### **GLOBAL KARPOWERSHIP COALITION**

### Introduction

Environmental and climate justice activists in several regions have been working to challenge floating gas Powerships owned by Karpowership. These Powerships threaten marine life and the livelihood of small scale fishers. Powerships rely on heavy oils or LNG making them expensive, dirty projects with harmful environmental, social and climate impacts. Environmental justice activists have used legal, legal advocacy and other strategies to challenge Karpowership projects across the world. This has included challenges to environmental authorisations and various licences, including on grounds related to failure to consult with interested and affected parties and local communities.

The cost of the Karpowership project, especially for developing economies most of whom are burdened by debt, is another consideration. For example, in Gambia, where Karpowership delivers 60% of the country's total electricity needs, the cost of electricity is one of the highest in the world.<sup>1</sup> The high costs associated with the project also has an impact on the ability of the country to invest in new renewable energy capacity.

These challenges have been met with resistance by the company, in some instances resulting in the legal harassment of local activists. Karpowership engages directly with governments in countries which face major energy security challenges, taking advantage of the vulnerability of developing economies. Allegations related to procurement and other irregularities have also been linked to some of the projects.

## **About Karpowership**

Karpowership is a Turkish company and owner, operator and builder of Powership - floating power plants which rely on heavy oils or liquefied natural gas (LNG). The group owns and operates 36 Powerships with an installed capacity of 6000 MW globally as well as an active construction pipeline. Powerships have a range from 30 MW to 470 MW. They currently operate in Brazil, Ghana, Gambia, Guinea-Bissau,Indonesia, Ivory Coast, Mozambique, New Caledonia, Senegal, Sierra Leone and Zambia. Past projects include Iraq and Lebanon while the company seeks to operate in Cuba, South Africa, Dominican Republic, Germany and Ukraine.

The Karpowership powerships are floating power plants which use gas as fuel to generate electricity, which is then fed into the electricity grid. Liquified natural gas (LNG) is imported on purpose-built LNG carrier ships. They offload LNG via pipelines to floating storage and regasification units (FSRUs), where LNG is heated and converted to gas, and fed via pipelines as fuel for the gas engines on the powership. The power generated by the powerships is fed

<sup>&</sup>lt;sup>1</sup> See <a href="https://www.trade.gov/country-commercial-guides/gambia-energy">https://www.trade.gov/country-commercial-guides/gambia-energy</a> - "The Gambia – the average tariff of \$0.23/kilowatt hour (kWh) is one of the highest in the world. This is a result of high costs to produce and supply electricity, driven by expensive imports of HFO for NAWEC's generators. Despite the high tariff, NAWEC continues to be unable to cover its basic costs of operations, let alone major investments. Revenues are depressed as a result of losses, collections challenges, and, until recently, public institutions and street lighting arrears."

by transmission lines to substations on the shore, where the electricity is fed into the grid. The FSRUs use seawater to heat up the LNG to change it from liquid to gaseous state, so they discharge cold water, while the powerships use seawater for cooling and so discharge warm water.

The regasification units use seawater to heat up the liquid gas to gas, so discharge cold water, while the powerships use seawater for cooling and so discharge warm water. This leads to patches of hot and cold water, which may affect marine life. This negatively impacts the livelihoods of local fishers.

Powerships are noisy and the impact of the chronic noise could cause negative impacts both on the marine world and for terrestrial life. The World Health Organization has set an annual average of 40 dB as a maximum background noise level during sleep, but ambient powership noise would be enough to exceed this in several of the proposed locations.

## The Global Karpowership Coalition

While work on Karpowership projects in different countries has resulted in the delay of projects and broader public awareness of the impacts of the projects, Karpowership continues to seek expansion and authorisation to operate in a number of regions. As a result, there arose a clear need to build a global coalition to challenge the corporation. So far, activists and activist lawyers working in Brazil, South Africa, Ghana. Senegal and Mozambique have been working together with GSCC to develop such a global coalition. In working together, we have agreed that a key aspect of work which needs to be strengthened, is challenges to the financiers of the project. While information for some countries are available, such as for South Africa, we need a great deal of financier information in order to ensure meaningful challenges. Therefore the key objectives for the coalition, is to to obtain information on the financiers of the projects in order to challenge the financiers over their support for the fossil fuel project, while also working with GSCC to develop a global "playbook" that will outline the conduct of the corporation in various jurisdictions. The Karpowership playbook could be used in various pieces of advocacy but we seek to use the information to challenge the financiers, particularly over the reputational risk of being associated with such a company.

Based on current local coalition partners, we are challenging 2020 MW of total installed capacity. If we ensure that local partners from Gambia and Indonesia are included in the coalition, then this would be to challenge an additional 1036 MW of total installed capacity. We are also aiming to prevent 1635 MW of either heavy fuel oil or gas capacity from coming online. (Need emissions, social and climate changes costs as well as methane data which have already been sought from relevant experts.)

# Additional Information on current and past Karpowership projects

**Brazil** - In November 2021 Karpowership signed its first LNG-to-Power contract in the transatlantic continent with Brazil. They current supply electricity to Brazil with 4 Powerships and 1 FSRU(Floating Storage Regasification Unit). The Brazil project is a 560 MW LNG-to-

power generation operation, including a 14.5-km onshore and 3.5-km offshore transmission line, 2 strings of natural gas flexible hoses of 1 km, and mooring, commissioning of the Powerships and FSRU. We need finance information, percentage of supply of total electricity needs and the impact on the cost of electricity.

**Ghana** - In June 2014, Karpowership signed a 450 MW contract with Electricity Company of Ghana to deploy a Powership for a period of 10 years. Powerships had previously generated electricity in Tema from 2015 to 2019 and utilized heavy fuel oils. In the 2nd Quarter of 2019, the Powership was deployed to Sekondi Naval Base to utilize Ghana's indigenous Natural Gas for electricity generation. This was Karpowership's first project in Africa. Karpowership is supplying 23% of Ghana's total electricity needs. We have a local country partner. We need finance information and impact on the cost of electricity.

**Gambia** - In February 2018, Karpowership signed a contract with National Water and Electricity Supply Company Ltd. of Gambia to deploy a Powership of 36 MW for a period of 2 years which was extended for years in May 2020. Karpowership has been supplying 60% of Gambia's total electricity needs. No local partner for the coalition yet. We need finance information and impact on the cost of electricity.

**Guinea-Bissau** - In January 2019, Karpowership signed a contract with Electricidade e Aguas da Guiné-Bissau (EAGB) to deploy a Powership of 35 MW for a period of 5 years. Later, the commercial operation period was extended to 10 years. Karadeniz Powership Metin Bey has been in operation in Bissau since February 2019. Karpowership has been supplying 100% of Guinea Bissau's total electricity needs. No local partner for the coalition yet. We need finance information and impact on the cost of electricity.

**Project Guinea (Past Project)** - In December 2019, Karpowership signed a contract with Guinea's national electricity company, Electricité Nationale de Guinée to deploy a Powership to Conakry to supply 105 MW for a period of 1 year. Karadeniz Powership İbrahim Bey started its operation in February 2020, in Conakry and is currently supplying 10% of Guinea's total electricity needs. The signed contract has been automatically extended for a period of one (1) additional year.

Indonesia (Karpowership has been supplying 30% of North Sulawesi's, 55% of East Nusa Tenggara's, 80% of Ambon's, 10% of Medan's total electricity needs. Indonesia is Karpowership's first project in SouthEast Asia. In 2015 and 2016, Karpowership signed five contracts with the state utility PT PLN (Persero) to deploy five Powerships of 1000 MW in total for a period of 5 years. Karadeniz Powership Zeynep Sultan and Nezih Bey, Onur Sultan, Gökhan Bey and Yasin Bey has been in operation in Amurang, Medan, Kupang and Ambon islands respectively since 2016. Since 2018, Karadeniz Powership Onur Sultan in Medan has been operating with indigenous gas. Karpowership has been supplying 30% of North Sulawesi's, 55% of East Nusa Tenggara's, 80% of Ambon's, 10% of Medan's total electricity needs. As of Q4 2020, Amurang project has started transitioning to becoming the company's first LNG to Power project. Karadeniz Powership Zeynep Sultan is expected fully operate with natural gas by the end of the year. No local partner for the coalition yet. We need finance information and impact on the cost of electricity.

Iraq - past project - In December 2008, Karpowership signed a contract with the Ministry of Electricity of Iraq (MoE) to deploy three Powerships of 520 MW in total. Karadeniz Powership Doğan Bey, Rauf Bey and Kaya Bey gradually started their operations in Basrah in the second half of 2010. Iraq is the first country where Karpowership deployed a Powership, the first country to order additional Powerships and the first country to extend its contract terms after an initial term was successfully completed. Karpowership supplied 15% of Iraq's total electricity needs. Lebanon - past project. In June 2012, Karpowership signed a contract with the Lebanese Electricity Utility (EDL) to deploy two Powerships of 404 MW in total. Karadeniz Powership Fatmagül Sultan and Orhan Bey have been in operation in Zouk and Jieh since 2013. In 2018, the contract period was extended for an additional 3 years, making the contract duration 9 years in total. Karpowership has supplied 25% of Lebanon's total electricity needs.

In January 2022, Karpowership has been supplying 7,5% of Ivory Coast's total electricity needs). In January 2022, Karpowership signed a contract with the State of Ivory Coast to generate 100 MW of electricity for a period of 4 years. Karadeniz Powership Fatmagül Sultan has been operational in Abidjan since April 2022. Karpowership has been supplying 7,5% of Ivory Coast's total electricity needs. In March 2018, upon the completion of the Zambian contract, Karpowership signed a new contract with Mozambique's electricity utility company, Electricidade de Mozambique (EdM), to deploy a Powership of 125 MW for a period of 10 years. Upon the LNG conversion notice of EdM, Karpowership has been taking necessary actions to enhance the first LNG – to – Power Project in Sub-Saharan Africa via its own LNG assets (FSRU) to be ready for operation in 2021. Karpowership has been supplying 10% of Mozambique's total electricity needs via 125 MW Karadeniz Powership Mehmet Bey.

**Mozambique** - in March 2018, upon the completion of The Zambian contract, Karpowership signed a new contract with Mozambique's electricity utility company, Electricidade de Mozambique (EdM), to deploy a Powership of 125 MW for a period of 10 years. Upon the LNG conversion notice of EdM, Karpowership has been taking necessary actions to enhance the first LNG – to – Power Project in Sub-Saharan Africa via its own LNG assets (FSRU) to be ready for operation in 2021. Karpowership has been supplying 10% of Mozambique's total electricity needs via 125 MW Karadeniz Powership Mehmet Bey. Local partner is Justice Ambiental / Friends of the Earther Mozambique, supported by Natural Justice. We need finance information and impact on the cost of electricity.

**New Caledonia** - In February 2022, we signed our first B2B contract with the world's number one producer of ferronickel, SLN-Eramet. With this project, Karpowership complied all European regulations to realize this project located on that French territory island. Since 6th January 2023 Karpowership is providing 203 MW of electricity to Nouméa.

**Senegal** (Karpowership is supplying 15% of Senegal's electricity)- In August 2019, Karpowership signed an LNG to Power contract with Senegal's Electricity Authority (SENELEC) to deploy a Powership of 235 MW for a period of 5.5 years. Karadeniz Powership Ayşegül Sultan started operation in October 2019, in Dakar. Karpowership is supplying 15% of Senegal's electricity. Local country partner is from Natural Justice, working in Senegal. We need finance information and impact on the cost of electricity.

**Sierra Leone** - (Karpowership is supplying 80% of Sierra Leone's total electricity needs). In June 2018, Karpowership signed a contract with Sierra Leone national utility company, Electricity Distribution and Supply Authority (EDSA), Ministry of Energy (MOE) and Ministry of Finance (MOF) to deploy a Powership to supply 30 MW for 7 months (dry season) and 15 MW for 5 months (wet season) for a period of 2 years. Karpowership is supplying 80% of Sierra Leone's total electricity needs. In June 2020, a new agreement was signed with EDSA, MOE and MOF to extend the contract for 5 more years, with 65 MW capacity during dry season and 25 MW capacity during wet season. We have a local country partner. We need finance information and impact on the cost of electricity.

**Zambia - past project -** In November 2015, Karpowership signed a contract with Mozambique's and Zambia's national utilities, Electricidade de Mozambique (EdM) and ZESCO to deploy a Powership of 115 MW to supply power to land-locked Zambia via Mozambique for a period of 2 years. Karadeniz Powership İrem Sultan supplied electricity to Nacala between 2016-2018. This delivery of economically critical electricity was the world's first cross-border power delivery by a single Powership. Karpowership supplied 16% of Zambia's total electricity needs.

**South Africa** - In South Africa, Karpowership seeks to operate 6 Powerships with a total installed capacity of 1220 MW in Coega, Saldanha Bay and Richards Bay. Three FSRUs would be required to support the six Powerships. All projects have been delayed since 2021 due to civil society challenges. The initial contract period was for 20 years at a <u>total cost of R225.7 billion</u> but is now said to be reduced to a five year contract. At least one of the banks which had initially indicated debt financing support has indicated that it is no longer supporting the project. We need additional finance information and potential impact on the cost of electricity.

Cuba - listed as a project but no information on Cuba operations.