

# STATES OF JERSEY



## GOVERNMENT PLAN 2020–2023 (P.71/2019): TWELFTH AMENDMENT

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Lodged au Greffe on 11th November 2019  
by Senator K.L. Moore

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STATES GREFFE

**PAGE 2, PARAGRAPH (f)(ii) –**

After the words “to the Report” insert the words “, except that, in Summary Table 6, after the line entitled “Sustainable Transport Initiatives”, there shall be inserted a new line as follows, with the line entitled “Closing balance” to be amended accordingly –

OceansLab – Race to Zero Emissions	(350)
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”.

SENATOR K.L. MOORE

**Note:** After this amendment, the proposition would read as follows –

**THE STATES are asked to decide whether they are of opinion –**

to receive the Government Plan 2020–2023 specified in Article 9(1) of the Public Finances (Jersey) Law 2019 (“the Law”) and specifically –

- (a) to approve the estimate of total States income to be paid into the Consolidated Fund in 2020 as set out in Appendix 2 – Summary Table 1 to the Report, which is inclusive of the proposed taxation and impôts duties changes outlined in the Government Plan, in line with Article 9(2)(a) of the Law; and
- (b) to approve each major project that is to be started or continued in 2020 and the total cost of each such project, in line with Article 9(2)(d), (e) and (f) of the Law and as set out in Appendix 2 – Summary Table 2 to the Report; and
- (c) to approve the proposed amount to be appropriated from the Consolidated Fund for 2020, for each head of expenditure, being gross expenditure less estimated income (if any), in line with Articles 9(2)(g), 10(1) and 10(2) of the Law and set out in Appendix 2 – Summary Tables 3(i) and (ii) of the Report; and
- (d) to approve the estimated income, being estimated gross income less expenditure, that each States trading operation will pay into its trading fund in 2020 in line with Article 9(2)(h) of the Law and set out in Appendix 2 – Summary Table 4 to the Report; and
- (e) to approve the proposed amount to be appropriated from each States trading operation’s trading fund for 2020 for each head of expenditure in line with Article 9(2)(i) of the Law and set out in Appendix 2 – Summary Table 5 to the Report; and

- (f) to approve –
- (i) the establishment of a “Climate Emergency Fund”, in accordance with the provisions of Article 6 of the Law, as set out at Appendix 3 to the Report; and
  - (ii) the estimated income and expenditure proposals for the Climate Emergency Fund for 2020 as set out in Appendix 2 – Summary Table 6 to the Report, except that, in Summary Table 6, after the line entitled “Sustainable Transport Initiatives”, there shall be inserted a new line as follows, with the line entitled “Closing balance” to be amended accordingly –
 

OceansLab – Race to Zero Emissions	(350)
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 ; and
- (g) to approve the amounts to be transferred from one States fund to another for 2020 in line with Article 9(2)(b) as set out in Appendix 2 – Summary Table 7 to the Report; and
- (h) to approve the estimated income and expenditure of the Social Security, Health Insurance and Long-Term Care Funds for 2020 set out in Appendix 2 – Summary Tables 8(i), (ii) and (iii) to the Report, with –
- (i) the estimated income to be raised from existing social security contributions defined in the Social Security Law and the proposed changes to contribution liability; and
  - (ii) the estimated expenditure to be paid to support the existing benefits and functions defined in the Social Security Law, the Health Insurance Law and the Long-Term Care Funds and new benefits, if any, to be paid from the Funds; and
- (i) to approve, in accordance with Article 9(1) of the Law, the Government Plan 2020–2023, as set out at Appendix 4 to the Report.

## REPORT

The purpose of the Climate Emergency Fund is –

*“to support initiatives that respond to the climate emergency as declared in P.27/2019 and initiatives that reduce carbon emissions and other pollutants, in line with adopted future plans or strategies for, inter alia, energy use and management, carbon reduction, sustainable transport approved by the States Assembly ...”.*

If the Assembly adopts this amendment, it will be agreeing to support an ambitious project to develop renewable energy that will have long-term benefits for Jersey and the rest of the world.

The immediate goal is to help one man to continue to achieve his ambitions by racing with clean energy in international sailing challenges, including a ‘round the world’ yacht race, known as the ‘Everest of the Sea’.

However, the wider objective is to invest in the development of technology that will reduce carbon emissions, particularly through sea-based transport, and also energy storage systems.

Through partnering with OceansLab, Jersey would be able to share in the knowledge that is developed through their work. There is more information available about the specific project and the partners who are already involved in the attached **Appendix**.

As the development of Formula One vehicles influences the progress of mechanical engineering as a whole, this project will not simply benefit one yacht, or even leisure boats, it will help to progress and hasten knowledge and technology to improve energy cell storage and the use of hydrogen power, which will have wide-reaching implications.

For example, one of the existing partners is a company based in France that is developing hydrogen fuelled vehicles, including buses.

As an Island that relies upon shipping to receive a large percentage of our goods, supporting the development of this technology sits within the purpose of the Climate Emergency Fund and the Island’s ambition to achieve carbon neutrality by 2030.

The partnership that could be developed with OceansLab also offers Jersey a unique opportunity to share commitment to carbon neutrality with the rest of the world, through the high-profile races that Phil Sharp will be competing in. Jersey would have its name on the sail of the yacht.

By means of background, when the Corporate Services Panel conducted focus groups regarding the Government Plan, a number of participants expressed surprise that only £3.095 million of new investment was planned for the environment, much lower than any other priority.

The Future Jersey consultation highlighted the passion that Islanders have for the environment, and this Assembly has supported Deputy R.J. Ward of St. Helier’s proposition ([P.27/2019](#)) to declare a climate emergency and a plan to achieve carbon

neutrality by 2030. This project offers a tangible commitment to the pursuit of long-term improvements in our use of clean energy sources.

The Island has successfully sponsored teams and events such as the ‘Jersey Reds’ and the ‘Super Tri’ in order to raise profile and show our support for sporting achievements. Sailing is an important sport here, and a passion that we share with our French neighbours. An Island-based consortium led by the Former President of Policy and Resources, Pierre Horsfall, successfully raised funds for Jersey to have a boat in the ‘Times Clipper Round the World’ yacht races in 2000, 2002 and 2005/6.

### **Financial and manpower implications**

This amendment meets the demands of the [Public Finances \(Jersey\) Law 2019](#) by –

1. being easily met by proposed States’ finances through the Climate Emergency Fund;
2. being sustainable in the medium and long term, and will have positive effects on the outlook for Jersey by pursuing the adoption of alternative energy sources for the Island and for the transportation of people and cargo;
3. promoting the sustainable wellbeing of the inhabitants of Jersey over successive generations.



# GLOBAL OCEAN RACING CLEAN INNOVATIONS

# OCEANSLAB

RACE TO ZERO EMISSIONS





# OCEANSLAB: OUR MISSION

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To **pioneer** clean technologies in the **toughest** ocean races

## INNOVATE

renewable energy solutions to replace fossil fuel power on the ocean

## DEMONSTRATE

through the world's toughest offshore events the performance and durability of renewables

## COMMUNICATE

the importance of reducing emissions on the ocean and the solutions we can embrace today

Demonstrating the performance and durability of clean innovations through the harsh environment of ocean racing





# GLOBAL OPPORTUNITY

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**Uniting stakeholders worldwide:** a mobile multifaceted communications platform

## **INTERNAL COLLABORATION**

Stimulate and strengthen team connectivity through corporate sailing, leadership keynote speaking and race activation

## **CLIENT ENGAGEMENT**

Captivate potential clients and enhance engagement through sailing days, developing loyalty and creating business opportunities

## **SUSTAINABLE INNOVATION**

Support a cutting edge, zero emissions innovations race team and communicate responsible and sustainable practises

## **VALUES COMMUNICATION**

Disseminate core company values through the principles of premier league ocean racing

## **BRAND DEVELOPMENT**

Develop brand personality and visibility through extensive global race media coverage



OCEANSLAB RACE TO ZERO EMISSIONS

# PHIL SHARP - SKIPPER

“Courageous, innovative,  
relentless.”

THE DAILY TELEGRAPH

Consistent **podium results** since 2017



**DOUBLE CLASS 40 WORLD CHAMPION**

2017, 2018



**DOUBLE WORLD RECORD BREAKER**

2016, 2018



**ONLY ZERO EMISSIONS ENTRY**

2017, 2018

“ On board OceansLab I will be pushing hard to **win** but also demonstrating renewable energy solutions to **replace fossil fuel** power on the ocean.

The races I will be competing in will test the performance and durability of this technology in the **toughest environment on earth** showcasing the solutions that can be embraced globally ”

**PHIL SHARP, SKIPPER & CO-FOUNDER**

OCEANSLAB RACE TO ZERO EMISSIONS

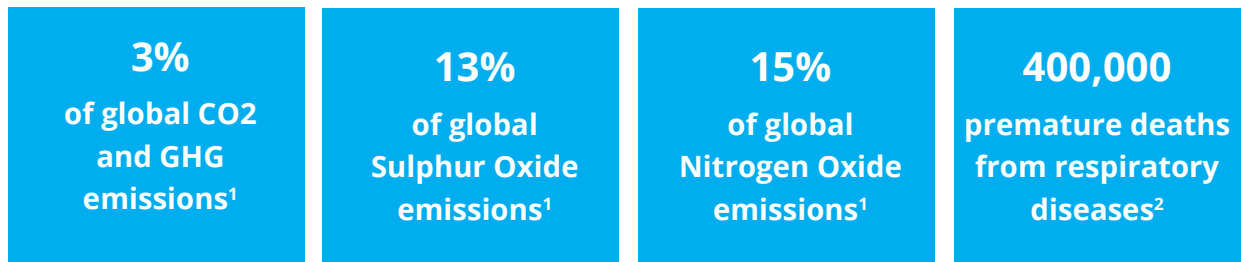




# THE THREAT TO OUR OCEAN

Over **90%** of our goods are transported across the world's oceans by some **90,000 vessels**

## SHIPPING ANNUAL IMPACT



## WHAT MUST BE DONE

International Maritime Organisation commitment to **reducing emissions in line with climate change targets<sup>3</sup>**:

- › Reduce CO2 emissions by at least 40% by 2030
- › Reduce total annual GHG emissions by >50% by 2050

Meeting targets requires **accelerated uptake** of clean technology through pilot programs in order to **demonstrate zero emissions solutions** for industry

1. Third IMO GHG Study 2014
2. [www.nature.com/articles/s41467-017-02774-9](http://www.nature.com/articles/s41467-017-02774-9)
3. Resolution on Initial IMO Strategy on reduction of GHG emissions from ships



# CLEAN ENERGY INNOVATIONS

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Renewable innovations to **decarbonise** marine transportation

- › OceansLab develops and tests clean technology innovations required to **accelerate the transition to zero-carbon transport** on our oceans
- › This project focuses on demonstrating hydrogen fuel cell technology to replace fossil fuels. OceansLab aims to be the **first hydrogen vessel to sail around the world**



## Clean Energy



Renewable energy capture



Electrical storage



Hydrogen storage



Energy management

## Boat Structure



Advanced coatings



Performance adhesives



Low weight composites

Bench testing of hydrogen fuel cell technology to replace standard marine diesel systems



High efficiency, non-skid solar panels that were developed to cross the Atlantic without fossil fuels



# CLEAN HYDROGEN POWER

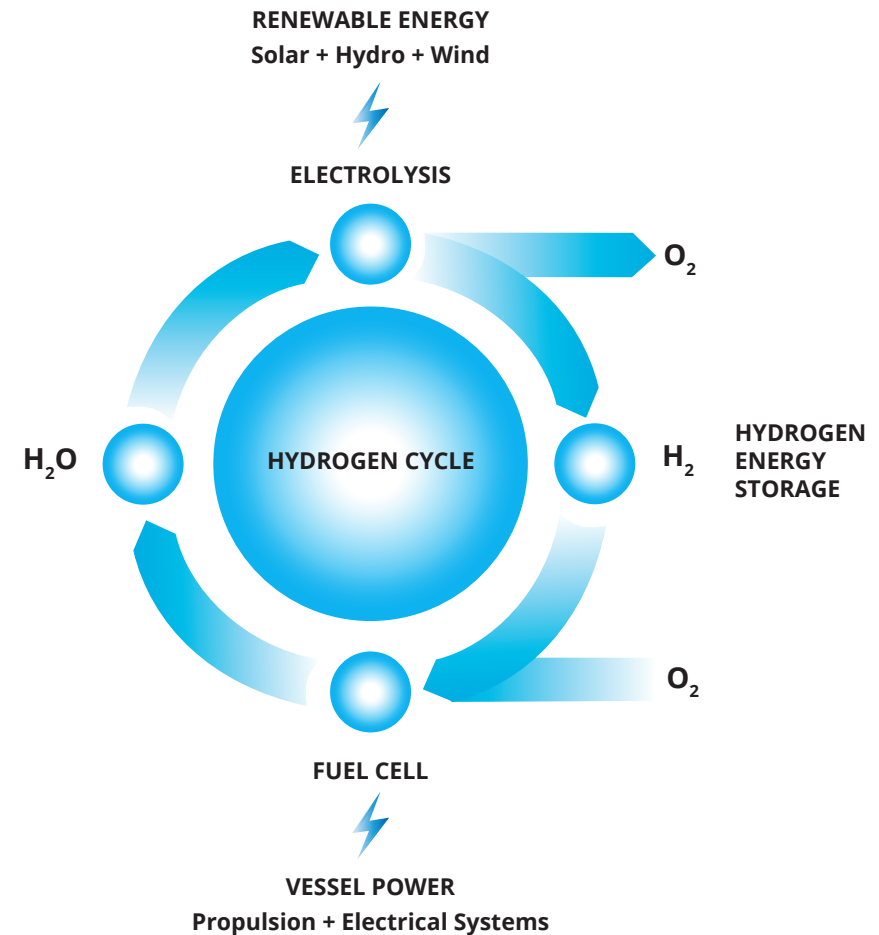
OceansLab uses the hydrogen cycle to create clean energy to power all onboard electronics and the propulsion system

## WHY HYDROGEN?

- › **Three times lighter** than diesel fuel enabling **high capacity storage**
- › **Zero green house gas emissions**, the only by-product is water vapour
- › **Silent** operation



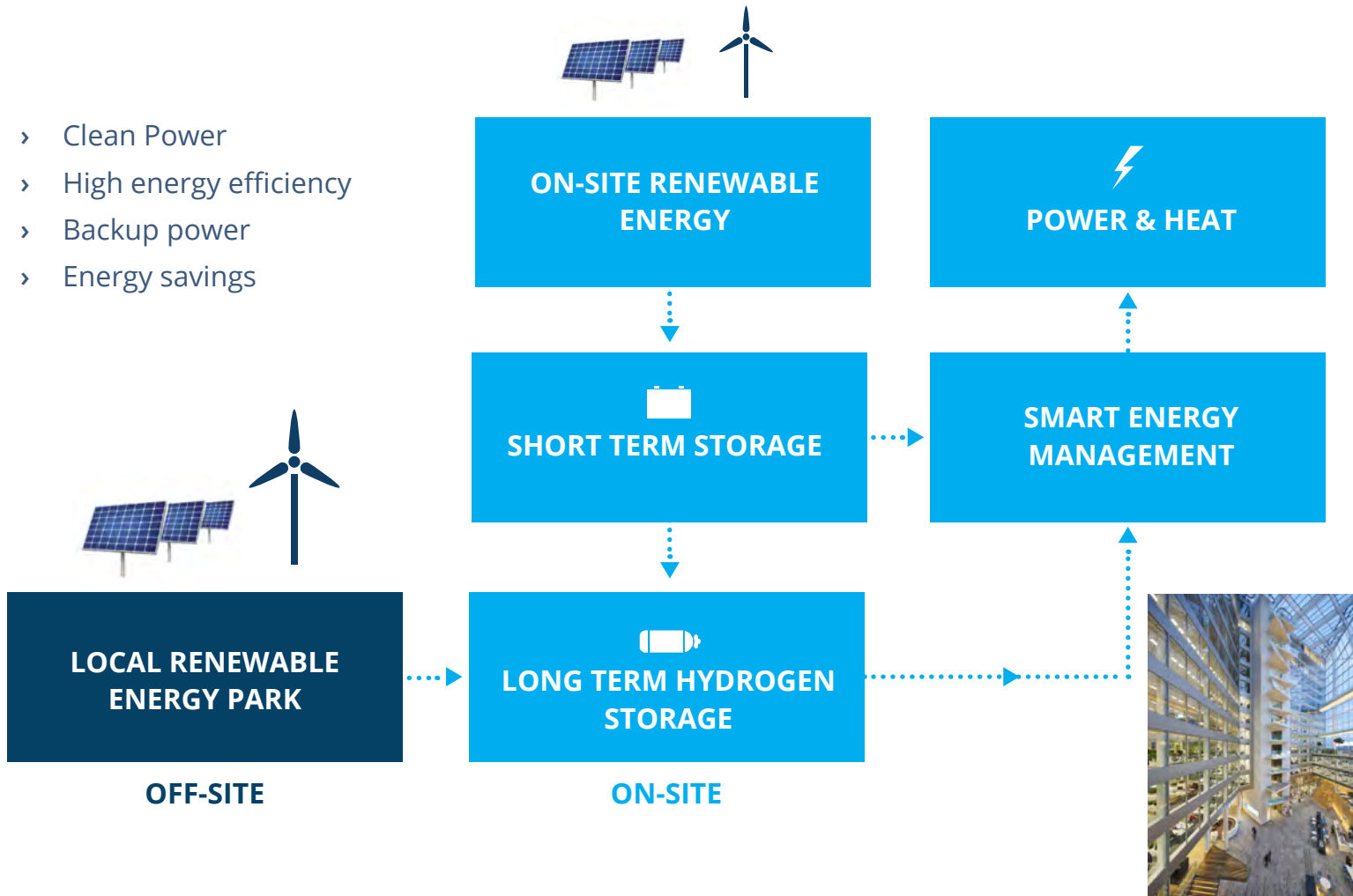
OceansLab hydrogen fuel cell bench testing



# RENEWABLE ENERGY STORAGE

Clean energy system saving energy **offshore** and **onshore**

- › Clean Power
- › High energy efficiency
- › Backup power
- › Energy savings



## Applications

Zero Emissions Vessels



Hydrogen-Electric Vehicles



Zero-Carbon Buildings



OCEANSLAB RACE TO ZERO EMISSIONS



# OCEANSLAB - RACING TO WIN

Stepping up from a winning Class 40 project to IMOCA 60, **the premier class in ocean racing**

## CLASS 40

Energy Challenge  
2016 - 2018

- › 2017, 2018 **World Champion**
- › x2 **World Records**
- › Race Circuit: **Transatlantic**
- › **Exclusive zero emissions**



OceansLab  
2019 - 2020

- › **Hydrogen fuel cell** first offshore prototype
- › x2 **World Record Attempts**
- › Promotional Europe Tour

## IMOCA 60

OceansLab  
2020 - 2025

- › **World's fastest** offshore monohulls
- › Hydro-foiling boats with **cutting-edge** foil technology
- › Race Circuit: **Global** + Transatlantic
- › **Exclusive clean-hydrogen**

Length: 40 foot / 12 metres  
Top speed: 50 km/h



Length: 60 foot / 18 metres  
Top speed: 75 km/h



OCEANSLAB RACE TO ZERO EMISSIONS

# IMOCA GLOBE SERIES

**OCEANSLAB**  
RACE TO ZERO EMISSIONS

## Official Ocean Racing World Championship

- 4 Years
- x2 Round the World Races
- x4 Transatlantic Races



**THE OCEAN RACE**  
Around the World, Crewed  
2021



**ROUTE DU RHUM**  
Transatlantic  
2022



**TRANSAT JACQUES VABRES**  
Transatlantic  
2023



**THE TRANSAT**  
Transatlantic  
2024



**NEW YORK - VENDEE**  
Transatlantic  
2024



**VENDEE GLOBE**  
Around the World, Solo  
2024



# THE OCEAN RACE 2021 - 2022

Formerly the Volvo Ocean Race

Fully-crewed • Around the world  
10 stopovers • 45,000 miles



**2.5M**

Race village visitors



**1.9B**

Social media impressions

**110,150**

Corporate guests

**€168M**

Social media engagement

**94,000**

Children participants across 38  
countries in education programme



**3,906**

TV Hours



**2.6B**

Print readership

**€654M**

TV publicity value

**117,000**

Online articles



OCEANSLAB RACE TO ZERO EMISSIONS



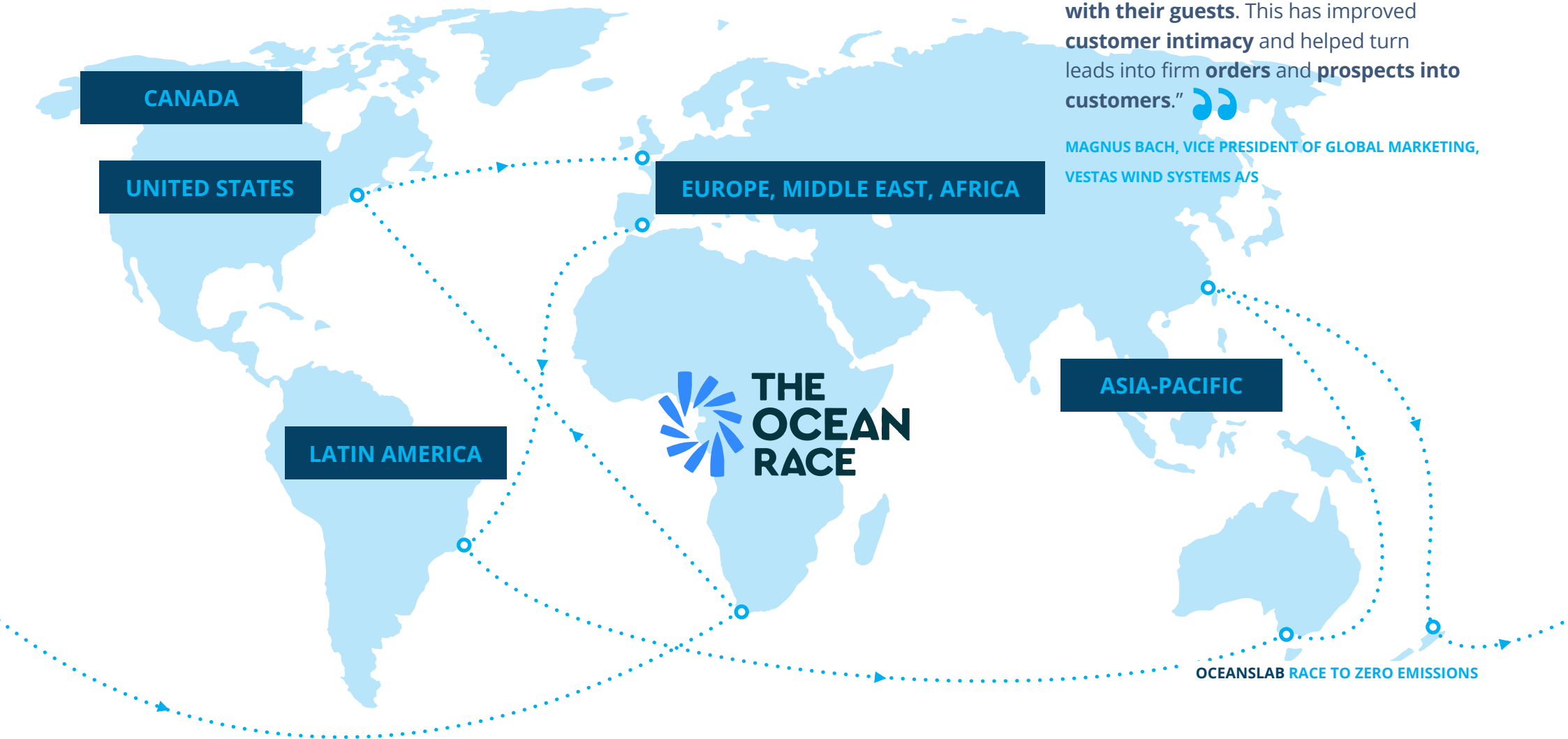
# A TRULY GLOBAL EVENT

Competing in the prestigious Ocean Race (formally Volvo Ocean Race) - the most established offshore race crossing the world's oceans, **linking countries and continents.**

Starting and finishing in Europe with ample opportunities for **stakeholder engagement**, visiting **Brazil, Australia, China, New Zealand, South Africa and US.**

“ As a business enabler and global platform, the race has allowed sponsors like Vestas to **connect the dots**, providing colleagues from Sales departments with an opportunity to spend **quality time with their guests**. This has improved **customer intimacy** and helped turn leads into firm **orders** and **prospects into customers.**”

MAGNUS BACH, VICE PRESIDENT OF GLOBAL MARKETING,  
VESTAS WIND SYSTEMS A/S



# RACE TEAM RETURNS



## Success Stories

**VOLVO OCEAN RACE TEAMS: 2017/18**

**Vestas Wind Systems**

**313m** media impressions

**Brunel**

**22,261** new job applicants

**AkzoNobel**

**€74M** publicity value

**46,000** employees engaged

“ The race is a fantastic, **global platform** for us. We can invite clients and attract professional candidates to stopovers. As a top-level endurance sport, the race allows us to show that **we are a company of real entrepreneurs**, we have endurance and, with that, we can **serve our clients best**.

**JILKO ANDRINGA, BRUNEL CEO**

**OCEANSLAB RACE TO ZERO EMISSIONS**



# VENDÉE GLOBE 2024 - 2025



Solo • Around the world • Non-stop • 25,000 miles



**2.3M**

Race village visitors



**1,274**

TV Hours worldwide



**71M**

Videos viewed

Team Hugo Boss return 2014 - 2017



**€226M**

sponsorship & media value



**€136M**

global media value

**ROI 1:12**



OCEANSLAB RACE TO ZERO EMISSIONS



# AN UNRIVALLED PLATFORM IN SPORT

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Provide an **intimate and engaging** platform for spending time with special guests, whether they are customers, clients, prospects, suppliers or employees. **The guest experience is unrivalled in all of sport.** In no other global sporting event do guests have so much access to the teams and athletes who are competing.

## PRE & POST RACE

Bespoke **motivational talks**, VIP sailing, **team-building** and **media tours**

## VIP SAILING

Jump aboard for a promotional race and tailor a company tour. One of **the most exclusive experiences on offer in all of sport**

## RACE START

Head out on the water and watch the sailors as they set off on their **incredible adventure**

## STORYTELLING

Generate engaging and original stories bringing your **brand and values to life**

## CUSTOMISED EVENTS

**Unique business engagement** opportunities including meetings, seminars, presentations, product showcases and launches

## RACE VILLAGE

**Entertain guests** in the heart of the sport and **showcase** your products and services

## RACE ARRIVALS

Be among **the first** to welcome the exhausted and emotional sailors into port

## AWARD CEREMONIES

Spend time with the sailors **celebrating achievements**



OCEANS LAB RACE TO ZERO EMISSION

# INSPIRATIONAL SPEAKING

The **fast-paced, rapidly changing** high-stress environment of ocean racing can provide invaluable lessons for business

Phil and his team bring to life dramatic experiences on the ocean, **engaging and empowering employees** through bespoke inspirational keynote speeches and **development** workshops



## CORE THEMES

- › Teamwork and collaboration
- › Self-awareness & self-management
- › Decision making & risk awareness
- › Leadership & management
- › Environmental responsibility

## EVENT ENHANCEMENT

- › Sales conferences
- › Team development sessions
- › Client engagement events
- › Management team meetings
- › Company values / culture launches

**The Telegraph**

"A true British underdog story:  
Phil Sharp overcomes all odds with  
Transat podium finish"

OCEANSLAB RACE TO ZERO EMISSIONS



# HIGH VALUE CLIENT ENGAGEMENT

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An ocean race yacht is an exclusive mobile hospitality vehicle that can be **transported globally** to develop client relations and internal collaboration. Our partners have been able to:

- › Break down formal barriers
- › Close business deals
- › Create inspirational experiences for clients and employees
- › Create a common engagement platform for uniting stakeholders



“ **Our clients had a fantastic time.** A really unique experience. One made a point of saying it was up there with the **best experiences** he has had, including pit lane passes at the **British Grand Prix.** ”

SEAN KEENAN, IMERYS

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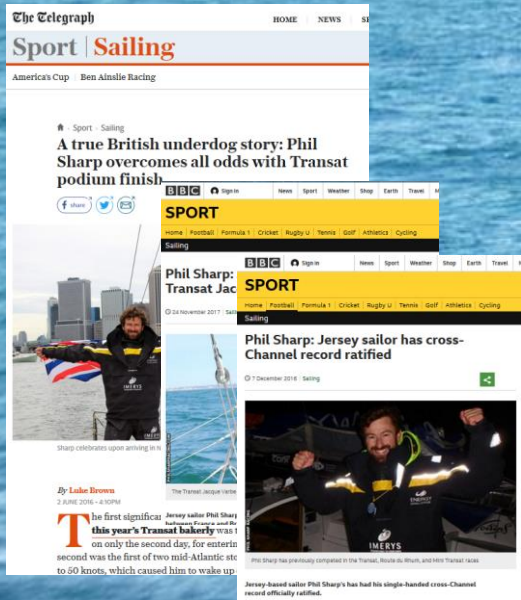
## TYPICAL SAILING DAY SCHEDULE

- › Introduction to Oceans Lab
- › Tour of the boat, technologies, Q&A
- › Technical and safety briefing
- › Opportunity to helm the boat and trim the sails with tips from Phil Sharp, or simply enjoy the views
- › 6-8 guests aboard per session
- › Two sessions of 2-3 hours per day
- › Availability of Phil Sharp and crew for entertainment lunch or dinners with guests



# INSPIRATIONAL CONTENT

High impact stories around OceanLab's racing and environmental successes leading to strong, positive media coverage



The Telegraph  
Sport | Sailing  
America's Cup Ben Ainslie Racing

Sport Sailing  
**A true British underdog story: Phil Sharp overcomes all odds with Transat podium finish!**

SPORT  
Home | Football | Formula 1 | Cricket | Rugby | Tennis | Golf | Athletics | Cycling

Phil Sharp: Transat Jac  
SPORT  
© 24 November 2017 5:45pm

Phil Sharp: Jersey sailor has cross-Channel record ratified  
© 7 December 2016 - Sailing

By Luke Brown  
2 JUNE 2016 - 8:30PM

The first significant sailing sailor Phil Sharp has ever won is on only the second day, for entries second was the first of two mid-Atlantic etc to 50 knots, which caused him to wake up

Jersey-based sailor Phil Sharp's has had his single-handed cross-Channel record officially ratified.



22:56  
Green Reflex  
**PHIL SHARP, LE NAVIGATEUR GREEN !**  
DEMAN 8H15  
DO DE DEEZER FRANCE

AVELERS 132.16 \$ +1.54 % | UNITED TECHNO. 139.91 \$ -1.06 % | UNITEDHE SBF120 4 461,04  
Engins de chantier : Caterpillar abaisse ses prévisions pour 2019 face à "l'incertitude mondiale".



sky NEWS HD  
LIVE JERSEY CHANNEL ISLANDS  
YACHT RACE PROFESSIONAL SAILOR  
PHIL SHARP  
16:16 BRITISH-BORN JULIAN CADMAN HAS CONFIRMED HE WAS KILLED IN THE BARCELONA ATTACK | BREAKING NEWS: SPAN



Yachting World  
FASTNET RACE  
PHIL SHARP RACING CLASS 2:39



The World Sailing Show  
CLASS 40 SEASON TITLE WINNERS  
FEATURE 4:29



Discovery  
4:00



FOX BUSINESS  
IMERY'S  
Phil Sharp  
Skipper of ZERO CO2 emissions Class 40 "Imerys Clean Energy"  
2:07



SAILING NEWS  
THE TRANSAT - IMERY'S  
3:35

The Telegraph

sky NEWS

BFM BUSINESS

FOX BUSINESS

The World Sailing Show

THE TIMES

BBC NEWS

Discovery CHANNEL

Yachting World

# Team Directors

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**Phil Sharp**  
**Skipper & Performance Director**

Pro sailor & co-founder of Oceans Lab, heading up boat optimisation and technology development of energy systems.

**Experience:**

- Winner of 2017 & 2018 Class 40 World Championship
- 2 x World Record holder
- Professional engineering experience in composite structural engineering

**Qualifications:** Masters in Mechanical Engineering at Imperial College London



**Jean-luc Cialdini**  
**Commercial Director**

Global professional leading teams in technical sales, marketing and strategic procurement for the last 26 years, with experience in energy storage for e-mobility, composite reinforcement and polymers.

**Experience:**

- Global Sales Director for Imerys Graphite & Carbon focusing on business growth in lithium-ion & alkaline batteries, conductive plastics, friction, power cables and refractories
- Global Director Purchasing – SGL Carbon

**Qualifications:** MBA London Business School / Columbia University New York



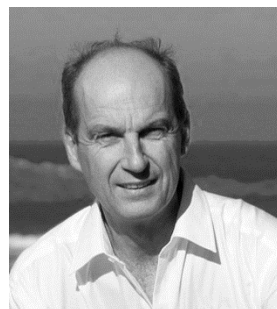
**Rebecca Sharp**  
**Marketing Director**

Marketing professional and co-founder of Oceans Lab, managing partner relations, marketing platforms as well as development & execution of sponsorship activation strategies whilst working closely with PR agencies.

**Experience:**

- Head of marketing at PS Racing 2016-2018
- Global Enterprise Marketing officer at JT Group
- Jungle Expedition Leader for British Exploring Society and Trekforce Expeditions

**Qualifications:** CIM Marketing Leadership Programme; Degree in Business & Marketing from Cardiff University



**Gilles Chiorri**  
**Operations Director**

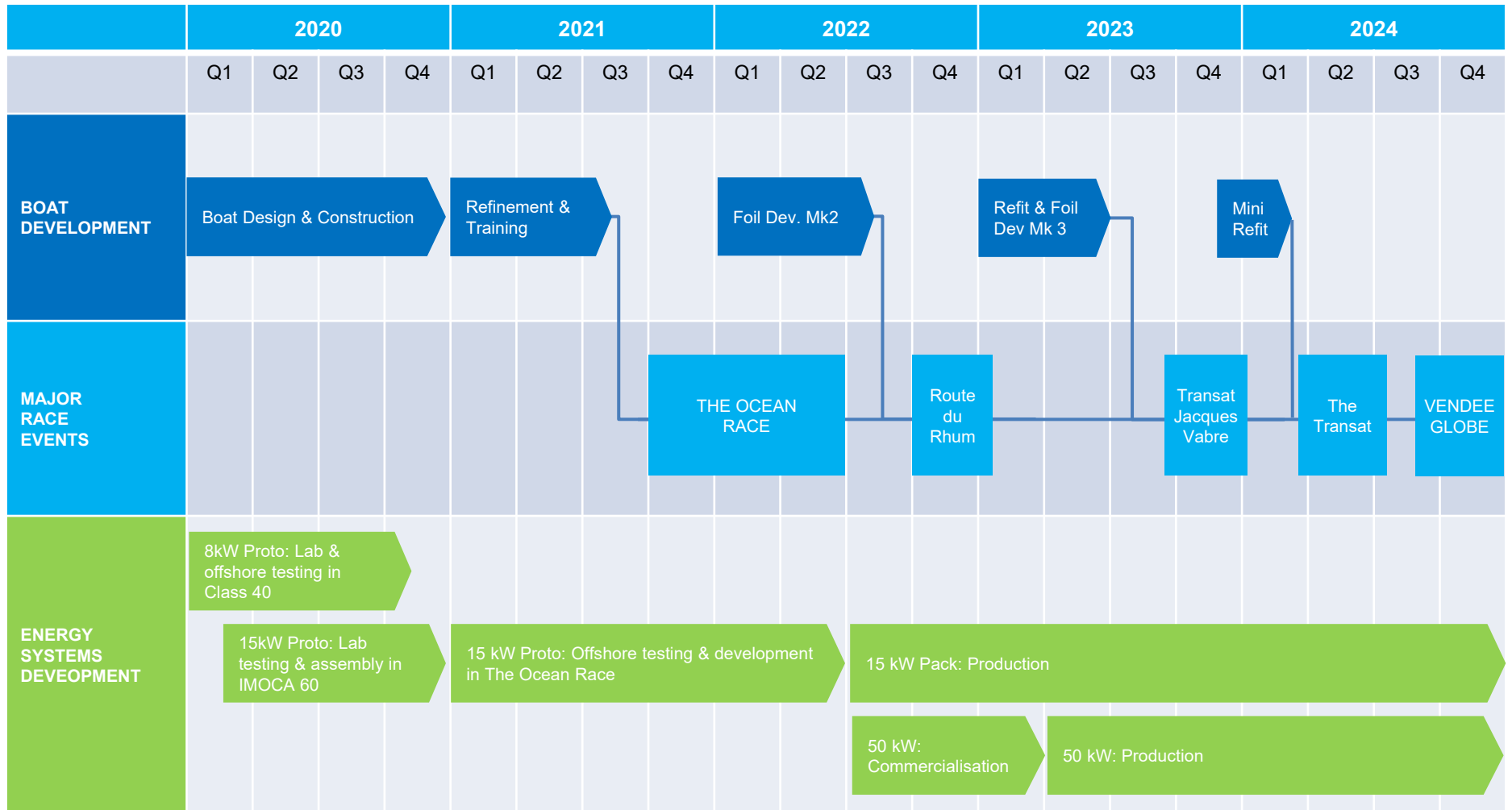
Team & Event Director managing all sporting and maritime aspects for major pro offshore/oceanic races and teams.

**Experience:**

- Team Manager of team AkzoNobel in the Volvo Ocean Race 2017-18
- Event Director or Race Director at OC Sport for La Route du Rhum, The Transat, 32nd America's Cup Valencia
- ex-Pro Sailor: Trophee Jules Verne 2002 aboard maxi multihull ORANGE in record 64 days; winner of Mini Transat 1987

**Qualifications:** MBA HEC Paris Business School

# Project Timeline





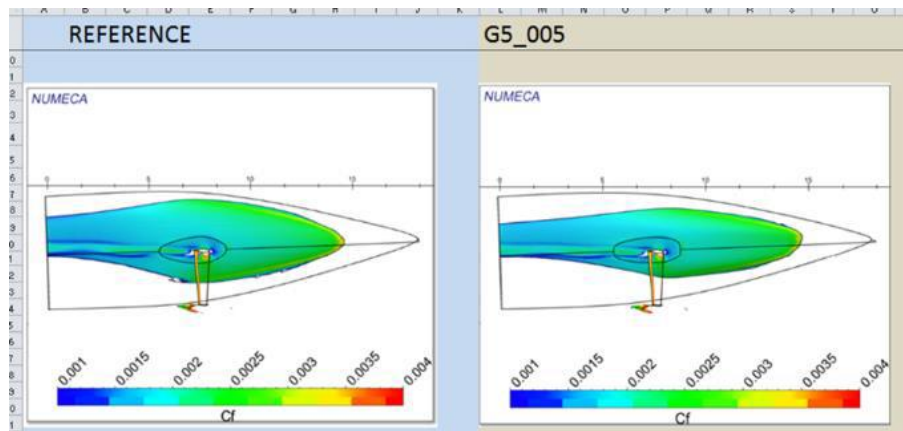
# New Boat Development

- ▶ To enter the IMOCA Globe Series with race-winning potential, Oceans Lab plan a new IMOCA 60 boat construction to start in February 2020, for launch in December 2020
- ▶ A design for the boat has been chosen and moulds for the hull have already been constructed.
- ▶ Construction takes 10 months, and will take place alongside the 2020 racing and promotional tours held in the current Class 40 boat
- ▶ An investment of €5.6m is required to fund the construction of a new boat which includes design fees and mould rental
- ▶ Latest generation IMOCA 60's are now foiling which has revolutionised offshore sailing: drag reduction and top speed gain is 10-15% over previous generation boats. Resulting simulations predict latest generation of boats to be 5 days faster around the world

The Oceans Lab IMOCA 60 design will be an evolution of the recent foiling boats to be launched including HUGO BOSS and CHARAL. Foils now lift the boats clear of the water



CFD drag simulation carried out during design of new boat



# EUROPE TOUR 2020

- ▶ Class 40 showcasing cutting-edge hydrogen fuel cell technology
- ▶ Media promotion of Oceans Lab, clean innovations aboard, and importance for decarbonisation
- ▶ VIP sailing hospitality for project partners in tour destinations
- ▶ Engagement with local renewable energy hubs and projects to help stimulate innovation and public interest

## 2020 EUROPE TOUR

- ▶ Brest: 29 April – 10 May (The Transat start)
- ▶ St Malo: 27 – 29 July (Transat QSM finish)
- ▶ Jersey: 1-3 Sep
- ▶ London: 7-11 Sep
- ▶ Antwerp: 14-15 Sep
- ▶ Amsterdam: 17-18 Sep
- ▶ Hamburg: 21-22 Sep
- ▶ Copenhagen: 25-28 Sep
- ▶ Gothenburg: 30 Sep – 1 Oct
- ▶ Oslo: 3-6 Oct
- ▶ Nantes: 12-13 Oct
- ▶ La Rochelle: 15-16 Oct

TRANSAT  
ANTWERP  
ST MALO

THE TRANSAT  
ANTWERP  
ST MALO

**OCEANSLAB**  
RACE TO ZERO EMISSIONS

NOTE: Tour destinations and dates are provisional and subject to confirmation with partners

# Annual Budget

## Annual budget averaged over 5 years

IMOCA 60 BUDGET	Cost (€)	Description
Boat Depreciation	420,000	Annual boat depreciation of new IMOCA 60
Boat Insurance	220,000	Boat insurance premium
Boat Maintenance	380,000	Boat structure, systems, rigging, sails
Boat Optimisation	380,000	Foil, hydrodynamic & performance upgrades
Clean Energy Lab	480,000	Hydrogen-electric energy systems R&D and equipment
Race Expenses & Logistics	260,000	Satellite comms, boat transport, hoisting, berthing, travel expenses, food, clothing
Human Resources	1,190,000	Project manager, skipper, race crew, boat technicians, engineers, communications team
Marketing & Communications	220,000	PR, events, content (photo / videoshoots), partner activation support, branding
Project Structure	100,000	Office, boat hanger, vehicles, office resources, legal fees, administration costs
Contingency / Risk	160,000	Boat insurance excess, boat damage contingency
<b>Total Annual Operating ex-VAT</b>	<b>€3,820,000</b>	



# Partnership Levels

- ▶ 4 base levels of partnership
- ▶ Packages tailored to partner objectives to maximise ROI

		TIER 1	TIER 2	TIER 3	TIER 4
COMMUNICATIONS	▶ Designation	Innovation Partner	Sustainability Partner	Official Partner	Official Supplier / Supporter
	▶ Boat branding *	Mainsail + Hull	Foresail & lower mainsail	Lower mainsail & lower foresail	Boom, stern or mast
	▶ Tailored marketing & PR campaigns	✓	✓	-	-
	▶ Image access and rights for CSR / promotion	✓	✓	✓	✓
HOSPITALITY	▶ Bespoke corporate sailing tour	✓	-	-	-
	▶ Corporate VIP sailing days	12	4	2	-
	▶ Tours of race boat, boatyard & development lab	✓	✓	✓	✓
CORPORATE SPEAKING	▶ Keynote speaking – inspirational or technical	6	3	2	-
	▶ Learning & Development workshops	✓	-	-	-
TECHNICAL COLLABORATION	▶ Technical feedback on products / prototypes	✓	✓	✓	✓
	▶ Collaborative R&D projects with knowledge share	✓	✓	-	-
	▶ Royalty-free IP access for commercial use**	✓	-	-	-

\* see separate slide: Boat Branding

\*\* subject to geographical and limited timescales



# Boat Branding

## Provisional Livery and Partner Brand Placement

### TIER 1 - INNOVATION PARTNERS x 3

- ▶ Mainsail or Foresail (large)
- ▶ Hull (large)
- ▶ Boom
- ▶ Cockpit (large)

### TIER 2 – SUSTAINABILITY PARTNERS x 2

- ▶ Foresail (medium)
- ▶ Lower Mainsail (small)
- ▶ Cockpit (medium)

### TIER 3 – OFFICIAL PARTNERS x 4

- ▶ Lower Mainsail (small)
- ▶ Lower Foresail (small)
- ▶ Cockpit (small)

### TIER 4 – OFFICIAL SUPPLIERS

- ▶ Cockpit (small)
- ▶ Stern (small)



# INNOVATION OVERVIEW

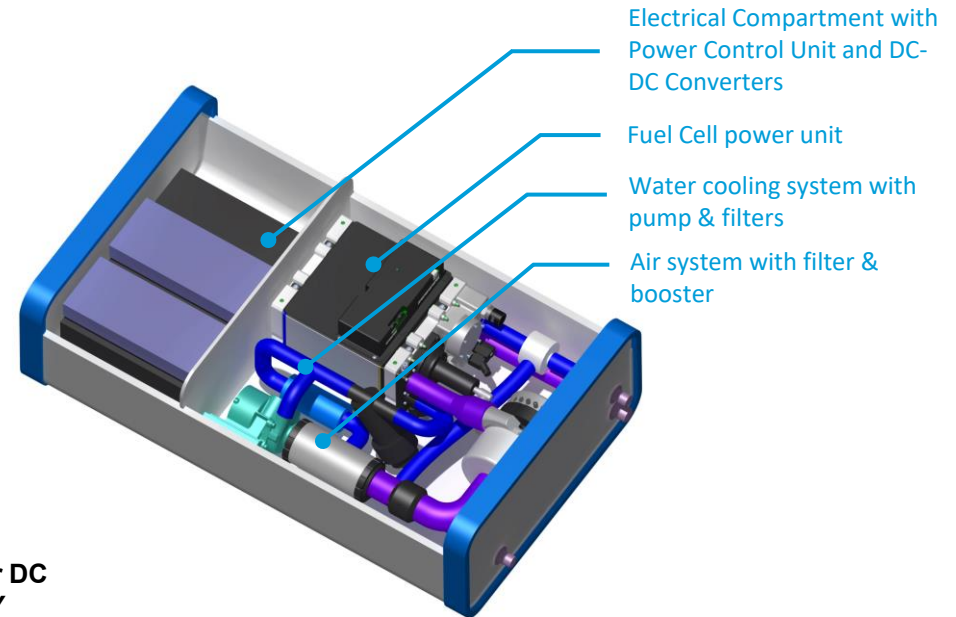
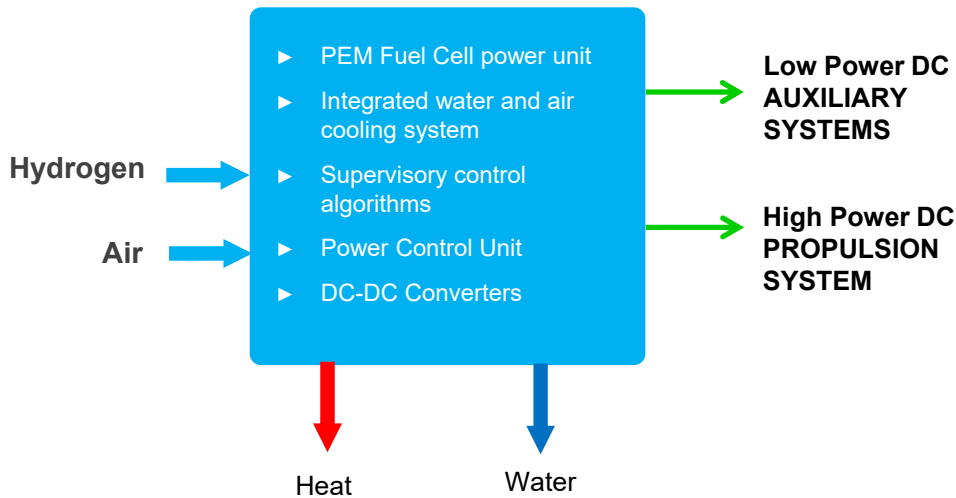


# Innovation – Hydrogen Power Cell

## Fuel Cell Technology Benefits

- ▶ **Zero emissions:** Only by product is water
- ▶ **High efficiency:** 2.5-3 times higher efficiency than internal combustion engines
- ▶ **High autonomy:** enables significantly extended autonomy over batteries
- ▶ **High reliability:** no moving parts

## Product Functionality



## Product Benefits

- ▶ Plug and play
- ▶ Modular for easy integration
- ▶ Resistant to marine environment
- ▶ Integral control system & energy management

# Modular Technology

## Strategy to develop 15 and 50 kW Hydrogen Power Cells for modular application

### 1. Primary propulsion power

Fuel cell module providing power for primary propulsion, hybridised with batteries (e.g. yachts, small ferries, small commercial craft)

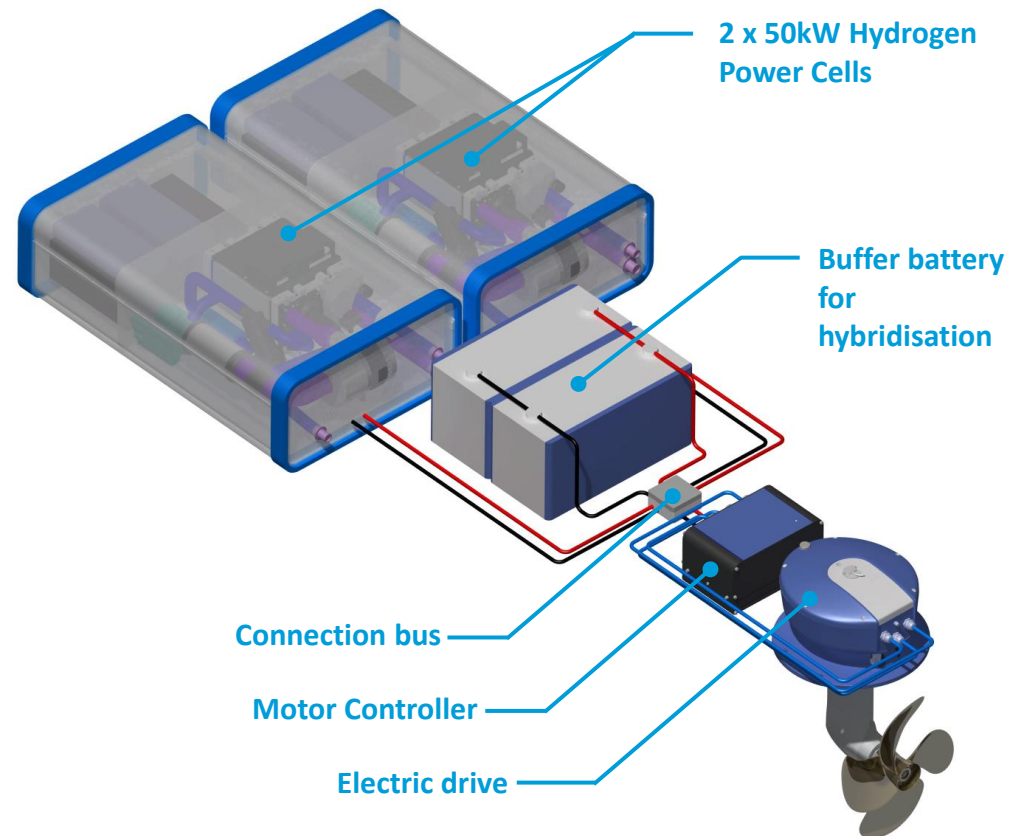
### 2. Secondary propulsion power

Fuel cell module hybridised with diesel-electric system and used for low power zero emission propulsion inshore (passenger ferries, service vessels, fishing vessels etc)

### 3. Auxiliary power systems

Power generation for auxiliary systems in larger commercial vessels (moored, anchored in restricted pollution zones)

### Example: 100 kW integration for primary propulsion



# Prototype Objectives

Objectives from hydrogen demonstration project aboard marine vessel in offshore environment:

1

## Technology development for scalability & marinisation

- ✓ Technology review and selection to enable cost-efficient integrated system to suitable power range, corrosion resistance, efficiency & lifetime
- ✓ Full system design and integration for marine environment
- ✓ Viability of access to green hydrogen in port

2

## Demonstrate & Validate System Performance

- ✓ Validate full system performance through bench testing and operation in an offshore marine environment aboard race boat
- ✓ Ability to withstand shock, vibration & vessel motions
- ✓ Monitoring of power & efficiency over time, with optimisation of control system and drive cycles

3

## Industrialisation & Return on Investment

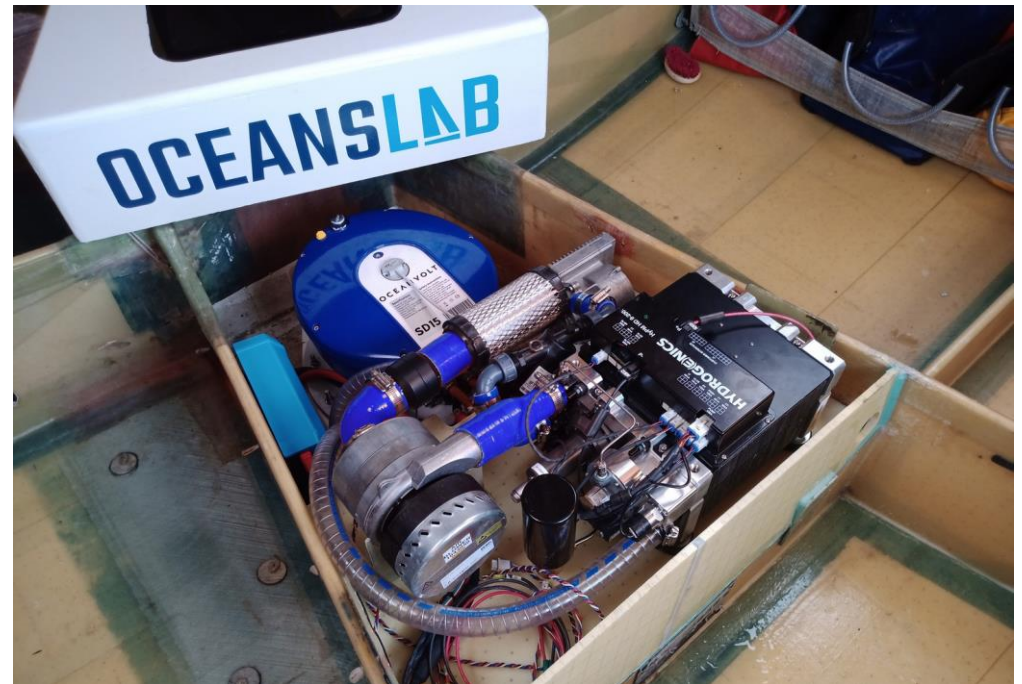
- ✓ Determine emissions performance through Life Cycle Analysis and CO2 savings relative to alternative powertrain solutions
- ✓ Cost study for development and running costs to outlay return on investment to prospective customer
- ✓ Design optimisation and recommended improvements for industrialisation





# Prototype Development

A prototype hydrogen power pack is currently being integrated in a Class 40 race boat which will ideally be certified and ready for offshore testing in March 2020.



# Project Partners

## Innovation Partner



## Development Partner



## Official Partner



## Hydrogen Project Partners



Collaboration with La Rochelle Port de Plaisance and La Rochelle Ville for green hydrogen access

## Research Partners



Hydrogen storage research projects with Energy Futures Lab



Fluid simulations studies of hydrogen power pack



## Official Suppliers



Official cell supplier to Oceans Lab, prototyping highest generation Maxeon cells



Supplier of plug-in hybrid vehicles to Oceans Lab with strategy to develop hydrogen transport



Official fuel cell supplier to OceansLab supplying power units for motive applications



PARTNERSHIP PROPOSITION:  
JERSEY & PUBLIC COMPANIES



# Proposition Summary

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- ▶ Opportunity for States of Jersey and/or interested publicly-owned companies to join OceansLab as Sustainability Partner via a Jersey public consortium or otherwise
- ▶ Partnership structured principally around technology transfer of renewable innovations into Jersey to accelerate uptake. This comprises IP access, knowledge transfer, and access to OceansLab technology network in areas of hydrogen storage, fuel cells, solar, bio-fuels and battery storage
- ▶ Promotional and client engagement opportunities through global race events and promotional tours, with European and International reach.
- ▶ Sustainability Partnership package cost: €350,000 per annum ex VAT ; equivalent to circa 10% of total annual budget for OceansLab
- ▶ Ideal engagement 5 years, from Jan 2020 to Dec 2022 and spanning both round the world events; The Ocean Race 2021/22 and Vendee Globe 2024
- ▶ Minimum engagement 3 years – from Jan 2020 to Dec 2022; around The Ocean Race

# Detailed Rights Package: Tier 2

## Sustainability Partner Proposition – States of Jersey

TECHNICAL COLLABORATION (TIER 2)		
IP ACCESS	▶ Royalty-free IP licensing opportunities for hydrogen power pack, limited to commercialisation in Jersey only, and subject to industry applications and stakeholders	✓
	▶ Access to active project performance data and design files during the project duration, including CAD files, technical reports, and data logging results	✓
BUSINESS NETWORK	▶ Access to OceansLab network in solar, batteries, EV's, hydrogen, fuel cells, biofuels, composites, and coatings	✓
	▶ Collaboration on partner decarbonisation strategies to help identify technical solutions and preferential technology rates through OceansLab business & partner network	✓
KNOWLEDGE TRANSFER	▶ Technical reporting on hydrogen power pack performance, including results on: performance monitoring, fuel efficiency, corrosion resistance, shock & vibration resistance	✓
	▶ Comparison of emissions performance through Life Cycle Analysis and footprinting, relative to alternative energy & fuel solutions	✓
	▶ Safety recommendations and cost study of hydrogen technology	✓

# Detailed Rights Package: Tier 2

## Sustainability Partner Proposition – States of Jersey

CLIENT & EMPLOYEE ENGAGEMENT (TIER 2)		
CORPORATE SPEAKING & APPEARANCES	▶ Keynote speaking delivered by Phil – inspirational talks, or technical presentation delivered at sales conferences, team development sessions, client engagement events	3
	▶ Corporate appearances at trade shows and company launches	✓
CLIENT & EMPLOYEE EVENTS	▶ Corporate VIP sailing days for clients or employees <sup>1</sup>	4
	▶ Corporate visits to race boat, boat yard and development lab, including presentation on project and technology developments <sup>2</sup>	✓
	▶ Access at race villages to boats, pontoons and VIP area	✓
	▶ Invitation to Oceans Lab events such as launches, pre and post-event	✓

### NOTES

<sup>1</sup> 1 day includes a morning and afternoon session of approximately 2-3 hours per session, with a maximum of 5 guests (Class 40) and 8 guests (IMOCA 60) per session on. Additional days available for purchase. VIP Sailing Days are subject to safe weather conditions.

<sup>2</sup> Maximum 10 guests per session, with up to 4 sessions per day.



# Detailed Rights Package: Tier 2

## Sustainability Partner Proposition – States of Jersey

COMMUNICATIONS (TIER 2)		
BRANDING: BOAT	▶ Mainsail	Small
	▶ Foresail	Medium
	▶ Cockpit	✓
BRANDING: OTHER	▶ Team and corporate clothing	Sleeve
	▶ Backdrops: project events & press conferences	✓
	▶ Vehicles, merchandise and print collateral	Small
	▶ Partner logos and URL links on website, newsletters, press releases	✓
MARKETING SUPPORT & CONTENT	▶ Content Distribution: Consistent supply of high impact content for commercial use (news, photo, video, blogs)	✓
	▶ Content Access: Full access to high quality image and video archive	✓
CONTENT AND IMAGE RIGHTS	▶ Content Rights: Non-exclusive royalty-free license for commercial purposes	✓
	▶ Image Rights to Phil Sharp: use in commercial promotion related to project	✓

# JOIN US

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OceansLab is a **competitive** ocean racing campaign that is **pioneering** vital renewable energy technologies to decarbonise marine

For more information or to explore partnership opportunities, please contact:

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