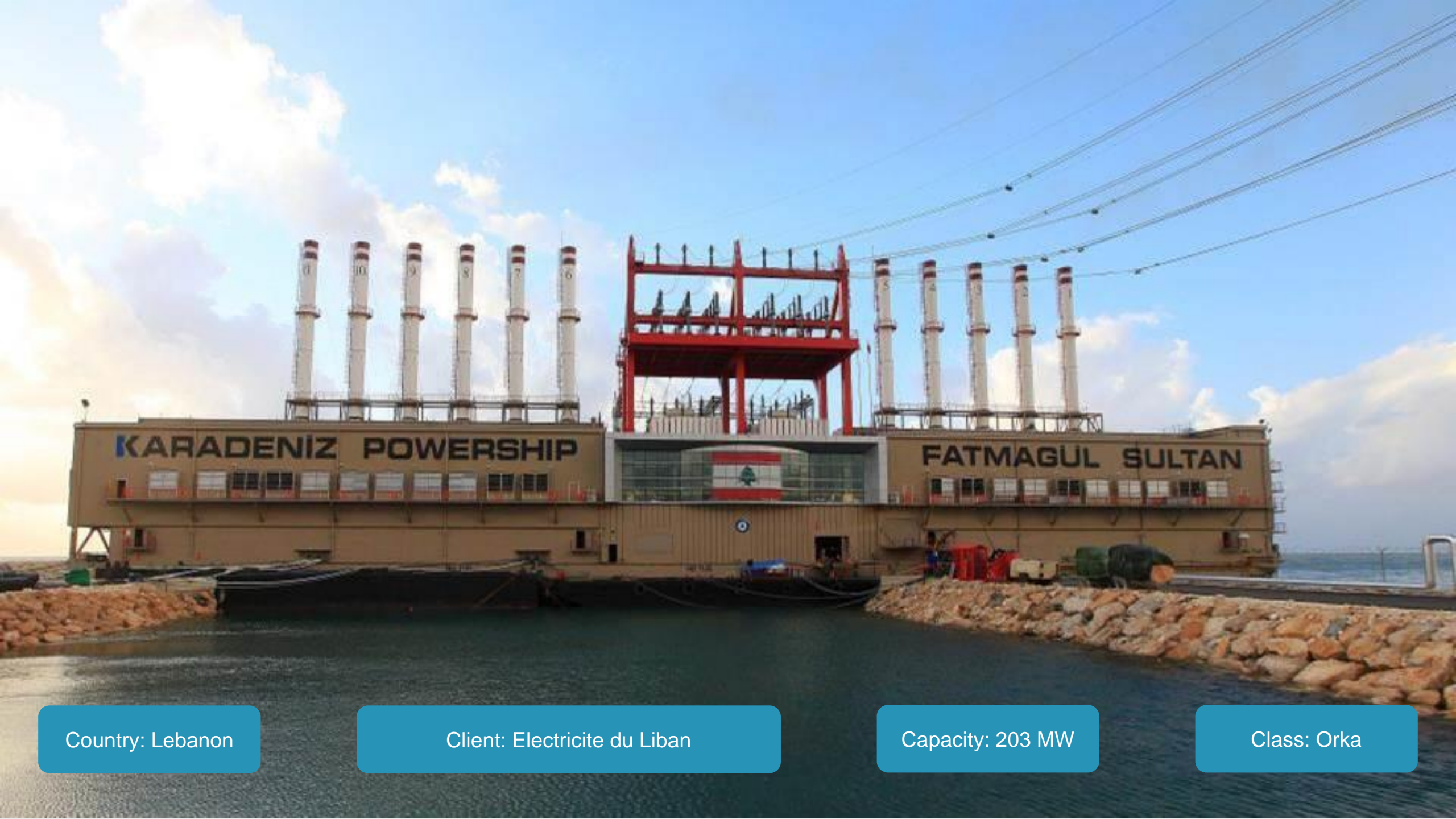


Country:
Zambia/Mozambique

Client: ZESCO/EDM

Capacity: 112 MW

Class: Shark



Country: Lebanon

Client: Electricite du Liban

Capacity: 203 MW

Class: Orka



Country: Ghana

Client: Electricity Company of Ghana

Capacity: 235 MW

Class: Orka



Country: Indonesia

Client: PT PLN

Capacity: 125 MW

Class: Shark

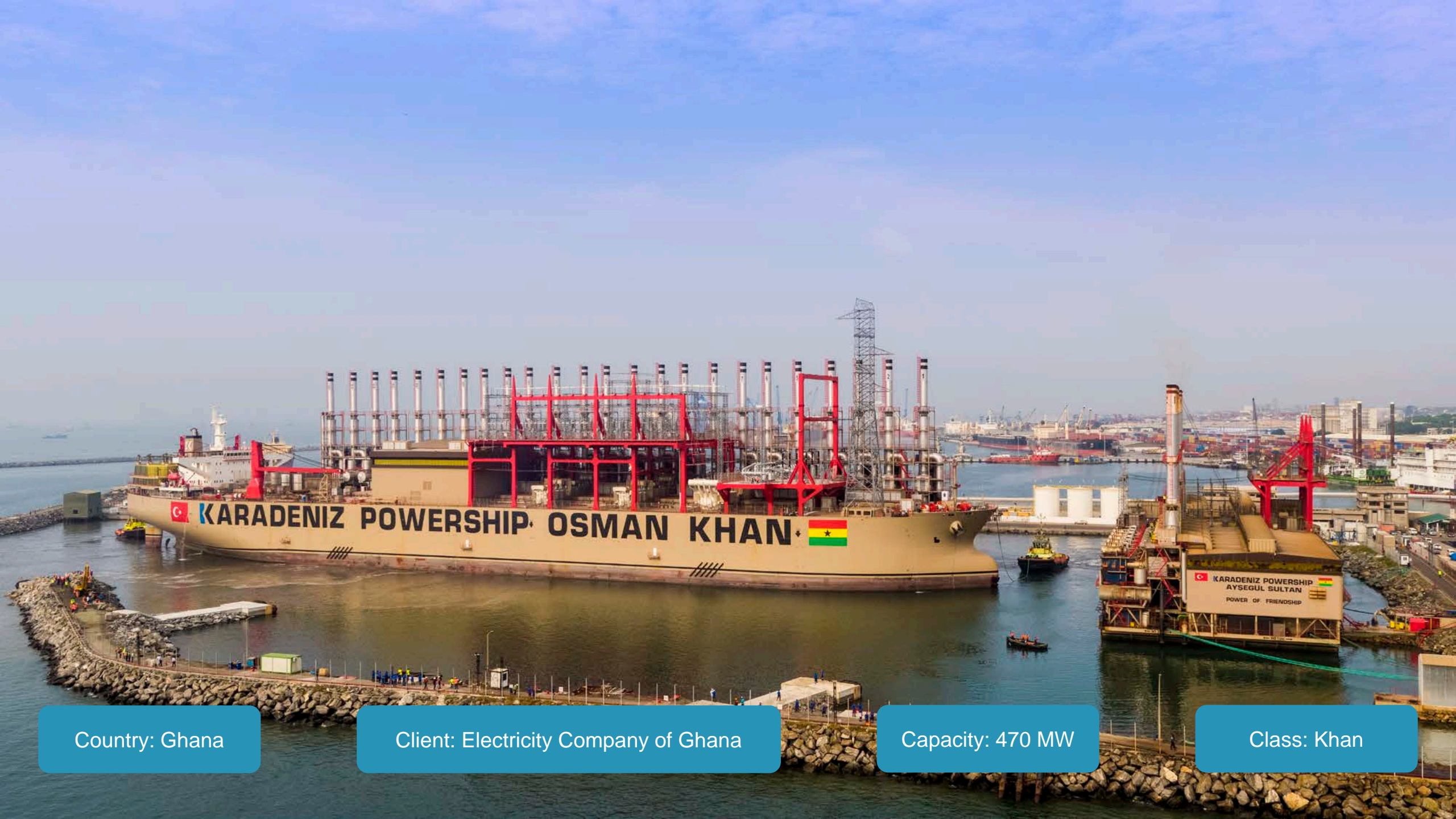


Country: Indonesia

Client: PT PLN

Capacity: 125 MW

Class: Shark

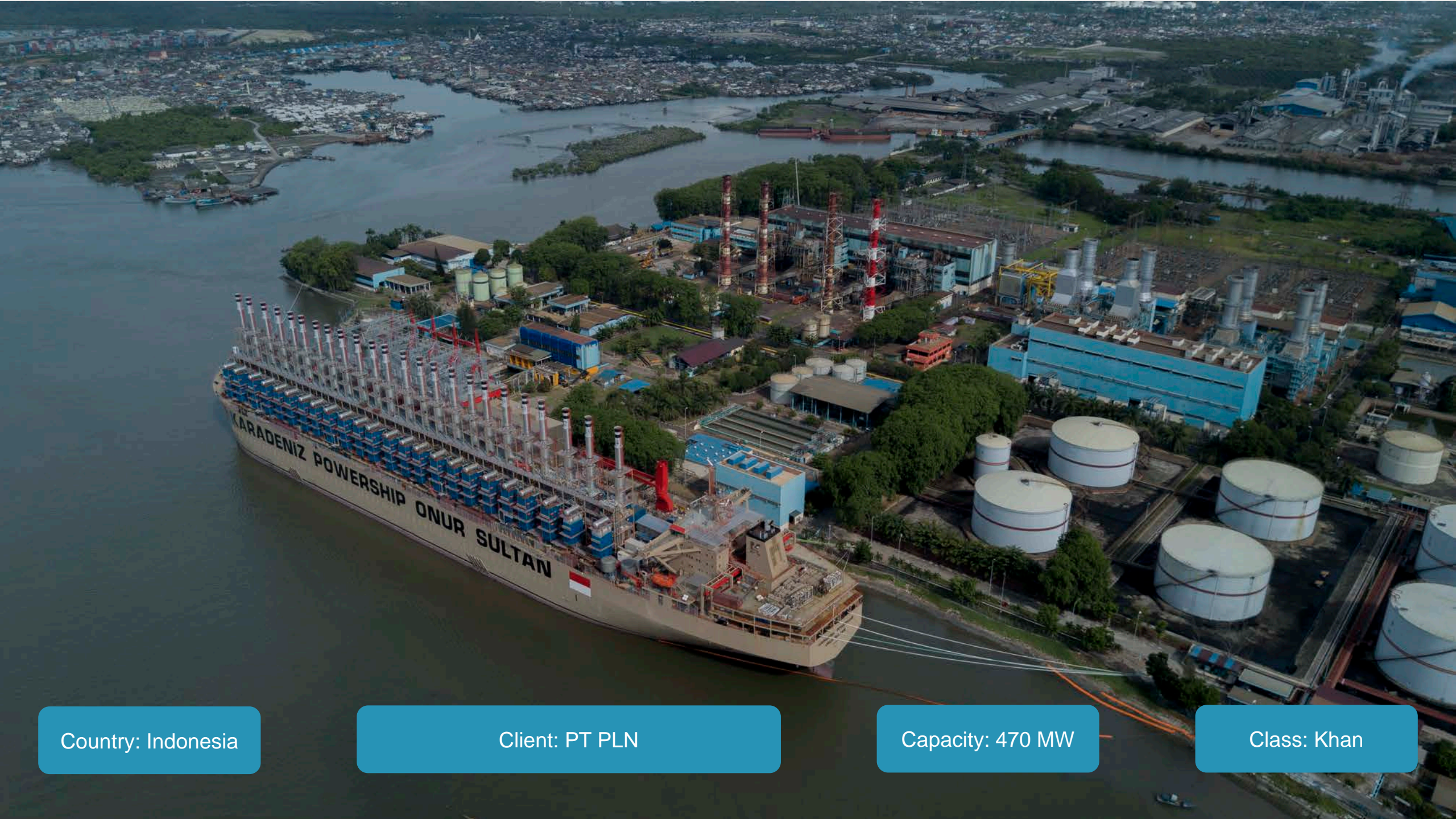


Country: Ghana

Client: Electricity Company of Ghana

Capacity: 470 MW

Class: Khan



Country: Indonesia

Client: PT PLN

Capacity: 470 MW

Class: Khan

FUELSHIPS



Ela Sultan – 109,000 DTW



Suat Bey – 5,500 DTW



Deniz Sultan – 109,000 DTW



Erol Bey – 109,000 DTW



Enis Bey – 6,900 DTW

SUPPORTSHIPS



Refakat Sultan



Karadeniz One



Ragıp Bey



Asım Bey



Faruk Bey



One World Karadeniz



Remzi Bey



Gültekin Bey

KARPOWERSHIP AROUND THE WORLD



OFİSLER / OFFICES

ACCRA

AMSTERDAM

ANKARA

BASRA

BEIRUT

BUENOS AIRES

DUBAI

ISTANBUL

JAKARTA

JOHANNESBURG

LONDON

MALTA

MAPUTO

NICOSIA

SINGAPORE

YANGON

WINDHOEK



PROJE SAHALARI / PROJECT SITES

AMBON

AMURANG

JIEH

KUPANG

LOMBOK

MEDAN

NACALA

TEMA

ZOUK

Expected COD 2018

POWERSHIPS AROUND THE WORLD



UNITED KINGDOM

Orhan Bey
203 MW



Fatmagül Sultan
203 MW



LEBANON

GHANA

Ayşegül Sultan
235 MW



Osman Khan
470 MW



MOZAMBIQUE/ZAMBIA

İrem Sultan
112 MW



INDONESIA

Zeynep Sultan
125 MW



Gökhan Bey
125 MW



Yasin Bey
125 MW



Onur Sultan
470 MW



Metin Bey
125 MW



PROJECTS IN EUROPE: UNITED KINGDOM

Project United Kingdom

Powerships will be deployed in several different locations within Ports and will be supplying electricity to the Ports and their private wire network customers for a period of 5 to 10 years for up to 200MW. Where feasible, the projects may have grid connection to play in the capacity and ancillary services market in the UK. Being close to the demand centre, Powerships will avoid high transmission costs and reduce the invoice for the customers. Expected COD is in 2018.



Our Sites

1. **Port of Tyne:** 40 MW Seal Class, Natural Gas Operation, Private Wire Network Customers, Potential grid connection
2. **Port of Tilbury:** 40 - 80 MW Powership, Natural Gas Operation Private Wire Network Customers, Potential grid connection
3. **Isle of Grain:** 120 - 640 MW Powership, Natural Gas Operation Direct national Grid Connection

PROJECTS IN MIDDLE EAST: IRAQ AND LEBANON

Project Iraq (past project)

Karpowership had a 410 MW of Powership contract with Iraq, supplying electricity between 2010 and 2016.

Iraq holds a unique position for the Power of Friendship Project. Iraq is the first country where Karpowership deployed a Powership, the first country to order additional Powerships after Karpowership's satisfactory performance, and also, Iraq became the first country to extend its contract terms after initial term was successfully completed.



Project Lebanon

In 2012, Karpowership was awarded a contract by the Lebanese Electricity Utility (EDL) to provide 2 Powerships totaling 270 MW of base load generation capacity.

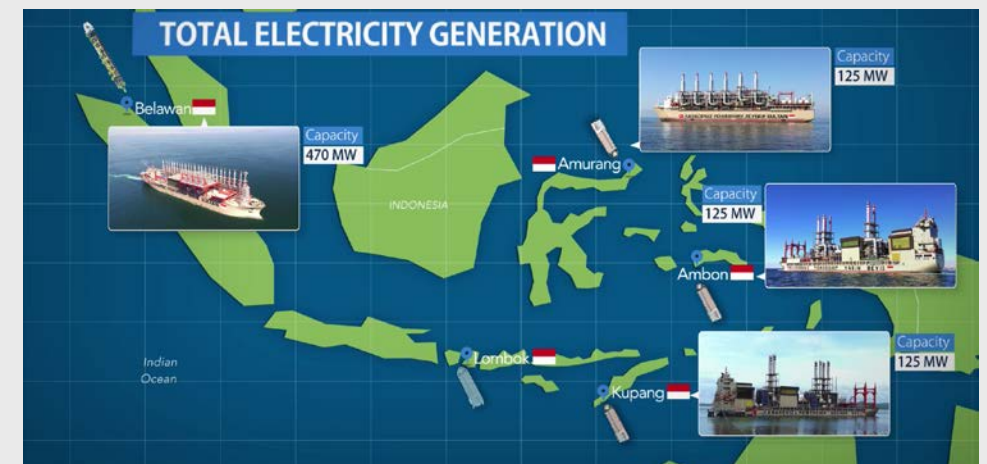
Capacity of existing Powerships were increased on-site upon additional demand for electricity from the off-taker. In 2016 the contract capacity was increased to 370 MW of reliable power from the Powerships for another 2 years.



PROJECTS IN ASIA: INDONESIA

Project Indonesia

Indonesia is Karpowership's first project in South East Asia. Karpowership has been awarded a 540 MW tender by the state utility PT PLN (Persero) to supply electricity in 5 different islands of the Indonesian Archipelago for 5 years. The first Powership of the Project has arrived to North Sulawesi, Manado and started operations in January 2016. The second started operations in December 2016 in Kupang. The third started operations in April 2017 in Ambon. The fourth started operations in June 2017 in Medan. Additional one Powership will start operation within the 4th quarter of 2017. In total our installed capacity will reach more than 1000 MW in Indonesia.



PROJECTS IN AFRICA

Project Zambia

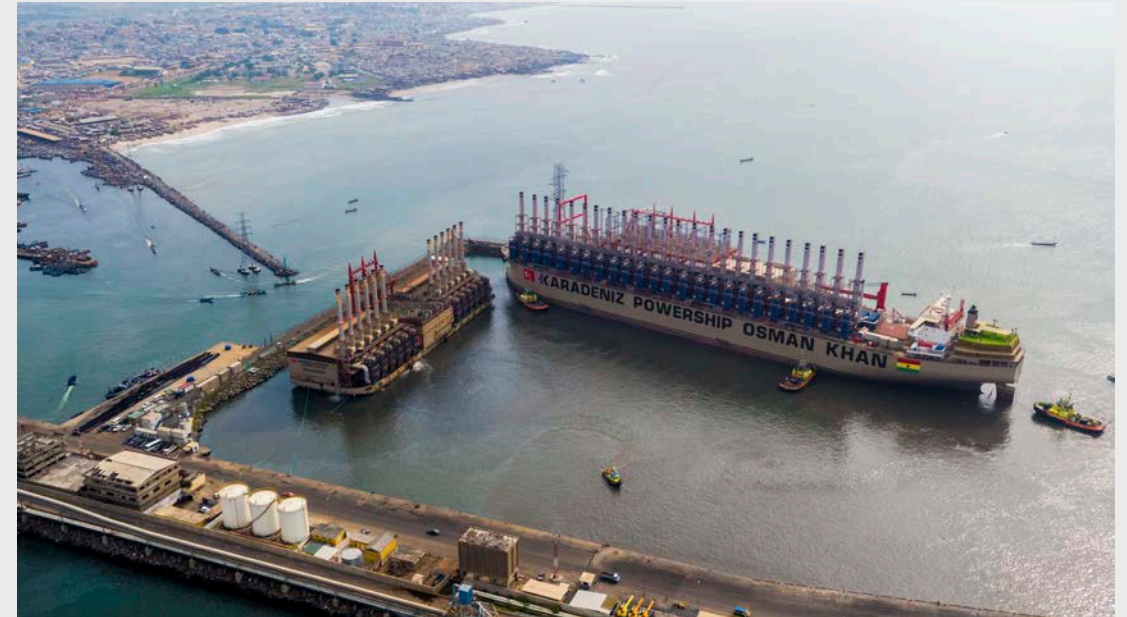
Zambia is Karpowership's first cross-border project. In November 2015, Karpowership was awarded to supply electricity to land-locked Zambia via cross-border interconnection lines through Mozambique and Zimbabwe. This economically critical electricity is delivered working in partnership with Mozambique's and Zambia's national utilities, Electricidade de Mozambique (EdM) and ZESCO.

The Powership started delivering electricity in March 2016, within four months from contract signing. The contract is to initially supply 100 MW of base load power.



PROJECT IN GHANA

- The first project in Africa
 - In 2014 Karpowership Ghana Company Limited signed a Power Purchase Agreement with the Electricity Company of Ghana Limited to supply 450MW Powership.
 - In November 2015, the first Powership with an installed capacity of 235MW arrived in Ghana.
 - The Powership began operations in December same year operating from the Tema Fishing Harbor
 - Since then the Powership has been supplying consistent reliable and affordable electricity.
 - In August 2017 Karpowership deployed an installed capacity 470MW Powership to Ghana.
 - The Powership which is the world's largest Powership began operations in October from the Tema Fishing Harbor.
 - Powership project engaged both local and expatriate workforce.
 - The Powership project has provided employment for about 200 people in Ghana.
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ENVIRONMENT AND PEOPLE



ENVIRONMENT AND PEOPLE

Environment, Health and Safety

- Enframed with a corporate level EHS policy, all IFC Performance Standards , Guidelines and industrial best practices are implemented in all of our operations
- Put onto two pillars as Occupational Health & Safety Management and Environmental & Social Management, each system includes job specific procedures starting from greenfield project till decommissioning phase
- Regular EHS inspections and monitoring are conducted by identifying the risks and implement appropriate control measures to ensure continuous improvement in EHS management
- Stakeholder engagement plans and tailor-made grievance mechanism are conducted inline with IFC and destination country requirements.

INTEGRATED MANAGEMENT SYSTEM CERTIFICATION

ISO 9001:2015
Quality Management

ISO 14001:2015
Environmental Management

OHSAS 18001:2007
H&S Management

IFC Certification



KARPOWERSHIP CORPORATE SOCIAL RESPONSIBILITY

Karpowership engages in Corporate Social Responsibility projects in communities it operates

As part of our CSR strategy, regular stakeholder engagements are held in order to ascertain the views of stakeholders regarding our operations.

Again the stakeholder engagements also informs us about CSR projects to embark on

Stakeholder Engagements

- Regular engagements with stakeholders
- This is done to get stakeholders acquainted with the operations of the Powership
- It is also a mechanism to ascertain any concerns with regards to our operations
- To ascertain views regarding implementation of CSR projects

2017 and 2016

Three stakeholder meetings held

- Fishmongers association
- Fishermen association
- All operational stakeholders



OUR CORPORATE SOCIAL RESPONSIBILITY PROJECTS

CSR projects are focused on these areas

- **Education**
- **Community support**
- **Environmental sustainability**

Education

- Provision of ultra modern computer laboratory for the Manhean Anglican JHS
- Distribution of 2,000 school backpacks and stationary to the students in the community
- Annual bursary for brilliant but needy students in the community
- Provision of water tanks to community schools

Community Support

- Distribution of Fishing nets and Wire Mesh to Fishermen and Fishmongers
- Distribution of resource materials to the Manhean Police station
- Annual donations to the Muslim community regarding Ramadan

Eid-Al Adha

- Donations to the SOS orphanage, Homowo festival

Environmental sustainability

- Regular clean up exercise with the community



An aerial photograph of a large industrial ship, possibly a power vessel or offshore supply ship, docked in a harbor. The ship features several tall, white smokestacks with red and white striped tops. The ship is surrounded by various maritime infrastructure, including cranes, piers, and other vessels in the background. The image has a blue overlay with geometric patterns.

THANK YOU

KARPOWERSHIP