

2017 Bermuda Sustainability Report
#RaisingTheBAR



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Introduction

About this report

This is the Bermuda Sustainability Report of Ben Ainslie Racing Ltd (Land Rover BAR). This report covers the activities related to sustainability undertaken during the team's relocation to Bermuda from the end of 2016, through to their return home in July 2017. A full report on the team's sustainability activities in 2017 will be released in May 2018 as the Land Rover BAR 2017 Annual Sustainability Report.

About Land Rover BAR

Land Rover BAR is the team name for Ben Ainslie Racing Ltd, the company conceived by four time Olympic gold medalist and 34th America's Cup winner, Sir Ben Ainslie, with the long-term aim of challenging for Britain and bringing the America's Cup back home to where it all began in 1851.

The team is committed to embedding sustainability throughout all of its operations while developing a British entry capable of winning the prestigious trophy, something Britain has so far not managed to achieve. 11th Hour Racing, the team's Exclusive Sustainability Partner, was the first commercial partner when the team was launched in 2014, signifying the importance of sustainability to the company.

Ben Ainslie Racing Ltd is a commercial sporting team, becoming Land Rover BAR in June 2015 when Land Rover was signed as Title and Innovation Partner. As of July 2017, the team now has a Title Partner in Land Rover and five main partners in 11th Hour Racing, BT, Aberdeen Asset Management, Coutts and CMC Markets. There are 17 official suppliers and a number of technical and base suppliers.

Alongside the commercial partners and suppliers, are a number of individual private investors. The team is made up of some of the best British and international sailors, designers, builders and racing support. It is set up as a limited company with shareholders and private investors who provide the backbone of support to the team. Sir Ben Ainslie is the majority shareholder and the Team Principal. The core business centres on the team's participation in the America's Cup, an activity that creates revenue through the marketing of that sporting event, and the commercial partnerships created with organisations and businesses that can benefit from it. More recently, the business has expanded to include the Land Rover BAR Academy and their participation in the Extreme Sailing Series and the Red Bull Youth America's Cup in 2017.

For generations to continue harnessing and enjoying the ocean's natural resources, our Exclusive Sustainability Partner, 11th Hour Racing understands the importance of addressing environmental challenges sooner rather than later. They establish strategic partnerships within the sailing and maritime communities to promote collaborative, systemic change benefitting the health of the ocean, spreading the critical message of sustainability on and off the water. With their help, at Land Rover BAR we have embedded sustainability into the whole of the team's operations, taking a balanced approach to economic activity, environmental responsibility and social progress. We believe there is an opportunity for all sports teams to become truly sustainable businesses. We plan to lead the way by educating and inspiring younger generations, who we hope will then drive sustainability forward instinctively.





Sustainability Strategy

Land Rover BAR's 35th America's Cup Sustainability Strategy covers three key areas, which were identified through stakeholder engagement and alignment with the team's mission and objectives.

Driving Innovation

At Land Rover BAR, we use our position at the leading edge of high performance sport to drive innovation towards a sustainable economy. The team aims to maximise innovation opportunities through partnerships, and invest in using collaborative technology, engineering and innovation skills to find solutions for long-term issues in sustainability.

Smarter Futures

We were the first British sports team to be awarded the Olympic-inspired ISO 20121. This provides a management framework to Land Rover BAR, to guide our use of resources and the impact we have on our environment and its ecology. This pillar is about reducing our operational impact, through minimising whole life impacts of the products we build and purchase, as well as managing the footprint of our team bases, fuel use and travel.

Inspiring Excellence

Land Rover BAR aim to play a major role in creating an inspirational centre of marine technology, design, engineering and innovation excellence across the Solent. We hope to inspire not only our followers, but also our partners, our supply chain, the marine industry, sports teams and the next generation to move towards a more sustainable future.

Looking back, some of the team's key achievements in 2016 before arriving in Bermuda:

 **0%** WASTE DIRECTLY TO LANDFILL FOR OUR NON-HAZARDOUS MATERIALS

 **3** NATIONAL AWARDS FOR SUSTAINABILITY BEYOND SPORT, BRITISH MARINE TRADE ASSOCIATION, BOAT INTERNATIONAL - OCEAN AWARDS

 **9m²** OF PROTECTED OYSTER BEDS INSTALLED ON TEAM'S MDL PONTOON

 **21%** TOTAL SOLAR ENERGY GENERATED BY THE TEAM

 **44,400 litres** WATER SAVED THROUGH WATER BUTT RECYCLING

 **4877** PEOPLE VISITED THE TECH DECK AND EDUCATION CENTRE

 **497** TONNES CO₂ OFFSET FROM LAND ROVER BAR ACADEMY TO ACHIEVE CARBON NEUTRALITY FOR 2016

 **61** EXTRA SPECIES NOW MAKE THEIR HOMES AT PORTSMOUTH HQ BIODIVERSITY HUB

 **66%** WASTE IS EITHER REUSED, ANAEROBIC DIGESTION OR RECYCLED

 **85%** SUPPLIERS UK BASED

 **100%** COMMITMENT TO BEING THE MOST SUSTAINABLE SPORTS TEAM WE CAN












#RaisingTheBAR







Report Highlights

-  Creation of the 11th Hour Racing Exploration Zone, hosted within the team base, including **11** interactive exhibits - visitors were taken through an engaging story with interactive displays around interconnecting themes including Technology and Innovation, Alternative Materials, Invasive Species/ Lionfish, Ocean Plastics, The New Plastics Economy, Creative Solutions
-  **9,708** visitors to the 11th Hour Racing Exploration Zone during its life cycle from February through to June
-  **1,800** Bermudian students took part in lessons on Ocean Plastics, Renewable Energy and Invasive Species
-  **223** public and **700** student sustainable living personal pledges were made in the Exploration Zone
-  **2,570** limited edition supporters wristbands were sold internationally, made from recycled ocean plastics and developed with 11th Hour Racing and BIONIC Yarn, with the proceeds going to the 1851 Trust to fund ocean health related educational modules.
-  **40** pounds of invasive Lionfish were caught by 5 licensed Bermudian cullers and showcased at the 11th Hour Racing #EatLionfish chefs throwdown
-  **6** celebrity chefs, along with the skippers from every America's Cup team, took part in the 11th Hour Racing #EatLionfish chefs throwdown, to raise awareness of invasive species
-  **10,770** of the sponsors and suppliers' employees reached through The Power of Partnerships campaign
-  **194** solar panels installed at Bermuda's National Museum with the team's Renewable Energy Partner, Low Carbon, generating more than **93,600kWh** of clean energy per year, avoiding **43** tonnes of CO₂ per year, and compensating for the team's energy footprint in Bermuda within **2** years
-  We aimed for zero food waste to incineration. The Eliza Dolittle Society collected surplus meals from the team **7** times during the course of our time in Bermuda to feed the homeless. A further average of **27kgs** of food scraps per week were collected by Green Mount farm who used them as food for their pigs. Coffee grounds and tea bags were composted.
-  Worked with **40** community groups through the creation, operation and deconstruction of the 11th Hour Racing Exploration Zone



Approach to building the Bermuda Base

Importance

The team needed to build a base in Bermuda that would function as a hospitality space, a manufacturing facility, a training area for the sailing team, a design office and an area where we could invite the public inside to share more about the America's Cup, and use the opportunity to raise awareness on the sustainability challenges we are facing today. With environmental health and sustainability being such an integral part of the team's ethos, the concept of building a resource efficient base was very important. Almost 50% of the UK's CO2 emissions stem from energy consumed in the construction and operation of buildings¹, making it all the more essential to design a sustainable, low impact platform – both at the UK team base in Portsmouth and the America's Cup team base in Bermuda.

Learnings from the Portsmouth team base

The Portsmouth team base was built on a reclaimed Brownfield site, at a perfect location to host future America's Cup events, generating huge economic and sporting benefits to the UK. The building encapsulates a truly sustainable design, with 100% of offices receiving natural light and ventilation through windows and a central atrium. 97% of the demolition materials were recycled into the new site and 100% of demolition concrete was crushed and reused within the new building's foundations. 432 solar PV panels cover 100% of available roof area and these produce 130 MWh/yr. A 1000 litre tank was created to harvest rainwater and the building has a 25% water efficiency improvement from standard building regulations. Along with this, local ecology was also considered in the sustainable design of the base - with 9m² of artificial reef being developed. Fifty marine species were welcomed to the reef, along with the reintroduction of the Solent's native oysters in partnership with the Blue Marine Foundation, MDL and IMS. The Portsmouth team base was built to the BREEAM Excellent standard, receiving 8 awards and being shortlisted for a further 7 for sustainability, innovation and considerate construction.

The Bermuda team base approach

Taking these learnings to Bermuda, we designed the team's base in the Royal Dockyard, with sustainability in mind. Land Rover BAR's team base was built with the intention that it would be as low impact as possible throughout its full life cycle, from design, everyday use and featuring a modular design for easy re/deconstruction.

There were three parts to the team base; a rented hospitality structure (making up a quarter of the base), comprising two story modular building, made up of 5x5m grids. This was a repurposed structure from previous events that could flat pack back into a container post event and be returned to the owner for future hire. The canteen and gym facility was made up of a temporary tent structure already owned by the team, and previously used as the team base at the nine America's Cup World Series events. This structure was to be retained and reused after competition. The remaining half of the base, the boat sheds, were constructed as a semi-permanent building, with the intent of donating the space to the landowners once the America's Cup was finished.

A main objective of the building's design was to aim for low carbon energy operations and sustainable resource management. Rainwater harvesting tanks were installed and solar panels were planned for installation with team partner Low Carbon on top of the nearby National Museum of Bermuda. Lavatories and kitchens within the Land Rover BAR complex were purchased as 'bolt-on' features on a buy-back scheme to reduce wastage, while carpet tiles were made from 100% recycled nylon, containing ocean plastic content. With our graphics supplier, we researched and installed PVC-free wall coverings, solvent free graphics and fairlyne mesh external wrap. We also designed the 11th Hour Racing Exploration Zone, a free experiential education zone for local residents, visitors and young people. The zone enabled them to learn about sustainable resources and materials, renewable energy and marine ecology, as well as give an insight into the team, the America's Cup and the technology behind the race boats.

See appendix for guidance that we put together for the construction team in Bermuda, which brought together the learnings from the BREEAM and Considerate Construction Scheme that we worked to when building the UK team base.

1 <http://www.ukgbc.org/resources/additional/key-statistics-construction-industry-and-carbon-emissions>



Reducing operational impact

Water

At Land Rover BAR, water conservation is a key consideration. We work hard to reduce the quantity of water used during our activities, which in turn will lead to a reduced carbon footprint, increased sustainability and lower financial costs. Water production has a high impact on sustainability due to the energy and chemical procedures that are required to produce clean and safe water. The team base in Portsmouth includes a 1,000 litre rain water tank, making it possible to essentially eliminate the use of potable water for boat washing purposes. Following on from this, we also wanted to ensure that water conservation was integral at our base in Bermuda – where rainwater harvesting is a concept well-built into Bermudian culture. Our rainwater harvesting tanks in Bermuda were designed to provide us, on average, 70% of our fresh water usage while in Bermuda.

Every time we go sailing we save 400 litres of water through our wing ballast reuse system¹. There were 43 sailing days in Q1, a water saving of 17,200 Litres through use of the wing butt water reuse system. There were 40 sailing days in Q2, a water saving of 16,000 Litres.

¹ Wing Ballast Reuse System: This innovative system eliminates run off and waste water from the launch procedure, achieving 100% reuse.



Waste

Reducing the amount of waste produced by the team is essential, ranging all the way from manufacturing waste to food waste. Reusing and recycling materials are integral to our approach, especially while out in Bermuda – where tin, aluminum and glass are the only materials that can be recycled. We wanted to avoid waste ending up in incineration and landfill wherever we could, which led to the development of a plastics grinder within the 11th Hour Racing Exploration Zone, that enabled us to ensure that HDPE plastic waste were given new life, turning the shredded plastic into flower pots with the use of a solar powered kiln. Furthermore, the team made sure that surplus food was not wasted. Donations were given to local charity, the Eliza Dolittle Society, who then distributed food to those in need. Food scraps were either composted or collected by a local farmer for use as pig feed – this way, nothing was wasted.

Recycling: Tin, aluminum and glass

There was no facility for recycling to be weighed by waste contractors, however we estimate that with one lift per week of a 660L bin, with an average bin fill level of 80%, that a total of 5.4 tonnes of tin, aluminium and glass were recycled¹ over 36 weeks during the time the team were in Bermuda.

¹ Calculated using Wrap UK's Business Waste Weights Calculator

Recycling: Plastic

100 plant pots were made using the solar kiln, resulting in approximately 200 kilograms of plastic being redirected from incineration. This was also an opportunity to engage with ACBDA, Race Village construction teams, Land Rover BAR families and shore crew, community groups, schools and various yachts at the Hamilton Princess Marina including J Class, Bystander, Stay Calm and Elfje, who saved and donated waste plastic materials and used the recycling system.

General waste

General waste in Bermuda goes to the waste to energy plant at Tynes Bay, where waste is burnt and the energy captured to power the island. During the time that the team were operational in Bermuda, the following amounts of waste were sent to the Waste to Energy plant.

- Q4 2016 – 4.13 tonnes
- Q1 2017 – 13.3 tonnes
- Q2 2017 – 19.06 tonnes
- Q3 2017 – 15.27 tonnes

Food waste

The Eliza Dolittle Society collected surplus meals from the team seven times during the course of our time in Bermuda to feed the homeless. A further average of 27kgs of food scraps per week were collected by Green Mount farm who used them as food for their pigs. Coffee grounds and tea bags were composted.



Energy

Reducing our energy footprint was a key part of managing our impact in Bermuda. At our team base, we planned to keep our energy consumption as low and as green as we could. In Bermuda, there is a heavy reliance on fossil fuel sources; a central power station, containing 21 diesel and gas turbine engines, generates power for the island. Fuel burning is common practice, as well as high quantities of gas and oil being imported. The economy depends on fossil fuels for over 99 percent of electricity generation¹. Making use of renewable energy was a concept we wished to take advantage of and to showcase as a sustainable alternative to fossil fuels.

Our energy usage in Bermuda:

	Q4 Total	Q1 Total	Q2 Total
Electric (kWh)	15,040	82,470	148,510
Gas (m ³)	67.4	185.9	166.7

To compensate for this, we were able to partner with the team's Renewable Energy Partner, a UK-based renewable energy investment company, Low Carbon, completing a partnership project to install solar panels at the National Museum of Bermuda.

The solar panel installation was conceived through our partnership with Low Carbon and a generous donation from the Stempel Foundation, with the installation led by local company BE Solar. The panels will compensate for the electricity used by Land Rover BAR while competing in Bermuda during the America's Cup.

The installation consists of 194 high performance solar panels installed along the Museum's northwest rampart. They are expected to generate more than 93,600 kWh of clean energy per year, save 43 tonnes of CO₂ per year and cut the museum's electricity bills by up to 20 percent. Solar panels have already been successfully installed by Low Carbon at Land Rover BAR's base in Portsmouth, enabling the sailing team to avoid more than 100 tonnes of CO₂ across the two projects each year.

¹ https://www.gov.bm/sites/default/files/bermuda_electricity_policy_150526_3.pdf
<https://belco.bm/index.php/education-85/generation-in-bermuda>



The panels installed at the National Museum of Bermuda will completely offset the team's Bermuda-based energy consumption within two years, continuing to provide power to the island for a minimum of 30 years. The site will also be a valuable educational resource for local school children about the importance of renewable energy in building sustainable island communities.

Roy Bedlow, Chief Executive of Low Carbon:

“ This installation is going to make a fundamental difference to the local community for years to come. We're delighted to be able to support the museum team, and our partners Land Rover BAR in their efforts to be the world's most sustainable sports team. We also shouldn't underestimate the importance of this legacy project. Land Rover BAR are drawing attention to the importance of sustainability and showing their commitment to giving back to the communities they're part of, during training and competition. I can only thank and congratulate them for making a difference and for setting an example that we should all look to emulate. ”

Travis Burland, Sales and Engineering Director for BE Solar:

“ The BE Solar team are delighted to complete Bermuda's largest ground mounted solar installation. This will provide the National Museum of Bermuda with notable sustainability benefits, both in terms of its carbon footprint reduction and a significant decrease in their energy costs. As a result, this project has seriously empowered the ongoing preservation of Bermuda's cultural heritage. It was a sincere pleasure to work together with Low Carbon, Land Rover BAR, The Stempel Foundation and The National Museum of Bermuda, to develop and complete this fantastic legacy project for our island. ”

Food



We aim to ensure that we consume food that has been sourced in a sustainable manner, enabling our athletes and team members to eat nutritiously while reducing the associated environmental impact.

Our Food Charter was implemented as a way of ensuring that all the food offered to the team and our visitors was local wherever possible, had good nutritional value and was sourced ethically. It is essential that any meat and fish we consume follows animal welfare standards and that it has been produced as locally as it can be. Fruit and vegetables are to be organically certified where possible and dairy products should also have this certification, being bought from local suppliers and from Fairtrade where applicable. Part of the Charter also focuses heavily on reducing waste by ensuring that packaging is reduced, by buying in bulk and in reusable, returnable containers. The Food Charter was put together to make sure that we have as little impact on the environment as possible, while supporting producers in the local area.

While in Bermuda, it was important to us that food was sourced from local Bermudian farmers and producers, reducing our carbon footprint by lessening travelling distances of importing onto the island. Our aim was to contribute to local communities by trading with Bermudian businesses, ensuring that we were able to give something back to the economy. As an example, we sourced our sweet potatoes from Tom Wadson's farm – a local Bermudian who has been farming on the Island for many years. Tom relies heavily on local buyers to support his business and sustainability is key for people like him to continue farming. Food packaging is a large expense for farmers like Tom. In order for Tom to reduce costs within his business, he specifically focuses on reusing materials where possible and that way ensures that no waste is left to harm the environment that he so heavily depends on. Where local sourcing is not possible, we focus on ensuring that all food is Fairtrade and ethical.

Cutting down on food waste was a simple way for us to reduce our environmental impact. Any food that was cooked and not served (therefore unable to be reused for service) was donated to local organisations and foodbanks where possible. This way, food could be redistributed to local people who were in real need. A key local organisation we approached in Bermuda was The Eliza DoLittle Society (TEDS). TEDS work to provide support for Bermuda's homeless population by gathering surpluses of fresh, frozen and cooked food, donated from people all over the island. TEDS's Daily Bread programme ensures that food is collected on a daily basis to be distributed out to local service programmes, where it can then be served to communities who struggle to feed themselves. TEDS collected from us once every two weeks during May, June and July.

We made sure that sustainability was at the forefront of our catering services within the Land Rover BAR team base in Bermuda. Meat Free Monday was implemented for the team and hospitality guests as a way to reduce our environmental impact by preserving natural resources and cutting down on carbon emissions associated with meat production. Promoting this concept was vital for spreading the important message about high levels of energy usage when rearing and feeding livestock, along with meat transportation. By following Meat Free Monday, we were encouraging a healthier lifestyle among our team and visitors, while also recognising that cutting down on meat and fish consumption would use less fuel, water and land – therefore helping the environment by reducing the amount of pollution produced. With the team having embraced Meat Free Monday for the period of one year, we saved the equivalent amount of carbon as driving from Portsmouth to Bermuda and back...twice!

We also focused heavily on abolishing single-use plastics. The use of reusable water bottles was compulsory among both the team and visitors, and single use plastic tableware such as cutlery, straws, plates, stirrers, coffee and water cups were prohibited within the team canteen. Recycling was also a key focus for us, making sure that valuable and durable HDPE plastics were disposed of sustainably through our on-site plastics shredder and solar kiln.

Education is essential for us to spread the message of sustainable food consumption and production. It was important that our guests understood the importance of sourcing food in an ethical way, recognising the impacts on the people who produce it, the animals that provide it and the environment that is effected in the process. Our catering staff and team members understood the importance of our Food Charter and would continuously come up with creative sustainable solutions - such as Tariq, who started re-growing salad and spring onions from shoots in the kitchen on site!

Jennifer Mahoney, Executive Director for the Eliza DoLittle Society, *“We would like to commend Land Rover BAR for their commitment to recycling, reusing and reducing waste of not only their food products, but all elements of their operation. The food donations received from them helped stock the shelves of our Food Bank and the remainder was used at feeding venues throughout Bermuda. They will be sorely missed by the local community.”*

Hospitality

Our hospitality offering for the 35th America's Cup was made up of The Bermuda Lounge within the team base and three spectator boats allowing guests to watch the racing. Guests were hosted from the Land Rover BAR team base in the heart of the race village in the Bermuda Lounge, the top floor suite of the team's island base. There were 2,277 total guests over 21 days of hospitality with 1,693 going out on the water and 584 guests watching from on-shore in the base.

In the America's Cup race village the footfall reached over 144,000. There we 7,000 official spectator boat guests, 2,223 private boat registrants, and 545 'first mates' volunteers from 32 nationalities, speaking 36 languages.

We used the captive audience of the hospitality set-up to expose our guests to our sustainability goals through various forms of messaging, such as through the 'Band of Britain' campaign, sustainability themed 'Morning Shows' with Lady Georgie Ainslie featuring Oceans Day, 11th Hour Racing's Wendy Schmidt and the RSE Lionfish robot, Meat Free Mondays and Food Charter messaging and labeling of hospitality offerings.



Transport

Goods

Below is the summary of the total distances and carbon impact of all goods transported to and from Bermuda between Q1 2016 and Q3 2017

Total km	Total kgCO ₂ e
38,591	7,753.40

People

Below is the summary of total distance and carbon impact of all flights to and from Bermuda, from Q3 2016 to Q3 2017 total:

Total km	Total kgCO ₂ e
5,033,304	904,923



Deconstruction and building legacy

Resource Plan

The Bermuda base was designed for deconstruction, in that it was as waste free as possible. The nature of the structure meant that kitchen containers and toilet blocks were 'bolt-on' features on buy-back schemes, and the main hospitality structure was rented and returned to Markey at the end of the campaign, for future hire. Any materials that were not due to be returned at the end of the campaign, were donated locally rather than disposed of. Examples include;

4 solar panels donated to GreenRock for their Ecoschool youth education programme

75m² ocean plastics carpet tiles donated to Keep Bermuda Beautiful along with **2** solar panels to power the office

50 sheets of plywood donated to the Bermuda Diabetes Association to build their new premises

20 sheets of plywood, **20** assorted plants and **100kg** of earth taken by Horsfield Landscapers to build an allotment and garden for their partner school, Somersfield Middle

150m² ocean plastics carpet tiles donated to the Eliza Dolittle Society, who regularly visited the team base to take surplus food to feed the homeless and people who struggled to afford food



Sarah Burrows:

“ The Bermuda Diabetes Association is embarking on the most critical moment in its 39 year history: we are purchasing a building so that all our educational services, patient counselling and pharmacy can be under one roof, delivering high quality, comprehensive care to those who need it most. A project of this size depends on community support and we are pleased Team Land Rover BAR were the first to be on hand to offer support by way of their kind donation of building materials. Thank you Team Land Rover BAR ”

Building Legacy

Of the four parts to our team base, two were permanent shed structures that have been left as a legacy - with ownership transferred from the 1st August to the Royal Naval Dockyard land owners, West End Development Corporation (WEDCO). The current intention is that they will continue to be used for sustaining the marine industry in Bermuda long into the future and become part of the Cross Island Legacy Committee vision for an “integrated Blue/Green Business Hub, including Indoor Agriculture, Aquaculture, Renewable Energy, and additional synergistic businesses”.

The third part, or ‘Roder Tent’, containing the team gym, canteen and changing facilities was packed down and returned to the team base in Portsmouth.

The final part, the Hospitality unit, was built and deconstructed by owners Markey, who we rented it from. It goes on to be used by the organisers of the Extreme Sailing Series.





Inspiring Excellence: The 11th Hour Racing Exploration Zone

Introduction and purpose

The 11th Hour Racing Exploration Zone was set up in a public facing section of the Land Rover BAR team base. It was designed to be a space that would not only educate a broad range of audiences, but also an area that would excite and inspire young people to continue on in the legacy left behind by Land Rover BAR. The aim of the Zone was to highlight Land Rover BAR’s unique achievements with regards to the technology used within the sport, while sending out a clear message about the importance of becoming involved in environmental sustainability.

The 11th Hour Racing Exploration Zone also functioned as an interactive classroom space, delivering engaging lessons to girls and boys aged 4-20, with a curriculum focus on the 11-16 age group. The lessons were designed to develop young people’s STEM skills, with the hope that the sessions would spread awareness about the importance of ocean health, sustainability and innovation. Furthermore, the Zone was used as a space for events and speeches, intended to engage the local community with several #RaisingTheBAR activities.

For this project, 11th Hour Racing and Land Rover BAR formed strategic partnerships: the Ellen MacArthur Foundation, 5 Gyres, the Bermuda Underwater Exploration Institute, RISE, Low Carbon and Land Rover BAR’s Official Charity 1851 Trust to help deliver the zone and key messaging.

Wendy Schmidt, Co-Founder of 11th Hour Racing:

“With the 11th Hour Racing Exploration Zone, we hope to create a legacy lasting well beyond the 35th America’s Cup. Through interactive displays, we focus on some of the concerns that are top of mind for all of us: which invasive species is creating havoc in the Atlantic Ocean? How widespread is the problem of ocean plastic pollution? We also look at bigger issues, such as what it means to have a circular economy and how we can accelerate the transition to the use of more renewable energy. We are thrilled to share this story with Land Rover BAR’s fans, sailing and sports enthusiasts, and the general public.”

Ben Ainslie:

“Since we launched the team back in 2014, with Exclusive Sustainability Partner 11th Hour Racing, we set ourselves the goal to become one of the world’s most sustainable sports teams. Our collaborative impact throughout the 35th America’s Cup has been incredible – 9,807 students and fans visited the 11th Hour Racing Exploration Zone at our base in Bermuda, learning about invasive species, the issue of ocean plastic pollution, what it means to have a circular economy and how we can accelerate the transition to the use of more renewable energy. We captured people’s imagination and sparked creativity and interest in our oceans – a true lasting legacy.”

KPIs

We set up the following KPIs to track the impact of the 11th Hour Racing Exploration Zone. In conjunction with 11th Hour Racing. The following table details the KPI, target and reporting method and the types of data that were gathered.

PROGRESS AGAINST TARGETS

SUSTAINABILITY PRINCIPLE	SUSTAINABILITY ISSUE	KPI DESCRIPTION	OBJECTIVE	Objective reference	TARGET BERMUDA	REPORT ON:	RECORDS
Inspiring Excellence	Sustainable Transport	Modes of transport taken by attendees and participants as a percentage of total transportation, and initiatives to encourage the use of sustainable transport options	We should be encouraging travel to the Exploration Zone by sustainable means, and communicating this to visitors such as school groups	IEBDA01	100% of visitors before the Cup to the Exploration Zone encouraged to travel by sustainable means (i.e. not by single occupancy car) Visitors will be told and encouraged to come by sustainable means through communications	Method of transport of every visitor to the Exploration Zone and impact. 100% of communications to visiting groups to receive 'How to find us' sustainable travel guide. Modes of transport taken by attendees and participants as a percentage of total transportation, and initiatives to encourage the use of sustainable transport options	Surveys
Inspiring Excellence	Awareness and behaviour change	Number, type and impact of sustainability initiatives designed to raise awareness, share knowledge and impact behavior change and results achieved.	Report the impact of initiatives deployed within school or community groups that have lasting social, environmental or economic impact and that lead to enduring behavior change, post-event and within set time lines.	IEBDA03	1,500 visits to the Exploration Zone before the start of the Cup 3,500 visits to the Exploration Zone during the Cup (based on Race Village being open for 20 days, from 1000 - 1700, and max capacity of 25 people in the space at any one time, with a visit length of 1 hour) 40 different School and community group visits (Feb, Mar, Apr) 25 of which are local schools (out of a total of 30 schools) ie. 80% of schools reached 500 pledges 70% of visitors surveyed to show increase in awareness on topics raised in the Exploration Zone 50% of visitors surveyed to demonstrate some commitment to behaviour change as a result	Number of visits to the Exploration Zone School / Group name School / Group name Number of Pledges Understanding of limited resources and the concept of a circular economy. Renewable energy/ increased awareness. Understanding of STEM principles applied in sailing. Understanding of ocean health (plastics, invasive species and their threat) Change in transportation modes. Change in waste behaviours. Energy conservation behavior change. Number of visitors that would consider a STEM career. Change in behaviour around ocean plastics, invasive species.	Bookings log Engagement Events Spreadsheet Engagement Events Spreadsheet Pledge log, app Engagement Events Spreadsheet Post visit surveys Post visit surveys
						Ensure key influencers and media are shown around Exploration Zone	Engagement Spreadsheet
							Track amount of plastic collected/recycled
							Track Food Miles saved



Measuring impact

It was important to all stakeholders involved in the development of the 11th Hour Racing Exploration Zone that we tracked the impact of our activities. In order to gather data to track progress against KPIs, we designed a series of surveys. We used three types of survey; one for school groups during the school sessions prior to the America's Cup starting, one for visitors at the entrance of the Race Village during the America's Cup before experiencing the Exploration Zone, and one for visitors who had been through the Exploration Zone during the Cup.

Survey 1 was aimed at school groups and Surveys 2 & 3 were aimed at public visitors, sampled pre and post visit respectively

Survey research purpose; to assess the impact of visiting the 11th Hour Exploration Zone on:

- 1) Level of understanding of key environmental and sustainability issues
- 2) The effect of the Zone on taking positive action towards tackling issues as a result

Hypotheses:

That visiting the Zone has a positive effect on:

- a) Understanding key environmental and sustainability issues
- b) Inspiring action as a result of increased awareness

Sampling method:

- Survey 1: Surveys sent to all school groups
- Surveys 2 & 3: Random sampling of entrants to race village and those leaving Zone
- Surveys 2 & 3: Ensure sampling at different times of day and variety of age groups

Immediate learnings:

- Visitors didn't always fill in the last section on what their favourite exhibit was
- Empty boxes for respondents to write in comments is good for qualitative analysis and case studies, but not so helpful when looking at bigger picture as it is harder to quantify data
- Ipad/survey monkey surveys were quick, convenient and paperless, but often resulted in far less quality and length of answers than when visitors used the paper version

Results

PROGRESS AGAINST TARGETS

TARGET BERMUDA	RESULTS
100% of visitors before the Cup to the Exploration Zone encouraged to travel by sustainable means (i.e. not by single occupancy car) Visitors will be told and encouraged to come by sustainable means through communications	100% of school groups travelled to the Exploration Zone by sustainable means. 49% of 75 visitors surveyed during the Cup came by ferry, the most popular mode of transport.
1,500 visits to the Exploration Zone before the start of the Cup	2,198 visits to the Exploration Zone before the start of the Cup, including 1,324 young people and 874 community and local business visitors.
3,500 visits to the Exploration Zone during the Cup (based on Race Village being open for 20 days, from 1000 - 1700, and max capacity of 25 people in the space at any one time, with a visit length of 1 hour)	7,650 visits to the Exploration Zone during the Cup. A total of 9,848 visitors.
40 different School and community group visits (Feb, Mar, Apr)	40 different school and community group visits.
25 of which are local schools (out of a total of 30 schools) ie. 80% of schools reached	20 different schools reached.
500 pledges	237 public pledges plus 700 student pledges. Every student that took part in an Ocean Plastics lesson made a pledge as part of the end activity.
70% of visitors surveyed to show increase in awareness on topics raised in the Exploration Zone	72% of school children surveyed demonstrated that they had learned something they didn't know before in one or more of the following areas. Solar energy, materials and recycling, ocean plastics, invasive species.
50% of visitors surveyed to demonstrate some commitment to behaviour change as a result	See following <i>Behavioural change</i> chapter.

Headline results from student surveys

72% of school children surveyed demonstrated that they had learned something they didn't know before in one or more of the following areas; Solar energy, materials and recycling, ocean plastics and invasive species.

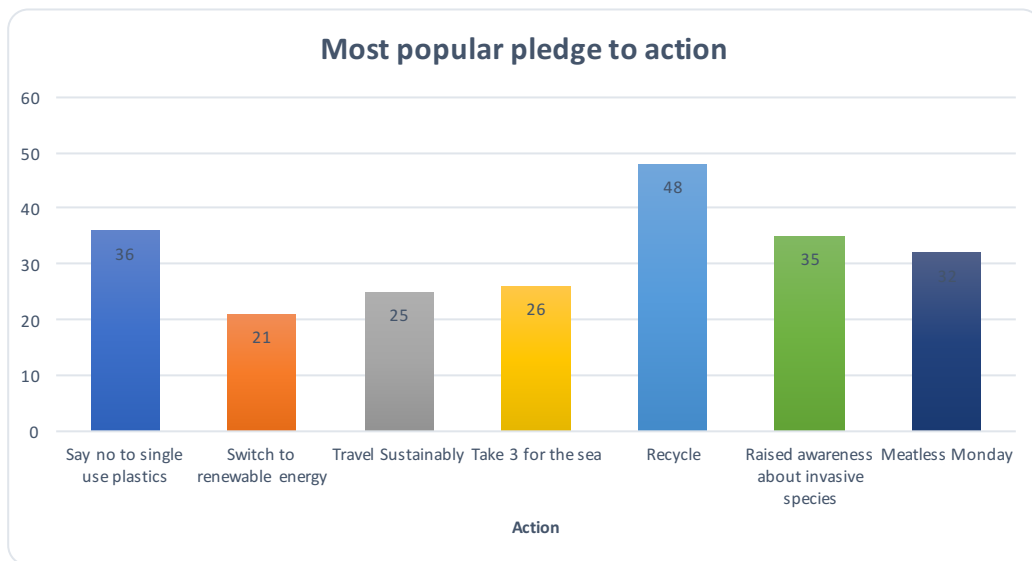
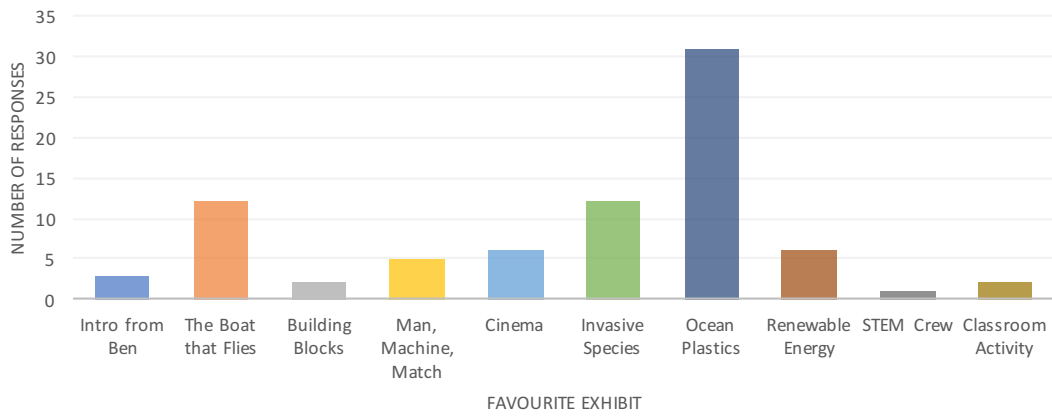
Over **700** student pledges were made:

- 70%** of pledges were related to ocean plastics
- 4%** pledged to go meat free Monday
- 9%** pledged to switch to renewable energy
- 6%** pledged to travel more sustainably
- 10%** pledged to raise awareness about invasive species
- 44%** of Bermudan primary schools were reached
- 100%** of Bermudian middle schools were reached

A total of **20** different schools were reached

With thanks to Digicel Bermuda who launched a #Connect2sailing programme – providing nearly 700 final year middle school students with the means to visit the 11th Hour Racing Exploration Zone

Favourite Exhibit at the 11th Hour Exploration Zone



Some reasons why certain exhibits were their favourite include... *“Because we need to learn about keeping our ocean safe and clean”; “Informative”; “Didn’t know that a shampoo bottle can become a plant pot!”; “Learnt about ocean gyres and garbage patches. Important to eliminate plastic in oceans”; “It taught me about plastic”; “Because it’s factual and interesting”; “Interesting. Excellent exhibits”; “Learned new things. Loved the recycling of plastic for plant pot”; “It’s important for our future”; “I like the ground plant pots”; “Really interesting”; “Friendly team”; “The plastic pollution problem affects us all”; “Well presented and exhibited”; “Plastic is something that not enough people focus on and its great to show what can be done with old plastic.”; “Grinder - being able to convert plastic to a useful form i.e. flower pot”.*

As the Ocean Plastics / recycling exhibit was the most popular exhibit, it follows that the most popular pledge to action was to recycle more.

The word cloud below has been generated using wordsift¹ with the comments from the public and student survey feedback. The larger the word, the more mentions in survey comments. For example, the two highest quoted words were ‘plastic’, mentioned 15 times and ‘ocean’ 10 times. This again confirms that visitors engaged the most with the ocean plastics exhibit.



Headline results: Pre-visit public survey

- **40%** visitors from Bermuda, **60%** from elsewhere including US, UK & NZ (top 3 others)
- Most popular transport method to the AC Race village is ferry with **42%** using this mode of transport (21 out of 50)
- Perception of recycling in Bermuda is much higher than reality, with the respondents thinking **25%** of plastic gets recycled in Bermuda on average. One third of participants thought **0%** plastic is recycled in Bermuda, which is correct (15 out of 45).
- **92%** of respondents (36 out of 39) know what an invasive species is.
- **58%** know it is edible (22 out of 38), **18%** said they did not think it was, and **24%** said that “maybe” it is edible.
- **74%** of respondents currently “take 3 for the sea” (25 out of 45) and only **10%** (4 people) did none of the options, so this is good.

1 <https://wordsift.org/>



Headline results: Post-visit public survey

- **60%** from Bermuda, **40%** from elsewhere.
- Most common respondent group is **<18**
- Ferry is the most common mode of transport
- They thought **18%** plastic is recycled in Bermuda and that **30%** is recycled worldwide
- **92%** know what an invasive species is
- Ocean plastics is the favourite exhibit (15 out of 25)
- **96%** of those surveyed would recommend the 11th Hour Exploration Zone to others
- Total pledges = **237**, Recycling is the most popular. “Other” pledges include a range of actions including educating others, buying recycled plastic, encouraging Bermuda to recycle and to support more sustainability projects.

Exploration Zone volunteer, Matthew McGowan said:

“Volunteering for Land Rover BAR during the 35th America’s Cup in Bermuda was a once in a lifetime opportunity. The sense of camaraderie throughout the team was wonderful. All the volunteers were made to feel incredibly welcome and a real part of the team. I was part of the Exploration Zone. The team gave us plenty of training and were always on hand to assist us if we needed any further information. During our time at the America’s Cup, hundreds of people came through our doors each day wanting to learn about Land Rover BAR and the work it is doing for sustainability and the environment. It was an excellent way to inform the tourists to the island, and also the Bermudians, about the importance of protecting and caring for our environment. The Exploration Zone was able to teach people that even the smallest contribution can help in a very positive way. It also gave the public the opportunity to get involved in a long-lasting way. Throughout the volunteering experience we were able to give back to our local community whilst encouraging a global perspective on what we can all do to help our planet.”





Behavioural change

It was difficult to assess behavioural change through on the spot surveys, but in total there were 937 total pledges, and we saw that visits from yachts, other teams, and local community resulted in them starting to bring plastic to the team for recycling. Somerset Primary set themselves a Land Rover BAR inspired sustainability challenge of the month. They also set up a collection station at the school for all HDPE plastic, to bring to the EZ for recycling. Victor Scott Primary committed to trash free lunches, School of BAR took the learnings of their invasive species lesson at the EZ back to their own classroom, and work on raising further awareness through making papier mache lionfish models. They also themed their school song around sustainability by performing 'Reduce, Reuse, Recycle'! Bermuda College pledged to design and build their own plastic shredder and kiln, as did Sandys middle school - who are not only building their own shredder, but also have started a social media campaign 'Take3forTheSeaBermuda' with weekly student beach cleans. Additionally, a team of Bermuda High School Girls have created a campaign to ban all single-use plastic from the island. While ambitious - they believe they need to start somewhere! We also had a number of 'influential visitors' to the Zone, who we hoped would have the power to take the learnings wider. These visitors included celebrities, government officials, business owners and journalists; including Premier Dunkley, Minister Gibbons, HRH Prince Edward, HRH Princess Anne, 6 celebrity chefs, Journalists Christopher Clarey and Bill Springer.





Local staffing

Wherever we could, we chose to employ locally. We employed four Bermudians in our catering team, three in our security team, one in facilities support who went through our intern programme, and two in our 11th Hour Racing Exploration Zone core work experience team.

11th Hour Racing Exploration Zone volunteer, Brian Wedlich:

“ My experience while volunteering at the Land Rover BAR Zone during the 35th America's Cup in Bermuda was fantastic. Being a recent high school graduate going into university for product design and technology, this was an amazing opportunity. At the Zone, the displays seamlessly integrated information about the design and technology at work behind the boat, as well as STEM and sustainability subjects which linked in flawlessly with the syllabus which I had studied in school.

Furthermore, the volunteer team which I worked with, were very welcoming and helpful, to ensure that I got beneficial experiences as well as ensuring that each of the hundreds of people who came through the door, learned something new. This opportunity was also invaluable as it allowed me to network and meet members of the design team, who I was able to talk with and learn what experiences allowed him to get involved with the America's Cup and how I could get involved in a similar way in the future. I also found that the Zone was excellent at making the information provided relevant to the local community, tackling sustainability issues that are very prevalent in Bermuda's waters, such as the invasive species of the lionfish and the issue of ocean plastics. This allowed both Bermudians and visitors to the island alike, to understand the greater impact of these issues on the environment around them, which I believe made them more excited to learn and retain the information. Overall, the zone was fantastically run and I believe was helpful not only to the visitors, but also to the volunteers. ”

Multiplying our reach

The power of partnerships

Sustainability Charter Background

The creation of the Sustainability Charter for the 35th America's Cup was implemented in order to bring all six America's Cup teams together and to move forward with a common goal – to promote sustainability and reduce environmental impact within the sport. The Charter was signed in 2016 by every team, who all agreed to recognise and apply the ten key elements put forward by the Charter.

The first point focused on eliminating single use plastics from the sport, with a first step of providing team members with refillable water bottles. This concept aims to spread awareness of the negative impacts single use plastics have on marine environments and consequently reduce the contribution to ocean plastic pollution. The teams are also heavily encouraged to reuse packaging and recycle waste where possible, making use of local recycling facilities if available and reducing overall waste output.


Water conservation is another key part of the Charter. Teams were asked to reduce the amount used, consider the issue of water pollution and how they can reduce their impact on marine environments through the use of safe cleaning fluids and ensuring that refuelling procedures are carried out with the utmost care, to avoid spills.

Efficient resource, material and energy use was another consideration of the charter, as well as demonstrating inclusivity, and supporting local economies and suppliers through the procurement of goods and services.

The Charter recognised that the teams are advocates for the oceans and the natural environment and so encouraged the sharing of positive action to inspire fans, suppliers and local communities to continue on the legacy. Each team picked a sustainability champion to collaborate with other teams and to promote the Sustainability Charter.

Achievements

Since signing the Charter, teams have driven the sustainability campaign. Some highlights from the other teams in the America's Cup include;



Softbank Team Japan committing to eliminating single use plastics by providing each of their team members with refillable water bottles. In addition, they worked with The Argus Group to host a series of STEM classes to provide young people with a practical insight into how team members apply their expertise in their roles. For example, their team chef taught a cooking class and their personal trainer hosted gym classes, while engineers and technicians instructed students on science and engineering.

Groupama Team France supported elements of the Charter by partnering up with Race for Water, a charity dedicated to ocean preservation. Together they supported a 100% self-sufficient vessel, powered completely by the wind, the sun and the ocean. The vessel departed on a five-year cycle sailing around the world, with the aim of educating students about clean energy and the importance of preserving oceans through innovative technology.

Artemis Racing collaborated with Bluewater, using 100% rainwater for their team base, which was built on an abandoned US sea navy base, reusing waste land in a sustainable way. The base was designed to be disassembled if necessary, recycling the materials and saving them from being demolished and thrown away.

Oracle Team USA recycle carbon based materials and ensure that recyclable resins are used in many of their designs.

Land Rover BAR supported the Charter further, by working on a communications strategy to present sustainability news across a whole range of social media platforms. We published our annual sustainability report, post weekly on various sustainability related topics and produced monthly video content. Sir Ben Ainslie leads the team as sustainability champion; he ensures that team members understand how their role has a part to play in reducing the impact on the environment. Together, the team works hard to promote sustainability throughout the sport.

Sources:
Sustainability Team Video produced by ACEA
Groupama Team France website
Race for Water website

Partner Engagement Campaign

Background

All the team's partners play a critical role in supporting the team's sustainability ethos. Triggered from attending a climate workshop at the Cambridge Institute for Sustainability Leadership and British Antarctic Survey, sponsored by 11th Hour Racing, and organised in collaboration with Title and Innovation Partner Land Rover, the team and partners identified five key behaviours that have some of the biggest impacts on climate change and encouraged those involved to promote to stakeholders and networks, to help make a difference. Collectively, the following behaviours were highlighted and promoted each week of racing during the America's Cup:

- 1) Saying 'No' to single use plastics
- 2) Looking at how we are recycling products and reducing waste
- 3) Going meat free on Mondays
- 4) Promoting and using renewable energy
- 5) Consuming only sustainable seafood

The team created a toolkit with stats, infographics and videos for partners to personalise and use. Partners were urged to take part in at least one behaviour, promoting them to employees within their working environments. By encouraging participation in the campaign and sharing stories through the media, the key message of the scheme could be spread to the wider community.

Achievements

A total of 10,700 employees were reached through this campaign and some highlights can be found in the table below.

BT	BT encouraged 8,000 of their employees to support Meat Free Monday
Prism	Prism supported the campaign in saying 'No' to single use plastics by purchasing 40 Land Rover BAR water bottles for each of their staff members.
Low Carbon	Low Carbon bought Keep Cups, water bottles, introduced Meat Free Monday to all staff and started an internal monthly newsletter to engage staff around sustainability topics.
11th Hour Racing	<p>The entire 11th Hour Racing team used reusable water bottles and proudly wore the Band of Britain during the 35th America's Cup. 11th Hour Racing donated 220 reusable water bottles for Land Rover BAR staff and volunteers over the entire campaign. 11th Hour Racing was a key partner in the development of the Band of Britain (with Land Rover BAR and BIONIC Yarn) and underwrote the initial costs of the Bands. They also purchased 100 bands and distributed them to our stakeholders and staff.</p> <p>11th Hour Racing emailed a group of 30 external partners each week, asking them to share the Power of Partnerships campaign on their social media channels.</p>
Aberdeen Asset Management	AAM gifted 2,000 employees with Keep Cups that shared the message: Say 'No' to single use plastics. Staff were also encouraged to use recycling bins more frequently and to consider the impacts of unnecessary printing.
Coutts	Coutts displayed the team's sustainability pledge permanently from 26 May – 26 June in their banking hall space, with 3000 clients/prospects exposed to the branding within Garden Court (average footfall in the Garden Court per week at that time was 1000). Purchased 250 'band of Britain's. They made 2000 lanyards (from recycled plastic) branded for ALL staff within Coutts describing the partnership, team and sustainability (taking part in at least 1 of the 5 sustainable behaviours)



Creating a movement The **#RaisingTheBAR** platform

To raise awareness, inspire advocacy and create ambassadors, we created the ‘#RaisingTheBAR’ platform as the lead message for our creative communication activation, as a way of inspiring a movement to engage and unite team members, partners and followers around a common theme of inspiring excellence in sustainability. This took form in a number of initiatives, to reach different audiences; #RaisingTheBAR Sessions, community engagement projects, Band of Britain and RaisingTheBAR videos.

#RaisingTheBAR sessions

To raise awareness, inspire advocacy and create ambassadors internally as well as in the local community, we created a series of sessions which included; guest speakers, film screenings and activities to engage the team and local community in a variety of sustainability related topics. #RaisingTheBAR sessions, that reached a total of 270 individuals included:

Robert Swan, Polar Explorer

Robert Swan is a polar explorer, environmentalist and the first man ever to walk unsupported to both the North and South Poles. It is through his expeditions and lectures that Swan works to inform, engage and inspire the next generation of leaders to take responsibility, teaching them to be sustainable and know that now is the time for action in policy development, sustainable business generation and future technologies. We hosted 80 attendees in the Bermuda Lounge at the Land Rover BAR team base, being a mix of local community groups, educational institutes, local media, AC teams, stakeholders, Land Rover BAR team members, as well as BDA Government.

Adventures in Meteorology

From microscale America’s Cup forecasting, to millennial-scale climate analyses, we discovered some fascinating revelations about atmospheric predictability, the warming ocean and interactions with hurricane intensity, thanks to Land Rover BAR Chief Meteorologist, Jessica Sweeney and Bermuda Institute for Ocean Sciences, Dr Mark Guishard. 80 attendees from a mix of local community groups, educational institutes and team members attended.



KBB Earth Day beach clean



15 members of the team came together on Earth Day to look after their local beach at Admiralty Cove. We ran snorkel tours through the caves for team and family members and had a great afternoon reigniting our passion for our beautiful local surroundings. Five bags of trash were removed from the beach and surrounding area.

Lionfish permitting course

25 members of the team got licenses to spear lionfish and learn more about invasive species, which are wreaking havoc on the reefs of Bermuda. Through the platform of the 2017 America's Cup in Bermuda, Land Rover BAR and 11th Hour Racing worked together to raise awareness about the global issue of the invasive lionfish species; for the team, this started with taking a course from the Bermuda Lionfish Taskforce, gaining permits to help locals with spearfishing, promoting them as a tasty sustainable food choice.



Global perspectives and solutions for a clean ocean: Ocean Conservancy, Land Rover BAR and Rozalia Project at BUEI



The team joined 11th Hour Racing and Bermuda Underwater Exploration Institute on June 1st for an evening presentation on ocean plastics, featuring Nicholas Mallos, Director of the Trash Free Seas Program at Ocean Conservancy, and Rachael Miller, Executive Director of Rozalia Project for a Clean Ocean and co-creator of the Cora Ball. Approximately 35 attendees.

Whale migration

10,000 humpback whales visit Bermuda annually, and marine debris has been found ingested by 56% of cetacean species. Over 100,000 marine animals die globally from plastic debris in the oceans, which are our playing field. We created a short video to inspire those who couldn't see these majestic creatures for themselves, to try to inspire supporters to make a simple change to protect them: Say 'No' to single-use plastic. 35 team members got to see them in the flesh, thanks to Bermuda Tourism and Bermuda Aquarium Museum and Zoo.

<https://www.youtube.com/watch?v=eS8WpMwtEbo>



Community engagement

It has always been important to the team to integrate with the communities in which we compete, and we were excited to engage with a number of inspiring local projects;

- Sustainability Officer guest speaker at Keep Bermuda Beautiful AGM
- Diver Invasion: Series Premier with Land Rover BAR at John Smiths Bay
- Hosted 50th Anniversary Gala Duke of Edinburgh Awards
- Five public open days in the Exploration Zone
- Team members 'walked the plank' for the Pirates of Bermuda Sloop Foundation Fundraiser
- Eight team members took part in the Bermuda Triple Challenge
- Land Rover BAR Earth Day beach clean at Admiralty Bay
- #EatLionfish Chefs' Throwdown, organised by 11th Hour Racing



Lionfish Project

Marine ecology and conservation is an integral part of the philosophy at both 11th Hour Racing and Land Rover BAR.

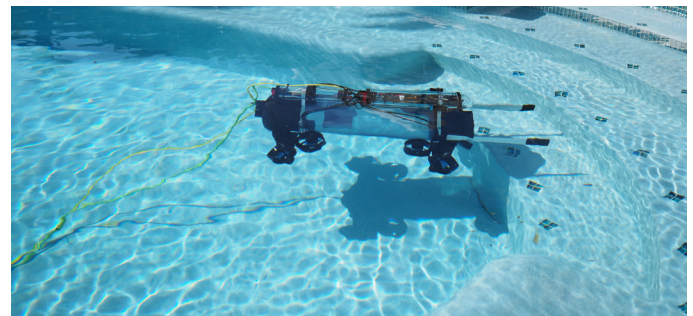
Growing populations of lionfish are increasingly becoming a destructive problem for Bermuda's coral reefs, having no natural predators in those waters with which to control numbers. The invasive species continue to threaten Bermuda's native fish, with an average of 20 fish being consumed in just 30 minutes. Lionfish specifically target populations of herbivorous fish, which consume the algae which restrict coral growth, meaning reduced populations of these fish results in reefs being smothered and dying prematurely. These coral reefs are vital in protecting Bermuda's coastlines from the damaging power of storms and hurricanes, as well as providing huge economic benefits to the island through tourism and both commercial and recreational fisheries; therefore, setting up the Lionfish Legacy Project was of high importance to 11th Hour Racing.



The Lionfish Legacy Project aimed to raise awareness of the threat from this invasive species on both a local and global scale. One of the first activities that Land Rover BAR team members took part in was the Lionfish Permitting Course, so that in their spare time they could assist the local community in capturing lionfish, for Desmond the Chef to cook up in the team’s on site canteen. The 11th Hour Racing Zone at the Land Rover BAR team base in Bermuda provided educational displays about lionfish, highlighting the risks to native fish species, the coral reefs and associated safety of the island. The Exploration Zone also had an Oculus 360 experience, showing visitors actual footage of lionfish within Bermudan coral reefs. The idea of this space within the Zone was to inspire others to drive forward the campaign to sustainably cull the species once 11th Hour Racing and Land Rover BAR had left the island, leaving a positive local legacy to continue on.

Innovation and new technology has provided a possible solution to aid the previously slow culling process. Divers within Bermuda hunted the fish with spearguns, although struggled to reach lower depths where lionfish particularly thrive. Fishermen attempted to capture higher numbers of the species within lionfish traps; however even this has made little impact on the increasing populations. RSE endeavored to help with this problem with the design of their Guardian LF1 underwater robot which was exhibited in the zone. The robot is remotely operated and works by stunning, then capturing lionfish – being able to reach much lower depths. A prototype was successfully tested in Bermuda, enabling mass capture of the species like never before. A crowdfunding campaign was also launched by RISE to support final developments of the robot, with the aim of bringing it to market in scale.

The highlight of the Lionfish Legacy Project was the #EatLionfish Chefs’ Throwdown at the National Museum of Bermuda, focusing on using lionfish as a sustainable food choice. The aim of this event was to promote the diversity of the fish to our visitors, encouraging a higher market demand for the species. The event itself welcomed 196 guests, as well as six top chefs from each competing country in the America’s Cup. The chefs each created their own unique dish, advertising the numerous possible recipes that could be used by the visitors in the future. This event brought together all the teams competing in the America’s Cup around an important environmental issue promoting Bermuda’s position as a leader in sustainable fishing practices.



“Protecting the oceans is one of humanity’s most important challenges,” said Jeremy Pochman, President of 11th Hour Racing. “We need to recognize the vital connection that we all share with this resource that is now under extreme pressure. The ocean connects and sustains all of our continents; more than three billion people globally depend on the ocean for their daily living.”

After a great night of culinary excitement, the winning chef was announced as Land Rover BAR’s representative Chris Kenny, Necker Island’s Head Chef, who was awarded a prize of \$10,000, to be donated to Unite BVI. Land Rover BAR, as the team represented by the winning chef, was also awarded a prize of \$10,000, which was donated to 1851 Trust, the team’s Official Charity.



Media review and achievements

The Lionfish Legacy Project and #EatLionfish Chefs' Throwdown was promoted to Bermuda, US and international media. The media attention meant the schemes gained impressive coverage, with a total media reach estimated at 325.8 million. The Lionfish Legacy Project was also awarded by the Bermuda National Trust, giving 11th Hour Racing credit for the work they achieved while out there – preserving and raising awareness of the island's fragile environment and ecosystems. 40 pounds of Lionfish were used for the #EatLionfish Chef's Throwdown, sourcing the fish from 5 licensed cullers in Bermuda – a further 70 pounds was flown in from Florida for the event.

Total Number of articles : 752 Total estimated reach : 325.8 million
Total estimated ad value equivalent : \$3.6 million

Legacy

Culinary students from Bermuda College assisted the chefs during the #EatLionfish Chefs' Throwdown in an effort to inspire the next generation of top chefs to get involved with sustainable seafood and conservation, and maintain the lionfish-containment momentum following the completion of the America's Cup.

The cooking contest highlighted a new way to cull the lionfish population, by using undersea unmanned robots. With partial funding from Schmidt Marine Technology Partners, Robots in Service of the Environment (RSE) is developing small, cost-effective ROVs that can stun and capture lionfish on a wide scale, and at depths unavailable to sport divers, who traditionally hunt the spiny, venomous fish with spears. RSE is a new nonprofit backed by some of the best minds in robotics and co-founded by Colin Angle, founder and CEO of iRobot and Erika Angle, founder and executive director of Science from Scientists. An early prototype of the robot was used to capture lionfish for the first time in a marine enclosure in Bermuda prior to the cooking competition. 11th Hour Racing engaged local and international organizations who are leading efforts in scientific research and innovation around invasive species:

11th Hour Racing is currently producing a short film about the lionfish legacy project, that will be ready in early 2018 and will be promoted at various film festivals.



Lionfish: Invaders below the surface

11

11TH HOUR RACING



Surface

LIVE IN ALL HABITATS
1m - 300m DEEP
BUT PREFER STRUCTURES
(LIKE CORAL REEFS)

 **18** VENOMOUS SPINES

 CANNOT SURVIVE IN WATER TEMPERATURES BELOW
50° FAHRENHEIT

BECOME SEXUALLY MATURE
< 1 year

EAT AS MANY AS
70 DIFFERENT SPECIES

SPAWN APPROXIMATELY
30K - 40K
EGGS EVERY **3-5 DAYS**




CAN CONSUME
20 fish
IN 30 MINUTES

CAN LIVE UP TO
30 YEARS


 CAN EAT PREY UP TO
1/2 THEIR BODY LENGTH

LIONFISH ARE **INVADING** THE WATERS OF THE EASTERN UNITED STATES, CARIBBEAN SEA, GULF OF MEXICO AND BERMUDA, AND **THREATEN TO TOTALLY DESTROY** REEFS, NATIVE FISH STOCKS AND FISHERIES



 **13in**
NATURAL HABITAT

VS

 **18.75in**
ATLANTIC

0 NATURAL PREDATORS IN ATLANTIC

 DENSITY IN NATURAL HABITAT

VS

 **17X**
DENSITY IN ATLANTIC

THREAT TO CORAL REEF ECOSYSTEMS

AS LIONFISH **DEVOUR FISH** THAT EAT ALGAE, WHICH GROW ON CORALS, REEFS ARE EVENTUALLY **SMOTHERED** AND **DIE**

A SINGLE LIONFISH CAN REDUCE THE FISH ON A REEF BY
80% IN JUST 5 WEEKS



#EatLionfish

Sources: NOAA, Bermuda Underwater Exploration Institute, REEF.org

300m

Band of Britain

The team released a limited-edition supporters wristband, the 'Band of Britain', which was made from recycled ocean plastics developed with 11th Hour Racing and Bionic Yarn. The purpose was to capture supporters imagination and change the way we think about ocean plastics, while supporting the team in the lead up to the Cup.

Band of Britain Stats:



1,100 sold internationally



1,470 purchased by partners & ACEA to engage staff internally and distribute to media / customers. Wristbands were made available to purchase through the 1851 Trust website or win through Land Rover BAR social media



240 Celebs and high-profile people gifted globally



HRH The Duchess of Cambridge wore a wristband to Land Rover BAR Roadshow on Friday 16th June



Call to action for fans to show their support for the team on social media, with fun / passionate photos & videos with #BringTheCupHome

Profits from the sales of the Band of Britain go to the team's official charity the 1851 Trust

Social content strategy and reach

The team created the #RaisingTheBAR platform as a way to host and link a series of creative video and social content to engage and unite team members, partners and followers around a common theme of inspiring excellence in sustainability. Our strategy was to identify team members who could be ambassadors for different themes. For example, Meat Free Monday advocate and sailing team manager, Jono Macbeth worked with the communications team on a feature to promote sustainable food sourcing and supporting local producers. 'Fuelling our sailors' achieved over 9,000 views.

#RaisingTheBAR video reach

- #EatLionfish Chefs throwdown **12,673** views
- Whale watching and ocean plastics **16,351** views
- #RaisingTheBAR using a solar kiln **10,724** views
- Protecting Bermuda from the Invasive Lionfish **17,787** views
- Introducing the 11th Hour Racing Exploration Zone **12,454** views
- Fuelling our sailors sustainably **9,053** views

For links to all video content, can be found in the Appendix



Conclusion

Large scale sporting events present such a unique opportunity to leave a legacy and a positive impact in the communities where they are hosted. While we had a huge amount to achieve in a short time with building the base, setting up a specialist manufacturing facility, training centre, design office and hospitality, we were still very aware of the opportunities. We had access to captive audiences, the platform to influence others, share our experiences and learn from other teams and local NGOs, while minimising our operational impact and ensuring we left a lasting impression beyond AC35.

Sustainability is the one space in sports where we can be truly collaborative rather than competitive. This is evidenced by the multiplied reach of our sponsors through our 'Power of Partnerships' campaign, the collaborative AC35 Team Charter, working closely with community groups on locally sensitive topics and global online engagement through the #RaisingTheBAR platform. Sport has a unique way of pulling people together, and we will take to the next campaign that when we work together we can increase our impact, learn quicker and achieve so much more.





One of the best ways to truly understand the team's achievements was through getting the local's perspective of Land Rover BAR's activities in Bermuda. Anne Hyde, the Executive Director of Keep Bermuda Beautiful, the charity organisation missioned to keep the island and its waters clean and healthy, summed up her thoughts;

“Although a relative late-comer to set up their base in Bermuda, Land Rover BAR impressed us all by the way they arrived, set up their base in Dockyard and were involved in sustainable education in the community within a matter of days. It was obvious that a lot of advanced planning and groundwork had taken place to make this appear, not only seamless, but lightning fast. Most of Bermuda operates on “island time” where things get done slowly. So Land Rover BAR's speed and efficiency were very noticeable - a breath of fresh air.

This was a big opportunity to push the Island forward to adopt new sustainability measures that would last beyond the sailing event. Now was the golden opportunity because one of the teams had a Sustainability Manager and was ISO-compliant. We could learn so much from direct exposure to this level of expertise - and we did.

It was exciting to watch Land Rover BAR construct a team base that could be dismantled and flat-packed and shipped back to Portsmouth. The 11th Hour Racing Exploration Zone was a fantastic way to deliver experiential environmental education for so many local students. I thought the evening lectures were equally appealing for adults.

When it came time to deconstruct the AC Village, the team was extremely proactive by circulating a list of items available for donation. KBB was the happy recipient of some of the carpet tiles and four of the solar panels.

From my perspective, Land Rover BAR and 11th Hour Racing set a great example of sustainability excellence while in Bermuda - a new benchmark for our Island. Thank you! ”

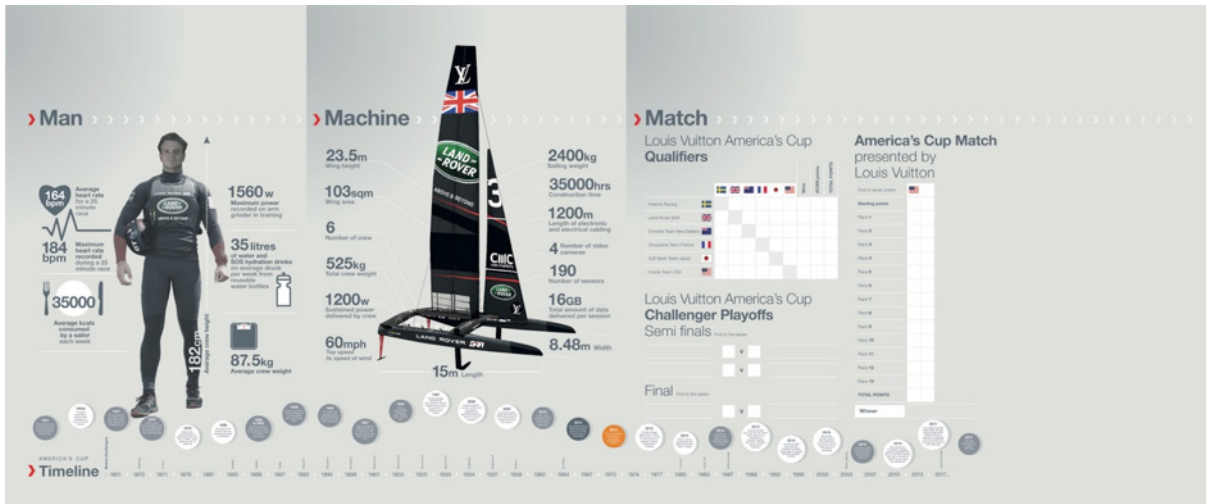
Thank you's

Our activities in Bermuda could not have been achieved without special thanks to the following groups who welcomed and supported the team throughout their unforgettable stay in Bermuda, along with many more of our partners and suppliers who supported the team from home.

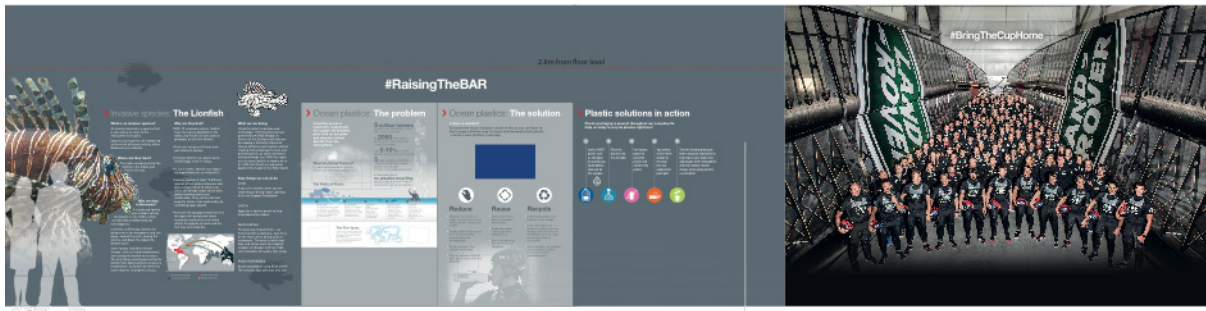
11th Hour Racing
1851 Trust
5 Gyres
Aberdeen Standard Investment
ACBDA
ACEA
BE Solar
Bermuda Aquarium
Bermuda College
Bermuda Government
Bermuda Lionfish taskforce
Bermuda Tourism Authority
BIOS
Blue Marine Foundation
BT
BUEI
Coutts
Design Unlimited
Digicel
ELG Carbon Fibre
Exploration Zone volunteers
Greenrock
Groundswell
Guardians of the reef
Jessica Meredith
Keep Bermuda Beautiful
Land Rover
Living Reefs
Low Carbon
MDL
NPEC
Ocean Support Foundation
Portsmouth Institute for Marine Sciences
Prism
RSE
Saildrone
Schmidt Marine Technology Partners
Schmidt Ocean Institute
Seabin Pty
Seafood Watch
Sloop Foundation
Southampton Marine Services
The Eliza Dolittle Society
The Stempel Foundation
Wadsons Farm

Appendix

11th Hour Racing Exploration Zone graphics and imagery



Exploration Zone - long inside wall



Graphics applied to front of 2, freestanding 'wing' displays



#RaisingTheBAR video links

- #EatLionfish Chefs throwdown - 12,673 views
<https://www.youtube.com/watch?v=WxgYwiKu7O8&t>
- Whale watching and ocean plastics 16,351 views
<https://www.youtube.com/watch?v=eS8WpMwtEbo>
- 11th Hour Racing Exploration Zone - Target Bermuda 261 views
<https://www.youtube.com/watch?v=OV099ofzBF4>
- #RaisingTheBAR using a solar kiln 10,724 views
https://www.youtube.com/watch?v=zXN_Qs3tEAA
- Protecting Bermuda from the Invasive Lionfish 17,787 view
<https://www.facebook.com/LandRoverBAR/videos/1200805750038092/>
- Introducing the 11th Hour Racing Exploration Zone 12,454 views
<https://www.youtube.com/watch?v=EKGgqm3kv7Y>
- Fuelling our sailors sustainably 9,053 views
<https://www.youtube.com/watch?v=-Co2iqWp4nI>
<https://www.youtube.com/watch?v=ICm8Nb2ed50>

Power of Partnerships Campaign

POWER OF PARTNERSHIPS

At Land Rover BAR we take our position as a role model in society seriously. If we are going to help combat climate change and reduce our global emissions by 80% (by 2030), we need to act fast and work together.

We have identified five key areas that are some of the biggest factors to climate change and each week of the America's Cup will be focussing on a different area.



W/C 22 MAY:

Say 'No' to single use plastics

At least 8 million tonnes of plastics leak into the ocean each year – which is equivalent to dumping the contents of one garbage truck into the ocean per minute. If no action is taken, this will increase to two per minute by 2030 and four per minute by 2050.



W/C 29 MAY:

Meat free Mondays

The livestock sector is responsible for 18% of global greenhouse gas emissions, which is a higher share than transport.



W/C 5 JUNE:

Sustainable Seafood
(to coincide with World Oceans Day on 8th June)

70% of the world's fisheries are exploited, overexploited, or have already suffered a collapse



W/C 12 JUNE:

Promoting and using renewable energy

Fossil fuel use is one of the primary drivers of climate change, and is the primary source of CO2 emissions globally – the most prevalent greenhouse gas.



W/C 19 JUNE:

Recycling products and waste

(to tie in with the end of the Cup)
Our current system of production, consumption and disposal has become unsustainable. By reducing the amount of rubbish produced and reusing existing materials, we can all make a difference.

Ahead of each week we will send you a digital toolkit for you to use on your channels and share with colleagues and suppliers to help us spread the word and raise awareness.

Through the power of partnerships we can spread the word and get our voice heard

#RaisingTheBAR

landroverbar.com/sustainability

LAND ROVER BAR

TEAM SUSTAINABILITY CHARTER FOR THE 35th AMERICA'S CUP

BETWEEN:

1. Artemis Racing
2. Emirates Team New Zealand
3. Groupama Team France
4. Land Rover BAR
5. ORACLE TEAM USA
6. Softbank Team Japan

BACKGROUND:


As teams participating in the 35th America's Cup we recognise the opportunity we have to set new benchmarks across both the sport and marine industry. As teams we are committed to leaving a positive legacy engaging with our fans and partners wherever we compete.

We support this 35th America's Cup team sustainability charter and will use our reasonable endeavours to implement it and embrace the ethos of the charter.


COMMITMENTS:

1. **Eliminating single use plastics**
Ocean plastics is an increasing problem and we see the opportunity and message we can convey by committing to identifying opportunities to eliminate single use plastics. We will provide our teams with refillable hydration bottles, avoiding single use plastic drinks bottles.
2. **Maximise reuse and recycling**
Participating in events and setting up temporary bases can produce waste. We are committed to identifying opportunities to reduce our waste as far as reasonably possible. We are committed to identifying opportunities to reuse packaging and other materials and to recycle waste, where local recycling facilities are available.
3. **Conserving water**
We are committed to identifying opportunities to conserve water where reasonably possible, particularly in the launch and retrieval of boats. Where possible, we will use water saving water butts and minimise the water used for boat wash down. Where possible, we will use rain water for the wash down of our boats.
4. **Avoiding water pollution**
We are committed to identifying opportunities to protect the waters in which we sail. Where possible, we will use environmentally friendly cleaning fluids for our boats, ensure safe refuelling procedures and ensure spills kits are available on board support boats.
5. **Reducing our energy/ carbon impact**
We recognise that through the base, our travel and transport, boat construction and the fuel used in vehicles and support boats, we consume energy and have a carbon impact. We are committed to understanding our carbon footprint and identifying opportunities to reduce this, for example, through efficient use of resources and material and product choices. We are committed to identifying opportunities to reduce our electricity consumption.
6. **Protecting marine habitats**
We are committed to identifying opportunities to minimise the risk that our boats and safety boats harm the marine environment. We will not knowingly anchor in areas of fragile marine habitats.

11th Hour Lionfish Infographic



11TH HOUR RACING




Monterey Bay Aquarium
Seafood Watch

WHITE, BUTTERY MEAT
CAN BE PREPARED IN A VARIETY OF WAYS

↑ HEART HEALTHY
OMEGA-3 FATTY ACIDS

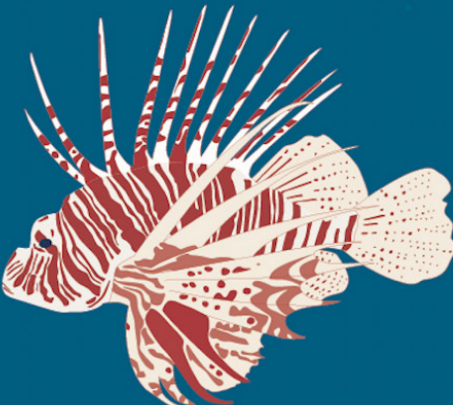
↓ SATURATED FATS
& HEAVY METALS

 **SEAFOOD WATCH
BEST CHOICE**
DOWNLOAD THE APP

THE MEAT IS PERFECTLY **SAFE TO EAT**,
18 VENOMOUS SPINES ARE USUALLY **REMOVED**.

#EatLionfish On Earth Day

(& Everyday)*



THREATEN
NATIVE FISH & THE ENVIRONMENT

REDUCE FISH ON CORAL REEFS BY
80% IN 5 WEEKS

0 NATURAL PREDATORS
IN ATLANTIC

SPAWN APPROXIMATELY
30K - 40K
EGGS EVERY **3-5 DAYS**

LIVE IN ALL HABITATS
1m - 300m DEEP

EAT 'EM TO BEAT 'EM

When you eat lionfish, you help prevent the spread of invasive species & protect native ecosystems.

*Ask for lionfish at your local restaurant & fishmarket

Band of Britain

Wear the **BAND OF BRITAIN** to support Britain's America's Cup Challenge



#BRINGTHECUPHOME



LAND ROVER **BAR**

Wear the Band of Britain and support Ben Ainslie and the team's bid to bring the America's Cup home and take action against ocean plastics.

The Band of Britain is a limited edition supporter's wristband, made from recycled ocean plastics developed with the team's exclusive Sustainability Partner 11th Hour Racing and Bionic® Yarn.

The 35th America's Cup is the oldest trophy in world sport and Britain has never won it!





@LandRoverBAR

To join in, share a pic or video with your support message to @LandRoverBAR with #BringTheCupHome

By 2050 there will be more plastic than fish in the ocean - help be part of the solution

Proceeds from the sales of the Band of Britain will go to the team's official charity the 1851 Trust.

landroverbar.com/BandofBritain

SUPPORTED BY



SUPPORTED BY



IN AID OF



LAND ROVER **BAR**

BERMUDA 2017 SUSTAINABILITY REPORT



#RAISINGTHEBAR

To keep up to date with our latest sustainability news, please visit landroverbar.com/sustainability.html

All enquiries, comments or suggestions related to the sustainability report should be directed to sustainability@landroverbar.com