# Revolutionizing marine electric mobility in emerging markets



to 100% electric.

# **Overview – Problem and Solution**

Millions of professional fishing and water taxi boats use outboard motors: each has emissions as 20 cars.

Those motors converted to electric reduce emissions. GEMPACS is an integrated boat electrification solution for marine mobility. We create and operate the recharging infrastructure in the ports, the IoT software to make the system work and convert existing boats (up to 12m-long)

We assist the boat owners getting loans to transition to electric with no upfront switching costs. They repay the loans and even obtain higher disposable income through savings from using electricity, while riding sustainable boats with no compromise on autonomy.

The Indonesian market is our initial target and we have the potential to scale up considerably, entering more geographies and market segments, incl. leisure: our approach is applicable to millions of boats in all continents.

# **Industry and Competition**

Existing competitors focus on electric motors or electric luxury boats for leisure use in Europe or North America. Competition to electrify fishing boats and water taxis in emerging markets is very limited due to cost, lack of charging infrastructure and technological restrictions.

### Market

Converting 10,000 boats in 5 years at an average cost of \$25,000, gives \$250M Total Addressable Market for GEMPACS, just in Indonesia.

We initially target 800,000 suitable-for-conversion fishing and water taxi boats in Indonesia, the world's largest national market.



# Product

We convert existing boats to 100% electric by retrofitting motors and PV roofs, adding batteries and electronics and restoring the hulls. We also install and operate charging stations in the ports, with the IoT software to make the system work.



# **Business Model**

We generate 2 revenue streams: -one-off: conversion kit or new boat sale -recurring: energy sales and fees (incl. geo-localization)

# **Current Status**

- 2 charging stations
- 4 boats in the water in Indonesia
- MoUs signed with local partners
- licensees identified to manufacture equipment locally
- A potential large order

# **Competitive Advantage**

Our USP is centred around our full stack and integrated approach, converting boats, building the port charging infrastructure and the IoT/AI software.

As a cost-efficient alternative, we can convert motors into 100% electric by retrofitting the internal parts.

By facilitating microloans through local institutions, the boat owners/operators get no upfront switching costs and higher disposable income from day one (from opex savings using electricity), convenience and autonomy. We are asset-light and do not retain ownership of neither boat leases nor capital and manufacturing assets.

## Go To Market

We are a B2B business: our direct customers are boat owners, development banks and local governments.

We target them port-by-port through institutional counterparts and local co-operatives to maximise efficiencies and market penetration.

#### Team

An expert team with solid and extensive international track record in automotive, energy, naval, telecoms, real estate and manufacturing.



GIUSEPPE GUERRA

Chief Eng



#### Fundraising

The total capital injection will allow us to operate from at least 3 ports, sell 200+ conversion kits and generate \$5M in sales in the first 18 months in Indonesia.

We can discuss milestones for the release of tranches of the investment following the initial, from angels, institutional investors and family offices, ideally assisting us with contacts and partnerships too.

We obtained SEIS/EIS Advance Assurance from HMRC.

## Expansion Strategy and Exit

Next countries in our roadmap include Philippines and Vietnam but we can be opportunistic in the approach. Future potential includes expansion into other segments (e.g. leisure) and 3D-printing of hulls with hydrofoils. Exit will be through outright sale to incumbents, private equity investors or even an IPO in 5-7 years.

