11TH HOUR RACING

SAILING TEAM

#OCEANHOUR

2019

11TH HOUR RACING TEAM SUSTAINABILITY REPORT

11TH HOUR RACING TEAM

2019 SUSTAINABILITY REPORT FOREWORD

Welcome to the first annual Sustainability Report for the 11th Hour Racing Team.

April 1, 2020

Our mission is to win The Ocean Race 2022-23 with sustainability at the core of all team operations, inspiring positive action amongst the sailing community, within coastal communities, and with global sports fans to create long-lasting change for ocean health. We will accelerate change by combining sporting excellence in sailing, ocean advocacy, and sustainable innovation.

The initial Team management structure was created in February 2019, and this first year has been focused on building a team, engaging our key stakeholders, and putting in place sustainability plans and operational strategies that will dictate how we lead over the next three years of the campaign.

A key decision for the Team to base our operations in Brittany, France has placed us at the center of the marine industry hub: this decision can be defined simply as efficiency. It has improved the Team's performance by creating new partnerships, given access to specialist skills and knowledge base in the offshore sailing industry, improved our allocation of resources, optimized timelines and improved deadlines, reduced supply chain transport distances, provided access to skilled local labor, and generated an overall reduction in all associated environmental impacts.

This simple, yet vital, decision to place the Team at the center of the marine community provides us with the best opportunity to promote sustainable change from the inside.
The creation of the 11th Hour Racing Team sustainability strategy saw the establishment of an internal Sustainability Department featuring a three-person team of a Sustainability Manager, Sustainability Officer and Sustainability Intern.

The sustainability team's ongoing work also includes a transfer of knowledge, passion, learnings and data to our entire sailing team from onboard crew to shore team and support staff.

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We'd like to thank our sustainability team for their efforts on this Annual Report with the hope and expectation it provides information as reader-friendly and as transparently as possible. As CEO and Skipper of 11th Hour Racing Team, the responsibility ultimately falls to us to run a campaign that embeds sustainable operations while also committing to our four Guiding Principles aligned with the UN Sustainable Development Goals:

- Be **leaders** advocating for ocean health, climate action and sustainability within the industry, communities and fan base.
- Develop **innovative solutions** to responsibly manage resources, applying circular economy principles to material needs, as well as reducing water and climate footprints, and becoming water neutral and climate positive.
- **Collaborate** with partners to create sustainable solutions, minimizing the environmental footprint across spheres of influence, including aiming for zero waste to landfill and implementing a ban on single-use plastics.
- Leave a lasting **legacy** by inspiring others to make changes - one degree at a time - including a community outreach program, internships and grant-giving

The team's Sustainability Program contributes towards the achievement of 13 of the UN Sustainable Development Goals, the nine objectives of the World Sailing Agenda 2030 and the five principles of the UNFCCC Sports for Climate Action Framework.

The challenge now for the Team is to find scalable solutions within the marine and sporting industries. Looking forward, we need to transfer our expertise and knowledge so that solutions become embedded within the industry both at an operational and policy level. The added challenge of COVID-19 restrictions has slowed down our collaboration at multiple levels, but also presents an opportunity to build a new form of business resilience.

We couldn't do it without a great team of supporters around us, in particular our sponsor, 11th Hour Racing.

Charlie Enright,
Skipper, 11th Hour Racing Team

Mark Towill,
CEO, 11th Hour Racing Team

2019 SUSTAINABILITY HIGHLIGHTS

Established base in Brittany, France

Showcased high-level sporting achievements with 3rd place in the Défi Azimut Challenge and 4th place in the Transat Jacques Vabre

Officially launched the Team on September 4, 2019

7

Worked with seven official sponsors and suppliers on various sustainability initiatives from mono-material clothing to recycled eyewear, ropes and refillables to supply chain mapping and grantee identification

63

Diverted 63% of trash from landfill

Calculated carbon footprint of the Team's operations,, totalling 537 Metric Tons Carbon Dioxide equivalent (CO2e)

Published the Team's Sustainability Policy on October 24, 2019 which outlines our vision, mission, strategy and target areas

Waste footprint totalled half a tonne, 63% (327 kg) diversion from landfill
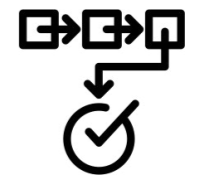
Produced a set of 4 Principles, 12 Goals and 73 Targets that are mapped to the UN Sustainable Development Goals and World Sailing Agenda 2030

Good Food Guide and sustainability clauses for supplier and staff contracts.

Calculated embedded water footprint of the Team's operations, totalling 35m litres Embedded Water (EmH20)

Implemented key planning aspects for team operations including: Sustainable Sourcing Code,

18

18 sustainability onboarding sessions completed, including 100 'first action' pledges detailing ways the Team will go about embedding sustainability within their roles

Five speaking engagements reaching 655 people

2

Two Grantees appointed, with youth education projects planned

Engaged internally through the creation of The Hub, a dashboard site to host the Team's sustainability inductions, latest sustainability news, interactive learning opportunities, sustainable stopover guides and quick links to tracking documents, templates, and through the creation of #OceanHour Sessions as a Team and partner training platform

Reached a global audience through our social media, digital and PR output with 1.23m social media impressions, 141k social media engagements, 1,089 articles published with a 591m aggregate reach

Life Cycle Assessment of the deck mock-up completed

Commissioned study on biocomposites and alternative materials

12

Initiated 12-month internship program

3

Three Sustainable Design and Build workshops held/attended in Concarneau, Genoa and Le Havre with MerConcept, Guillaume Verdier Design, Kairos and CDK Technologies with the purpose of bringing all stakeholders together to share vision, create common goals, and plan next steps

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INTRODUCTION

This is the first annual Sustainability Report of 11th Hour Racing Team, the high-performance offshore sailing team, based in Newport Rhode Island, USA. This report details the Team's progress in 2019, its first year of operation.

American offshore sailors Charlie Enright and Mark Towill have competed in the two previous editions of The Ocean Race (formerly The Volvo Ocean Race) using the round the world sailing race in 2017-18 as a platform to promote ocean health and sustainability. The Team returns to the next edition of The Ocean Race (in 2022-23) with the objective to win The Ocean Race Trophy with sustainability embedded throughout all aspects of the campaign, promoting the message that performance and sustainability can go hand-in-hand.

11th Hour Racing Team (the Team) is managed by 1 Degree, LLC of 251 Little Falls Drive, Wilmington, Delaware, 19808, United States.

Supported by title sponsor 11th Hour Racing, the Team have established a training location in Port-la-Forêt, France, where they have been training in their second-hand IMOCA 60, which has been refitted in Vannes, France. The Team are building a new IMOCA 60 to compete in The Ocean Race 2022-23 with designers based in France, and boatbuilder CDK Technologies in Brittany. The Team owns a number of portacabins and a tent as temporary bases, storage and workspaces. The Team consists of the sailing, shore and management teams, a number of whom work remotely during the Team's early phase, or are on-site/onboard for specific events.

> *GRI Disclosures:*
> *102-1 - Name of the organization*
> *102-3 - Location of headquarters*
> *102-4 - Location of operations*
> *102-51 - Date of most recent report*

THE OCEAN RACE

Since 1973, The Ocean Race has provided the ultimate test in team sailing and human adventure. With few sporting rivals over four decades, the event has held an almost mythical status for some of the greatest sailors ever on the planet.

The 2022-23 Ocean Race will consist of nine offshore legs. Following a Prologue event in September 2022, the race will start from Alicante, Spain in fall 2023. The 38,000 nautical mile race around the world will include stopovers in Cabo Verde (POR), Cape Town (South Africa), Shenzen (China), Auckland (New Zealand), Itajai (Brazil), Newport (USA), Aarhus (Denmark), The Hague (Netherlands) with the grand finale in Genoa (Italy).[1]

Bringing together the world's best ocean sailors, The Ocean Race is a world-class sporting event that is followed by millions of fans and sits squarely at the intersection of sport, technology, nature and adventure. A designated onboard reporter with each team provides high-quality digital footage allowing fans to follow the racing and teams during the nine-month long marathon.

Figure 1: The Ocean Race 2022-23 Route Map

THE TEAM

The Team was conceived by Charlie Enright and Mark Towill. The success of their previous campaigns are highlighted in the final report here.

- Team Alvimedica 2014-2015
- Vestas 11th Hour Racing 2017-2018

Vestas 11th Hour Racing pioneered an integrated approach with the inclusion of sustainability at the center of an Ocean Race campaign. The Team achieved many successes including:
- Showcasing sustainability to the ocean racing and sports community
- Establishing a benchmark for an Ocean Race team greenhouse gas (GHG) footprint (1402tCO2e)
- Supporting the work of 11 organizations worldwide with grants from 11th Hour Racing worth $110,000
- 313+ million media impressions promoting ocean health #leadingsustainability
- Over 100,000 visits to the Exploration Zone and team operations
- Compensating for the Team's environmental footprints, GHG, waste and water consumption, thereby transitioning towards environmental footprint neutral operations

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[1] The Ocean Race Notice of Race

SCOPE

In preparation of the 2019 Sustainability Report, the Team consulted key internal and external stakeholders. This report covers both topics that are of material importance and also, further topics of interest to interested parties. The reporting period for the Team's annual report is the calendar year of 2019. Questions regarding this report can be sent to sustainability@1degree.us

The sustainability program scope applies to all activities carried out by 11th Hour Racing Team. The boundaries of responsibilities of the Team include all products, services and infrastructure procured during the campaign, all activities at its construction and training base; and all its directly managed operations as the Team attends events leading up to and including The Ocean Race 2022-23.

The Team's major activities in 2019 that required particular focus from a sustainability point of view include:

- The purchase of a second hand IMOCA 60 training boat (known as 11.1) and a chase boat
- The design of a new IMOCA 60 race boat: '11.2'
- Competing in the Transat Jacques Vabre
- Set up of temporary base containers in Port-la-Forêt, France
- Staff travel in and out of France and to conferences
- Sourcing and shipping of materials
- The build of 11.2 deck mock-up at CDK
- Technologies in France
- The refit of 11.1 at Multiplast in France

GRI Disclosures:
102 - 46 Defining report content and topic boundaries
102 - 50 Reporting period
102 - 52 Reporting cycle
102 - 53 Contact point for questions regarding the report

Team Principals, Mark Towill and Charlie Enright sign the Team's Sustainability Policy in October 2019.

VISION, MISSION AND STAKEHOLDERS

During 2019, the Team and key stakeholders worked together to produce and refine the campaign vision, mission, values and principles. All Team members collaborated on the creation of these, which were approved by the Team principals and title sponsor ahead of the publishing of the Sustainability Policy one month after the official team launch in September 2019.

Over eight months, from the Team's conception to the public sharing of the policy, the management and sustainability teams and title sponsor mapped the activities, risks, and opportunities of the campaign and key interests and messages of the title sponsor, in the form of biweekly sustainability meetings and biweekly all team meetings. The risks and opportunities identified were then consolidated into 12 goal areas, under four principle headings and broken down into 74 overall targets.

18 sustainability inductions were completed with team members, to capture their support and feedback for the goals. Each team member selected at least four goals they were particularly interested in working on, which were given a rating. This has helped direct our sustainability strategy and focus of resources. Team members also had the opportunity to highlight any missed areas of importance, discuss where their roles, responsibilities and interests within the program could lie, and what their first actions in support of the program would be.

The sustainability team then co-created a 'Stakeholder Discovery' process with one of their suppliers: North Sails. The purpose in this context was to understand their strategies, to align with sustainability target areas, to identify any risks or opportunities that had been missed and to note potential joint initiatives and workstreams. The Team's Stakeholder Database captured the support for the goals and the allocation of resources. As new suppliers and partners continue to join the program, the priorities will be reassessed regularly.

Team training on the organization's values, principles, standards and norms of behavior is available in English, and signed up to by all new team members (long or short term) and reaffirmed throughout the term in line with the internal engagement plan. The delivery of the vision, mission and values ultimately lies with the Co-Founders and COO, and is supported by the entire team.

GRI Disclosures:
102-16 Values, principles, standards, and norms of behavior
102-40 List of stakeholder groups
102-42 Identifying and selecting stakeholders
102-43 Approach to stakeholder engagement

The Team's stakeholders have been mapped and grouped as follows:

Figure 2: Stakeholder Map

The stakeholder mapping tool example below helps the Team assess the best approach in managing the engagement of individual partners and suppliers:
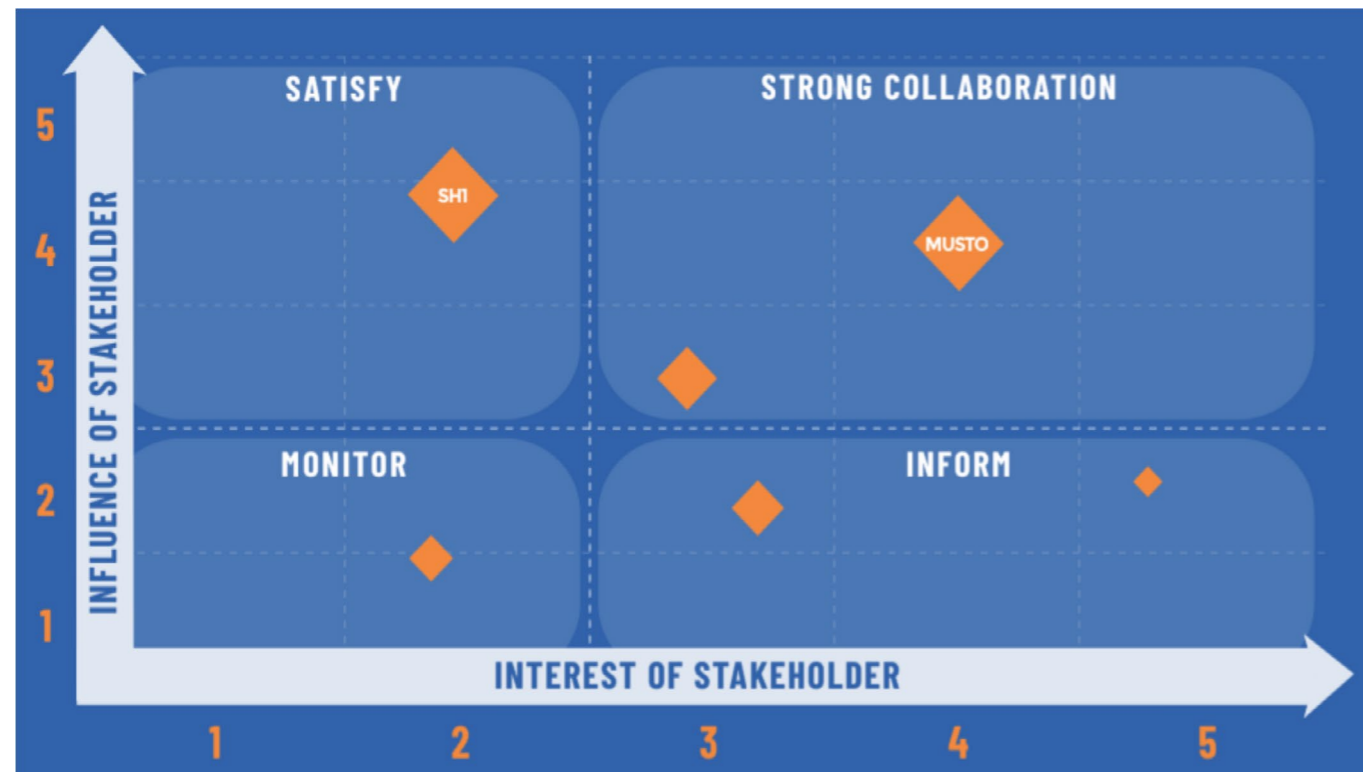

Figure 3: Stakeholder prioritization

To assess the relative importance of each stakeholder to the Team, a rating matrix was used:

- Stakeholder influence (1-5)
- Stakeholder interest (1-5)
- Stakeholder level of responsibility within the supply chain (1-4)

Level of influence x level of interest x level of responsibility = level of importance (1-100).

Prioritizing stakeholders is not a one-off process, but continuously evolves. As new partners join or as spend increases or decreases the prioritization will change.

The initial Stakeholder Discovery process gives the Team an understanding of the key areas of importance within the Team and stakeholder relationship and how they relate to the Team's sustainability goals. Feedback provided during the process directly influences the Team's key areas of focus within the sustainability strategy.

Some of the key topics of concern raised by Team stakeholders are outlined below. The table is not exhaustive, but presents a selection of the most frequent concerns.

Table 1: Topics raised by stakeholders

TOPICS RAISED	RESPONSE TO FEEDBACK
Potential performance loss when including sustainable alternative materials in 11-2 design and build	• Conduct materials research study to understand alternative material properties and environmental savings • Work with Class bodies to incentivize any loss in performance by making sustainable choices
End of life options for boat build materials (ie. deck mock up and carbon offcuts)	• Conduct a review of carbon fiber recycling options • Work with suppliers and sub-contractors to understand design-for-a options
How to embed life cycle assessment (LCA) and circular economy (CE) principles within yacht manufacturing	• Work with and support the development of a marine industry LCA tool with local stakeholders • Establish a program of educational workshops to focus on CE principles. • Set up a collaborative design and boat build working group to address this, with regular meetings and workshops. • Target high priority partners to develop CE and LCA initiatives, such as remanufacturing programs, packaging take-back schemes, projects to extend useful life of products
Gender equity, inclusion, and diversity in sailing	Address through: • Internship program • Youth mentorship concept • Grant legacy program

The following vision, mission, definition of sustainability, values, principles, campaign message and themes are a result of the extensive period of stakeholder engagement described above.

Table 2: Vision, mission, definition, values and principles

VISION	Vibrant, healthy oceans and communities supported and inspired by the sport of sailing.
MISSION	11th Hour Racing Team's mission is to win The Ocean Race 2022-23 with sustainability at the core of all Team operations, inspiring action amongst sailing & coastal communities as well as global sports fans to create long-lasting positive change for ocean health. We will accelerate regenerative change through sporting excellence in sailing, ocean advocacy, and sustainable innovation.
DEFINITION: SUSTAINABILITY	We view sustainability as the intrinsic balance between the social, economic and environmental aspects of our every day actions, which respects the world's oceans, natural resources and the needs of current and future generations. We believe that sustainability requires intergenerational empathy: our collective actions today will ensure healthy communities, prosperous economies and a thriving planet for future generations.
VALUES	The core values of Transparency, Sustainable Innovation, Integrity, Inclusivity and Marine Stewardship underpin how the Team operates. These values will be tracked in our Sustainability Reports which will outline key impacts, identify areas of improvement, and inform best practices that will be shared with industry stakeholders, and ocean sport and marine communities to inspire similar action.
PRINCIPLES	**Leadership:** We lead by advocating for the ocean health and climate action within the industry, communities and fan base **Collaboration:** We engage stakeholders to create sustainable solutions, minimizing the environmental footprints across the spheres of influence **Legacy:** We leave a lasting legacy for future generations by inspiring others to make changes - one degree at a time **Innovation:** We explore and develop innovative solutions to manage resources, while promoting the shift to a sustainable marine industry
CAMPAIGN COMMUNICATIONS - CORE MESSAGING	'What's under the surface connects us all' — from the oxygen we breathe to the food we eat to the stability of our climate — we only thrive when our ocean thrives. But human impact — from the climate crisis to plastic pollution to the decline in biodiversity — has driven the planet to a critical moment in time. The clock is ticking. This is the #oceanhour.
CAMPAIGN COMMUNICATIONS - SUPPORTING THEMES	Ocean health themes: • Marine debris • Sea level rise • Ocean acidification • Biodiversity

STRATEGY

Mark and Charlie's long-term commitment to developing sustainable improvements in the marine industry is demonstrated by the unique eight-year time span across three Ocean Race campaigns. Establishing new benchmarks for each subsequent cycle, allows the Team to define marine industry standards; inform clear strategies for action; and set ambitious new sustainability targets. The result is a loop of continual improvement spring-boarding from one campaign to the next.
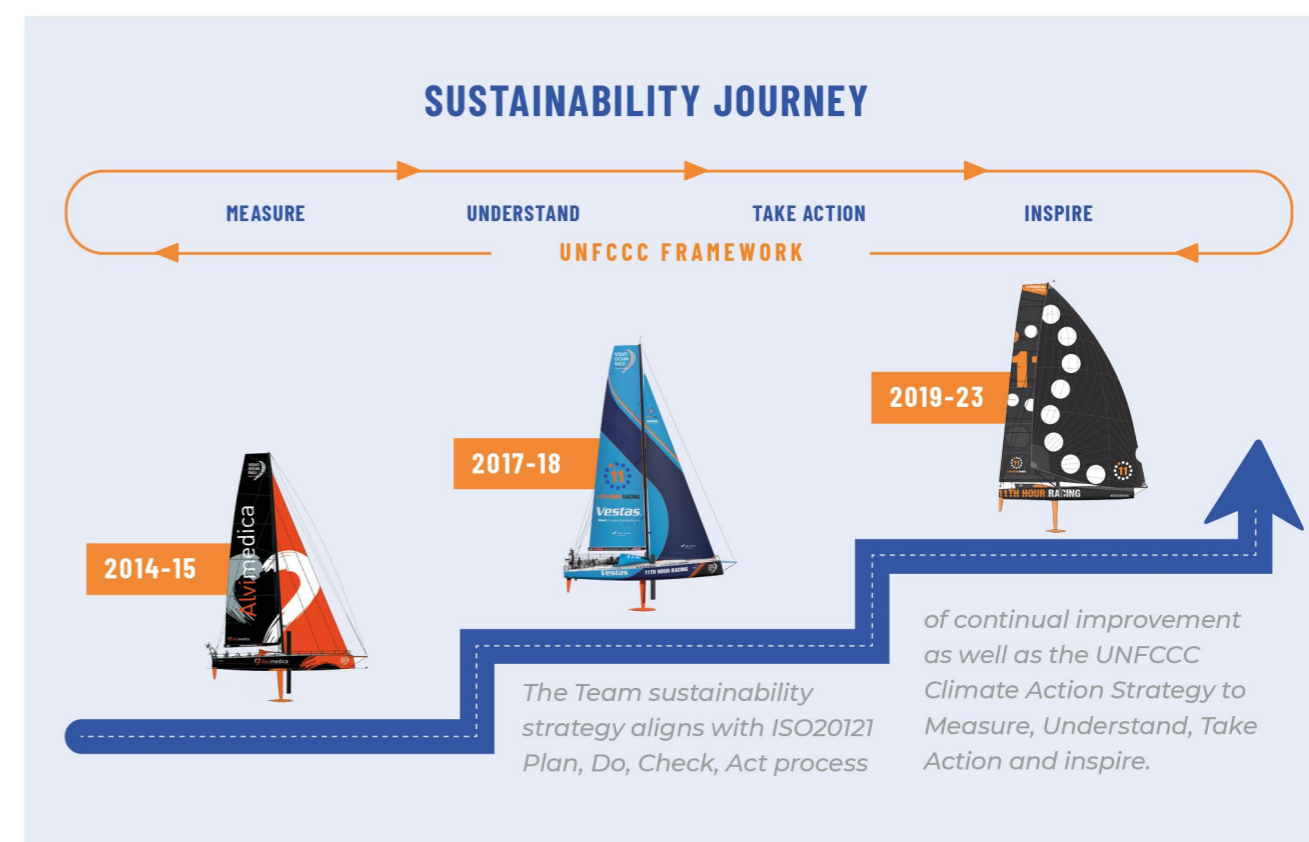

Figure 4: Strategy

ORGANIZATIONAL STRUCTURE

1 Degree Marine, the management company, is responsible for the full operation of the campaign. The campaign is supported by 11th Hour Racing, title sponsor and financial stakeholder. The decision-makers are the 1 Degree Marine management team and the title sponsor. Governing bodies include The Ocean Race and World Sailing. The Team must comply with the baseline sustainability requirements set out by The Ocean Race Team Sustainability Charter, and World Sailing's Agenda 2030, which is referenced within the Team's goals.

The operational team name is 11th Hour Racing Team. As the campaign progresses from venue to venue through the various phases of the term, the Team size and structure will evolve to include:

- Team: 20-25 Full Time Equivalent (FTE) staff; 3-6 part-time staff
- External boat design and boatbuilding services; other contractor and consulting services

The Team's Sustainability Management System is designed to conform with the ISO20121 standard, and the contents of this document correspond with the relevant clauses of ISO20121.
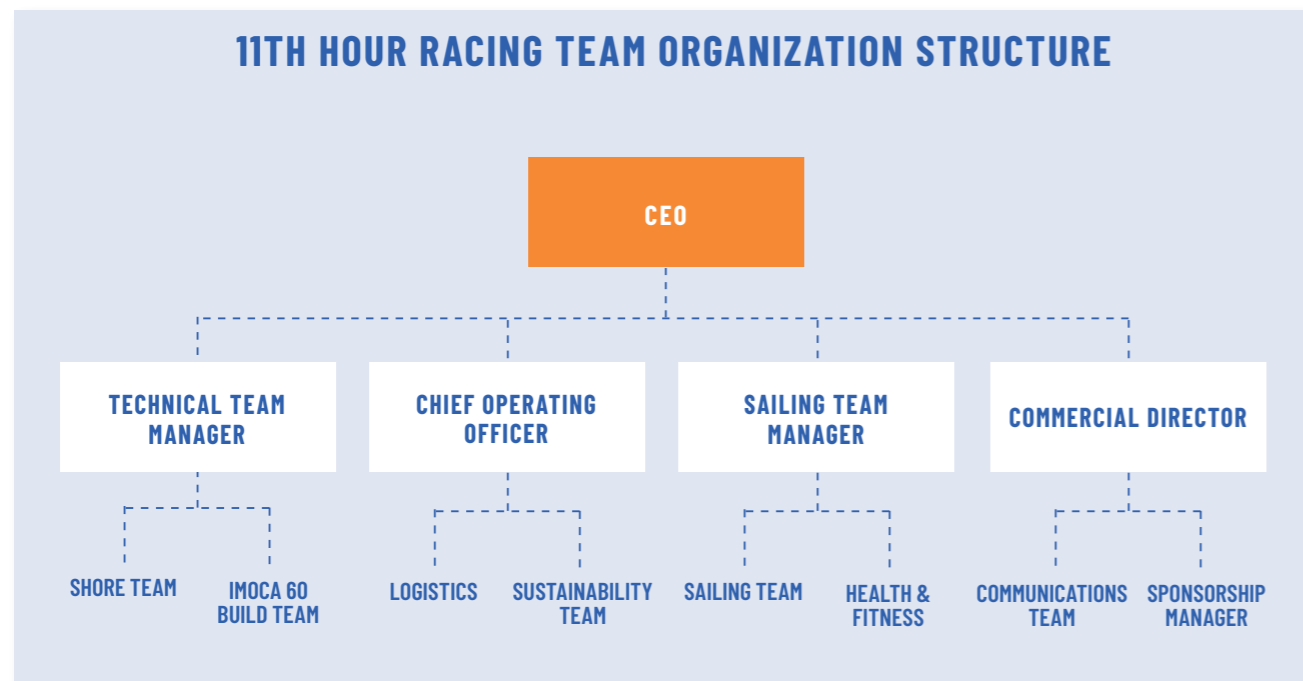
11TH HOUR RACING TEAM ORGANIZATION STRUCTURE

```
                              CEO
        ┌──────────────┬──────────────┬──────────────┐
TECHNICAL TEAM   CHIEF OPERATING   SAILING TEAM    COMMERCIAL DIRECTOR
  MANAGER          OFFICER          MANAGER
   ┌───┴───┐      ┌───┴───┐        ┌───┴───┐        ┌───┴───┐
 SHORE  IMOCA 60  LOGISTICS SUSTAINABILITY SAILING  HEALTH &  COMMUNICATIONS  SPONSORSHIP
 TEAM   BUILD TEAM          TEAM      TEAM   FITNESS    TEAM       MANAGER
```

Figure 5: Governance structure

2019 EMPLOYMENT CONTRACT	TOTAL	REGION
Long-term	12	France, USA, UK, Australia, New Zealand
Short-term	12	France
Total	24	

Table 3: Employment breakdown

GRI Disclosures:
102-8 - Information on employees and other workers
102-18 - Governance structure

ISSUES IDENTIFICATION

Mapping out the Team's activities and assigning the sustainability issues, risks and opportunities that might arise as a result is a key part of the early development of the Team's sustainability management system. The activities and issues will be reviewed annually by the management team, and dictate the Team's targets and areas of priority.

ISSUES

These are the sustainability issues that 11th Hour Racing Team identified across our five key areas of activity: design and build, sailing, operations, outreach and partnerships.

PARTNERSHIPS	DESIGN & BUILD	SAILING	OPERATIONS	OUTREACH
Sponsorship and stakeholder management, hospitality	*Hull, appendages, sails, rigging, systems, supply chain*	*Training, deliveries and participation in The Ocean Race*	*Logistics, shipping, travel, temporary bases, transport, employment*	*Community outreach, communications and legacy*
Sustainable sourcing	Environmental footprint - C02e, H20e, Waste	Accessibility, diversity, inclusion	Accessibility, diversity, inclusion	Fan behavior change
Fan behavior change	Health, safety, wellbeing	Environmental footprint - C02e, H20e, Waste	Environmental footprint - C02e, H20e, Waste	Product and service costs
Product and service costs	Impact on species and habitats	Fan engagement and support	Health, safety, wellbeing	Partner engagement, retention
PR/image	Local employment provider	Health, safety, wellbeing	Local employment provider	PR/image
Performance results	Resource consumption - Energy, water, materials (efficiency)	Impact on species and habitats	On time delivery	Impact on species and habitats
Partner engagement, retention	Sustainable sourcing	Performance results	Performance results	Fan engagement and support
On time delivery	Product and service costs	Pollution	Pollution	Community engagement
Fan engagement and support	Pollution	PR/image	PR/image	Accessibility, diversity, inclusion
Environmental footprint - C02e, H20e, Waste	Performance results	Team training	Product and service costs	
Community engagement	On time delivery		Resource consumption - Energy, water, materials (efficiency)	
Accessibility, diversity, inclusion	Manufacturing processes		Sustainable sourcing	
			Team training	

Figure 6: Activities and issues

The figure below describes the sustainability issues highlighted by stakeholder engagement, mapped to the Team's activities. The issues that present risks alikelihood, severity, compliance history, stakeholder importance and legislative importance. The higher the score, the more significant the issue was rated by stakeholders.

LEADERSHIP ISSUES DEFINED

ISSUE	TOTAL	RANK	RISK	OPPORTUNITY
Health, safety, wellbeing	39	3	Health and safety issues directly affect productivity. Risk of negative PR, legal compliance	Showcase best practice, retain healthy and motivated employees
Team Training	29	11	Underachievement of sustainability goals, poor safety management	Advocates and ambassadors for the Team sustainability goals, encouragement of peers, other sports teams and the marine industry to follow lead. Healthy, safe working environment, reduced staff turnover
Local Employment Provider	28	12	Poor community relationships, bad PR, high travel footprints	Reduced travel footprint, acceptance within community, better relationships and supporter base
Accessibility, diversity & inclusion	27	14	Legal compliance, lack of participation and engagement by cross-section of community, poor PR	Improved and varied skillsets, increased event participation
Fan engagement and support	26	15	Lack of support = reduced ROI to sponsors	Behavioral change, global support, increased sponsorship

COLLABORATION ISSUES DEFINED

ISSUE	TOTAL	RANK	RISK	OPPORTUNITY
Environmental footprint - C02e, H20e, Waste	43	1	Legal compliance, cost, sponsor risk, PR issues from single-use items	Cost savings, compliance, sponsor retention, fostering supply chain relationships and better working practices
Product and service costs	39	3	Budget, cash flow, sustainable options cost too high to justify	Drive costs down for sustainable products by stimulating demand
Sustainable sourcing	38	7	Lack of visibility through supply chain and sourcing leading to welfare, environmental and reputational risks	Through the power of partnerships, aligning goals with suppliers and putting robust sourcing codes in place, the Team can work collaboratively to reach vision faster
Partner engagement, retention	35	8	Cash flow	Partner retention, loyalty

INNOVATION ISSUES DEFINED

ISSUE	TOTAL	RANK	RISK	OPPORTUNITY
On time delivery	39	3	Delays to schedule, reduced training time and competitive edge	Improved supplier relationships, maximize training and tuning time
Manufacturing Process	39	3	Cost and waste through manufacturing inefficiency	Budget reductions and minimizing waste, best practices shared, industry legacy
Resource consumption - Energy, water, materials (efficiency)	31	9	Waste through inefficiency and associated costs, sponsorship deliverables	Innovative use of resources = performance differentiator. LCA identifies impact hotpots and reductions, and sharing of best practices

LEGACY ISSUES DEFINED

ISSUE	TOTAL	RANK	RISK	OPPORTUNITY
Impact on species and habitats	43	1	Oil spill, pollution, carbon emissions, water use	Opportunity to restore habitats through grantee programs, embedding best practices in operations, investing in offsets
PR/Image	30	10	Loss of fans and sponsors	Increase in fans, sponsors, positive engagement, behavioral change amongst followers
Community engagement	28	12	Local barriers, lack of engagement and local support	Improved local relationships, shared value and initiatives, positive PR
Positive behavior change	26	15	Team members and suppliers bringing poor corporate image	Team members and suppliers embrace sustainability and bring into their own businesses and home life, potential to impact behaviors of global fan base

Table 4: Issues, risks and opportunities

GRI Disclosures:
102-15 Key Impacts, Risks and Opportunities

DELIVERING ON PRINCIPLE ONE
LEADERSHIP

LEADERSHIP GOAL 1: CREATE AMBASSADORS

The Team have distilled our issues-opportunities matrix into 4 principle areas with 12 goals and 73 targets. The first principle, Leadership describes how we will lead by advocating for ocean health and climate action within our industry, communities and fan base.

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Foster an inclusive team of diverse, motivated and informed leaders in sustainability.	Building the team	Define the scope of the project; Create a comprehensive Sustainability Plan; Apply the resources to ensure success	●	5.5
		The team is an equal opportunity and disability confident employer	●	4.4
		Under 30 - Team provides opportunity for youth employment	●	10.2
		Employment policy sets a priority on local staffing and services.	●	4.7
	Development and Training	Staff induction ensures that all team have an understanding of Sustainability Principles, Objectives and Targets, their purpose and their role in delivery.	●	4.7
		Team members provided with ongoing professional development and training aimed at increasing their knowledge of sustainable behaviours	●	4.7
		Team members signed Sustainability Charter, defining commitment to champion best practices at all times	●	4.7
	External Ambassadors	Engage with regular public and marine industry speaking engagements	●	4.7
		Support partner sustainability initiatives at every opportunity. Measured through number of initiatives and number attended/supported.	●	17.16
		Team supports ocean education programs	●	4.7
		Each team member will champion one of the Team's goals to communicate to their fan base. Sustainability Team will speak at 4 events per year	●	4.7

● Complete ● In Progress ● Not Started   This goal aligns with World Sailing Agenda 2030 Objectives 1 & 4, and UNFCCC Principle 1

INTERNAL ENGAGEMENT

The purpose of the internal engagement plan is to create ambassadors, ensure that team members have an understanding of Sustainability Principles, Objectives and Targets, their purpose and their role in delivery, to provide team members with ongoing professional development and training aimed at increasing their knowledge of sustainable behaviors, and to encourage the Team to champion best practice at all times. It is the intention for the Team to engage with regular public and marine industry speaking engagements, support partner sustainability initiatives and champion Team goals to their fan base.

The Team's internal engagement plan kicks off with the sustainability onboarding one-on-one session with our sustainability team, triggered once a new team member or full- or part-time contractor comes onboard. The purpose is to introduce the sustainability policies, values, definitions and plans, to receive feedback on the goals, understand what area of the plan the staff member is passionate about or could have an impact on, and to understand what form of communication works best for them.

GRI Disclosures:
404-1 Average hours of training per year per employee

Following the inductions, team members receive communications in the following five formats (top five communications methods voted by team members):

1. #OceanHour Sessions: monthly sustainability-related team and partner socials aimed at receiving informal input into the sustainability plan and progress, to encourage healthy competition, incentivize action, engage local community and where relevant, foster relationships amongst partners
2. Posters: waste/food/sourcing code signage to inform and guide team members on operational processes
3. Verbal updates: short morning meeting updates when on site, on topical operational items
4. The HUB: go-to online platform containing links to all policies and news
5. In addition, professional development and training was delivered on request.

The results of the sustainability onboarding process has allowed the sustainability team to gain insight into the passions and drivers of team members, some of which are reflected below:

Sustainability is a mindset that we should all be applying to our every actions. Sustainability should not be view as a hindrance but as a tool to progress to our work and lives on the short, but also the long term. At home, I'm applying a more vegetarian diet by reducing my meat consumption, and cutting out beef altogether. I also buy more groceries locally grown and organic, and also try to not buy overly packaged products to reduce my plastic use. Recycling is also an easy task to achieve. Travel wise, I've stopped using the plane for short distance flight, preferring train or bus rides to reduce fuel consumption and CO2 emissions.

Cultural change happens when networks of people decide to prioritise different values and learn and re-enforce this behaviour. This often starts with individuals, who work to generate awareness amongst their peers and then spreads quickly when network effects are considered. Industrialization, scaling population growth, and the steady beat of the advancement of technology have been quite "influential" over the past 150 years or so. I'm interested in and curious about how we can effect cultural change related to sustainability and other objectives that effects change at the scale of our population for the next 150 and beyond.

Leadership requires first and foremost that you 'turn up' and be present. To push for change and inspire others you have to go out and do things, spread the message and collaborate.

Sustainability to me is about Ocean health and spreading the message. We have a unique opportunity to reach a very wide audience and we need to maximize it!

To me sustainability is about educating the population about the importance of making conscious choices that will ultimately have a positive impact over time on the environment. I'm trying to do the basics consistently such as using my reusable water bottle and shopping bags and hope to improve at my decision making to reduce my carbon footprint.

I want significant change

I spend a lot of time outside, at sea, or in the mountains. seeing the human path in those areas is not normal: the planet is our playground but don't leave any footprint!!

I have a responsibility, as a storyteller, to use my professional capabilities to educate and inspire people to do what they can, and understand the significance of their ability to make real change - and the importance of doing it now. It is my responsibility, as a storyteller, to create role models for the next generation. And as a passionate sailor and ocean enthusiast, I also want to use this platform and our partnerships to positively influence our industry partners who have a far greater reach, and in many ways a more lasting legacy. We may only last this campaign, but companies like Musto are potentially around for a lot longer...

Figure 7: Team quotes from induction process

In 2019, 18 Sustainability Onboarding Sessions have been completed, confirming that all team members understand, provide input and sign on to the Team's sustainability charter and mission, and commit to a set of 'first actions'.

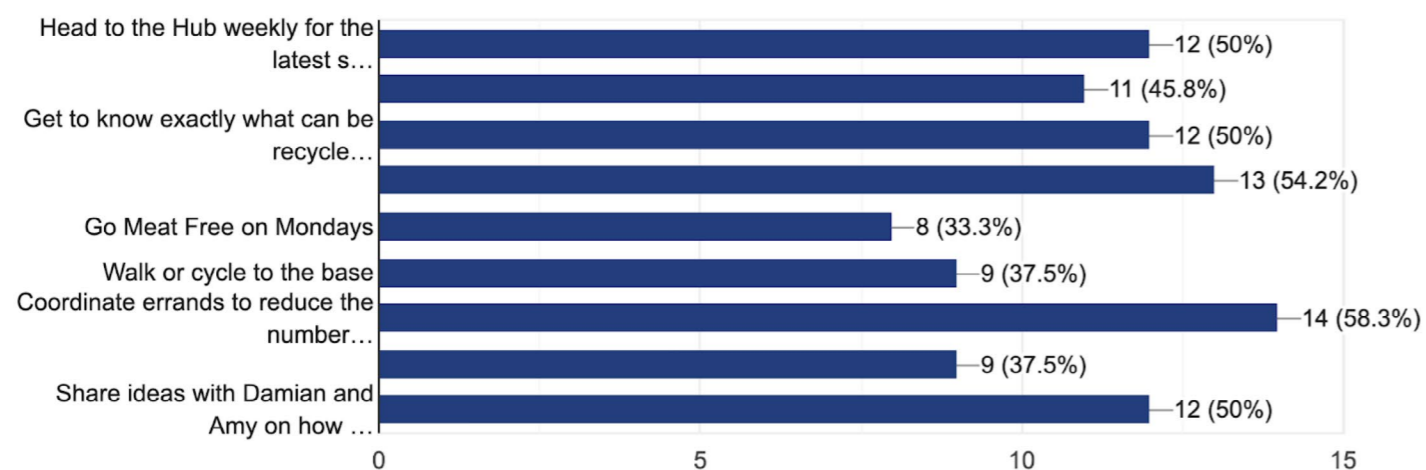## Q3: Which of the following will be your first actions?
24 responses

Head to the Hub weekly for the latest s...	12 (50%)
	11 (45.8%)
Get to know exactly what can be recycle...	12 (50%)
	13 (54.2%)
Go Meat Free on Mondays	8 (33.3%)
Walk or cycle to the base	9 (37.5%)
Coordinate errands to reduce the number...	14 (58.3%)
	9 (37.5%)
Share ideas with Damian and Amy on how ...	12 (50%)

Figure 8: Team sustainability action pledges

SPEAKER SERIES

The Team values face-to-face opportunities to engage audiences on topics around sustainability and ocean health. Opportunities to speak with youth groups and students to inspire a passion for the ocean, with sailing audiences to promote community action, to sporting and environmental groups to showcase the sporting platform for creating change, and in business-to-business forums, to present the clear economic case are all welcomed.

In 2019, the Team's Sustainability Manager, Damian Foxall, spoke at the Beyond Sport conference in June in Cannes, France, during the Cannes Film Festival, to an audience of 100 live, plus hundreds more on video replay. In September, he gave the keynote speech on sustainability and sailing at the International Association of Yacht Clubs event in Cork, Ireland, to an audience of 100 and attended 11th Hour Racing's InterConnect Event, aimed at facilitating sustainability initiatives across organizations and sponsorships.

The Team's CEO and co-founder, Mark Towill, spoke at The Ocean Race's Ocean Summit alongside professional sailor Francesca Clapcich and Stafania Campogianni from the World Wide Fund for Nature. Ocean Summits bring together governments, global businesses, industry, the scientific community, academia and passionate ocean advocates to explore innovative solutions to the crisis affecting our ocean. Mark also took part in a webinar on Sports Ambassadors for Sustainability run by the Green Sports Alliance, gave a speech at Iolani School in Honolulu on sailing, sustainability and ocean health, and joined the Barkarate Sailing Podcast as a guest speaker talking about the campaign and key #OceanHour objectives.

Team skipper and co-founder, Charlie Enright attended the Tip & Shaft Connect conference in Paris for a Q&A session on Sustainability in Sport and the benefits of running a campaign with sustainability at the very core of the Team.

Mark Towill speaks at The Ocean Race Summit Genoa in September 2019. Photo by Ainhoa Sanchez / The Ocean Race.

#OCEANHOUR NETWORK

The Team's campaign strategy includes an extensive training program aimed at cultivating leaders amongst our team members who can advocate for ocean health across our various platforms to sports fans. The #OceanHour Network, conceived in 2019 and to be built out in 2020, will be a group of experts in the realm of sustainability and ocean health that works with the Team in an advisor capacity to bring credibility and support to the Team's message and external campaign initiatives. This select group of individuals offer guidance in their area of expertise through a series of #OceanHour Sessions, empowering team members to enhance their communication and understanding of key topics in ocean health.

LEADERSHIP GOAL 2: SUPPORT PEERS

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Provide an exemplary model of sustainability leadership and ethical management	Support Peers	Collaborate with TOR and Industry community on at least 2 projects per year, to achieve sustainability improvements, including footprint reduction and increasing positive impacts.	●	17.16
	Influence Policy	Support strategic partnerships to facilitate specific policy changes in one or more of the following sectors: Marine Industry, World Sailing, IMOCA Class, The Ocean Race	●	17.14
		Support TOR and other stakeholders to engage with local & national government/organisations to positively affect sustainability policy	●	17.14

● Complete ● In Progress ● Not Started   This goal aligns with World Sailing Agenda 2030 Objectives 7, and UNFCCC Principle 1

The Team have distilled our issues-opportunities matrix into 4 principle areas with 12 goals and 73 targets. The first principle, Leadership describes how we will lead by advocating for ocean health and climate action within our industry, communities and fan base.

IMOCA AND THE OCEAN RACE

The Team have worked closely with organisations such as IMOCA and The Ocean Race to support and collaborate on their sustainability initiatives.

Six members of the design, shore, communications, sailing and sustainability departments attended The Ocean Race's Ocean Summit in Genoa in September, and actively contributed to the Sustainable Design and Build Workshop. Outcomes defined will include the exploration of an industry-led accreditation standard, and the development of a forum to share best practices.

The Team have worked closely with IMOCA, to support their strategy and the process of integrating sustainability into the class rules, due to be voted on in 2020.

LA VAGUE

The Team is involved and supportive of La Vague [The Wave], a collective bringing together skippers and sustainable development players in the world of ocean racing along with students, experts in bio-materials, engineers, technicians, journalists and communication specialists.. [2]

Photo by Alexis Courcoux

[2] IMOCA

LEADERSHIP GOAL 3: INSPIRE FANS AND FOLLOWERS

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Inspire behavioral change among global sports fans and communities to restore the health of our oceans.	Events	The team attend and support all known Ocean Race key sustainability events, Ocean Summits and key host city sustainability events as opportunities to engage influencers and policy makers as may be relevant	●	17.16
		If invited, the team principles will present and promote sustainability at 100% of 11 Ocean Summits.	●	4.7
	Digital platforms	Execute the sustainability communications plan	●	4.7

● Complete ● In Progress ● Not Started   This goal aligns with World Sailing Agenda 2030 Objective 6, and UNFCCC Principle 1

COMMUNICATIONS STRATEGY

11th Hour Racing Team is building a long-term campaign to raise awareness on how climate change impacts ocean health and how these changes will affect coastal communities around the world. Leading by example, the Team will inspire behavior change amongst the sailing and maritime communities to create lasting solutions for the ocean.

In 2019, the Team worked closely with sponsor, 11th Hour Racing, to put together a comprehensive sustainability communications strategy.

In addition to communicating around the 4 principles, the Team will create public engagement campaigns to raise awareness about the following four ocean health themes as defined in collaboration with the title partner.

- Marine debris
- Sea level rise
- Ocean acidification
- Biodiversity

The campaign's core message is:
"What's under the surface connects us all" — from the oxygen we breathe to the food we eat to the stability of our climate — we only thrive when our ocean thrives. But human impact — from the climate crisis to plastic pollution to the decline in biodiversity — has driven the planet to a critical moment in time. The clock is ticking. This is the #oceanhour."

#OCEANHOUR

In 2019, the Team published their Sustainability Policy, created a sustainability focused page on the Team's website linking to external resources and sharing sustainability focused content, and engaged in a campaign to support Hawaii's Bill 40, leveraging our team and personal channels to show support for a bill banning single use plastics in the island state, which passed successfully in December.

IN THE NEWS

The PR strategy has been to announce the Team, build the profile and audience, showcase collaborations, build local and global relationships, and share the #oceanhour message by targeting a range of local, national and international media groups. In total the Team contributed to 1,089 total online articles, with a 591m aggregate reach including a nationally (USA) picked-up AP story that mentioned sustainability, several profiles in high-reach French media, local stories in Hawaii and Rhode Island and feature coverage in sailing titles.

COLLABORATION

COLLABORATION GOAL 4: FOSTER STRATEGIC PARTNERSHIPS

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Foster partnerships based on the systematic adoption of sustainable standards.	Seek aligned partnerships to accelerate strategic success	The team will only engage with stakeholders that align with the team's sustainability ambitions	🔵	17.16
		Consult and co-create goals and objectives with each individual partner and report on results	🔵	17.16

🔵 Complete   🔵 In Progress   🔵 Not Started   This goal aligns with World Sailing Agenda 2030 Objective 1, and UNFCCC Principle 2

During 2019, the Team sought partnerships that would help elevate the platform of the sustainability program, and increase their chance of success. With targets to identify partners and official suppliers that are aligned with the Team's ambitions, and which can apply resources to collaborating on sustainability goals, we believe we will be well placed to have a positive influence on the systematic adoption of sustainable standards within our industry. Some examples of the partnership initiatives are below, created as a result of the stakeholder discovery process and subject to the sustainable sourcing code.

TITLE SPONSOR - 11TH HOUR RACING

11th Hour Racing establishes strategic partnerships within the sailing and maritime communities to promote collaborative and systemic change benefitting the health of our ocean. From plastic pollution to climate change to the environmental impacts of our sport, our oceans are threatened, and the clock is ticking. Since 2010, 11th Hour Racing has been harnessing the power of sport through three primary areas of engagement: sponsorships, grantees, and ambassadors.

11th Hour Racing have been the driving force behind the Team's sustainability efforts. Our title sponsor provides guidance and expertise, assists with extending the Team's reach and supports the creation of strong legacy projects through grant funding with important local initiatives.

Photo description placeholder text

OFFICIAL SUPPLIERS AND PARTNERS

MUSTO

Musto is sailing's leading premium technical clothing brand. The Team will be outfitted head to toe with high performance clothing both on and off the water. Musto will collaborate with the Team on research and development to create a range of innovative and sustainable clothing. This builds upon their previous partnership with Vestas 11th Hour Racing, where Enright and Towill supported Musto with the challenge of finding a more environmentally friendly plastic packaging solution. This project set some of the foundations for Musto to work towards overcoming the hurdles that businesses face, implementing and operating more sustainable practices on a larger scale.

Musto has long had a reputation for designing and engineering high quality, durable products. By collaborating with the Team, we are looking at how we can innovate further by developing and designing fully sustainable products from the ground up to introduce to our main line range and for the Team to wear as they race around the world.

– NICK HOUCHIN, MUSTO HEAD OF MARKETING

MARLOW ROPES

Marlow will be supplying 11th Hour Racing Team with high-performance lines from the Marlow Grand Prix custom-made series, ensuring the highest quality and durability within sailing as well as the new Blue Ocean Dockline from recycled materials. Marlow's R&D division is working together with the Team to minimize waste by providing lengths that are exact to the boat's specification and needs.

KARüN

11th Hour Racing Team has partnered with Karün as the official team supplier in the sustainable eyewear category. Karün's complete line of high-performance sunglasses is made with recycled ocean plastics from Patagonia, striking a true balance between sustainability and performance.

We are very excited to be partnering for a second consecutive race with 11th Hour Racing Team. We think that together with our friends and partners we can inspire more people into reflecting on our role on this planet and prove by example that we can create businesses from a different point of view, as a social and environmental welfare vehicle.

– THOMAS KIMBER, KARUN FOUNDER & CEO

ECOWORKS MARINE

Ecoworks Marine helps us keep our boat clean and our ocean safe with marine safe and environmentally-friendly maintenance and cleaning products. MARPOL compliant, their products are sustainably sourced, replacing hazardous and undesirable ingredients with renewable or naturally derived alternatives.

MERCONCEPT

The Team have formed a strategic partnership with MerConcept, the French offshore sailing company founded by sailing legend François Gabart. MerConcept is a strategic partner to the Team with a focus on the performance and technical aspects of the campaign. This includes supporting the Team with life cycle assessment and exploring innovative low impact technologies. They also collaborate on legacy projects with 11th Hour Racing Team grantees based in France including 11th Hour Racing grants to the Station Marine de Concarneau and the Explore research incubator.

COLLABORATION GOAL 5: INFLUENCE SUPPLY CHAINS

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Positively influence the marine industry supply chain.	Supply chain mapping	The team will only engage with stakeholders that align with the team's sustainability ambitions	🔵	12.7
		Consult and co-create goals and objectives with each individual partner and report on results	🔵	12.7
	Sustainable sourcing code	SSC Principles applied to 100% of products and services as defined within the code	🔵	12.7
		75% local products, services & labour at semi-permanent bases. 10% local products, services & labour at stopovers and short stay venues	🔵	12.7
	Improved supply chain performance	10 suppliers have improved their internal sustainability practices as a result of engagement with the team, with a special focus on Single-use plastic	🔵	8.4

🔵 Complete   🔵 In Progress   🔵 Not Started   This goal aligns with World Sailing Agenda 2030 Objective 2, and UNFCCC Principle 2

SUPPLIERS

Partners and suppliers play a critical role in the delivery of the Team's ambitious sustainability strategy. 2019 was a big year for building relationships, identifying areas of sustainability risk and establishing joint initiatives.

Related to the activities of the Team as a performance sailing team, the main elements of the supply chain comprise of yacht design services, maintenance and refit work, build components, technology and logistics services. With respect to procurement, suppliers are required to comply with the Team's Sustainable Sourcing Code. The Team have 147 suppliers to date, made up of 97 product suppliers, 27 service suppliers and 23 personnel. Of the Team's spend in 2019, 10 suppliers made up 70% of the campaign spend:

SUPPLIER	TOTAL	SUPPLIER TYPE	GEOGRAPHICAL LOCATION	ENGAGEMENT LEVEL TO DATE
Supplier 1	20%	Products	USA	1
Supplier 2	11%	Prodcuts & Services	France	1
Supplier 3	9%	Prodcuts & Services	Spain	1
Supplier 4	7%	Products	France	1
Supplier 5	5%	Products	Italy	3
Supplier 6	5%	Prodcuts & Services	Spain	3
Supplier 7	4%	Prodcuts & Services	France	2
Supplier 8	4%	Services	UK	3
Supplier 9	4%	Products	France	3
Supplier 10	2%	Products	France	3

Table 5: Breakdown of supply chain by percentage spend , type, location, and engagement level.

Engagement level defined as:

- *Level 1* - Stakeholder discovery completed, stakeholder management plan in place, with regular communications
- *Level 2* - Stakeholder discovery completed
- *Level 3* - Stakeholder yet to be engaged

40% of the Team's top ten supplier spend in 2019 was invested within the Brittany region where the Team has a temporary base.

71% of the Team's top ten suppliers by expenditure in 2019 was within Europe, with the rest in the USA.

In 2019, the Team engaged 14 key suppliers in their Sustainability Discovery and engagement plan. 100% of the suppliers engaged expressed a willingness to collaborate on the sustainability agenda, and are working with the Team to co-create and set goals and initiatives. In 2019, the Team made progress on the target to work with 10 suppliers across the campaign to improve sustainability performance through work streams with suppliers including Musto, Marlow, MerConcept, CDK Technologies, Multiplast, Guillaume Verdier Design, North Sails, The Ocean Race and Ecoworks Marine.

SUSTAINABLE SOURCING CODE

In 2019, the Team created a Sustainable Sourcing Code (SSC) which outlines the minimum sustainability standards expected of all suppliers providing services or products, sourced by the Team. It also sets out a series of questions that procurers should ask themselves before purchasing. The Team has made steps towards measuring the success of the SSC through the expense and accounts software, and will report on this in the 2020 report.

The objectives of the SSC

1. Apply sustainable sourcing to all products and services purchased by the Team
2. To reduce the Team's environmental impacts across all areas of operation
3. To positively influence the marine industry supply chain

SOURCEMAP

A key part of the Team's Sustainability Sourcing Code, Sourcemap assists the Team with supply chain visualization, giving us insight into potential areas of sustainability risk exposure. Sourcemap's network mapping solutions help the Team identify where products and materials are manufactured and then shipped to the Team. Understanding this enables us to make more informed decisions when selecting suppliers and creating operational efficiencies to reduce our carbon footprint.
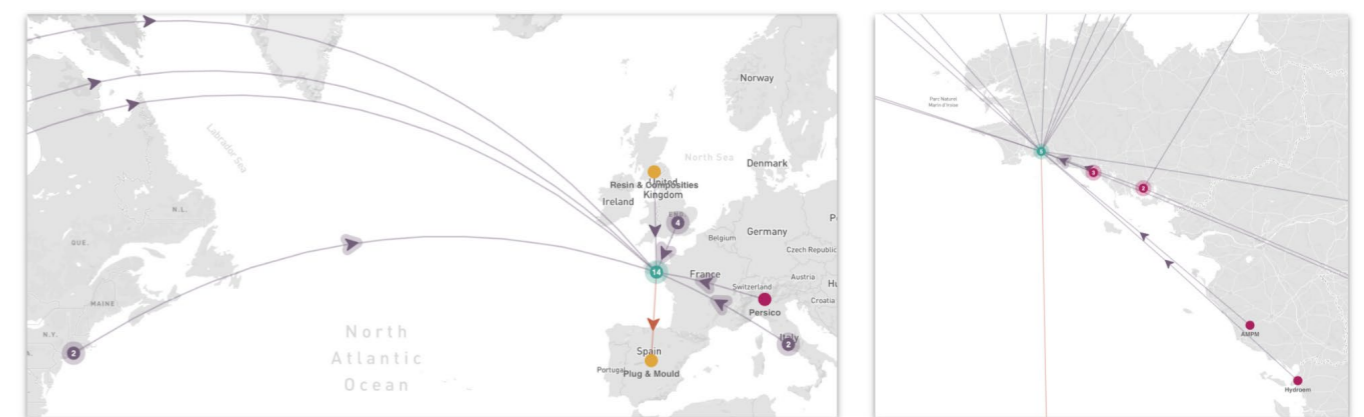

Figure 9: Material map from IMOCA 60 Sourcemap software

GRI Disclosures:
102-9 Supply chain
308-1 New suppliers that were screened using environmental criteria

COLLABORATION GOAL 6: IMPLEMENT SUSTAINABLE OPERATIONS

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Apply best practices to reduce environmental footprints across all areas of operation	Energy and fuel	Create and implement a CLIMATE ACTION PLAN to reduce fossil fuel use, emissions, and optimize energy needs	●	13.2
		Maximise renewable energy solutions. 10% improvement from baseline	●	7.2
	Logistical footprint	Optimize personnel transport to reduce emissions	●	12.2
		Optimize in goods transportation to reduce emissions	●	12.2
		90% of Self-catering accommodation to be within sustainable transport proximity of team base venues	●	12.2
	Sustainable catering guide	100% Compliance with Sustainable Catering Guide principles	●	8.4
		100% Staff engagement Meat Free Monday	●	15.3
	Zero waste	90% Landfill diversion rate at permanent Team bases	●	12.5
		80% Landfill diversion rate at temporary Team bases	●	12.5
		100% Composting or anaerobic digestion at all venues	●	12.3
		Zero avoidable single-use plastic	●	14.1
		Provide filtered water at all team venues	●	14.1
		50% onboard waste reduction compared to baseline	●	12.5
	Water neutral	Reduce all potable water usage (excluding drinking water) by 10% compared to baseline data	●	6.4
		Establish baseline data for embedded water, and offset	●	6.4

● Complete ● In Progress ● Not Started   This goal aligns with World Sailing Agenda 2030 Objective 2, and UNFCCC Principle 2

FOOTPRINTS

Within the Team's scope of responsibility the material, logistical, water and energy needs and waste flows are tracked and compiled annually to produce a greenhouse gas (GHG), embedded water, and waste footprint.

Priority and key issues of focus have been initially defined by referencing:

- Benchmark data from previous Ocean Race campaigns
- LCA & materiality studies of other reference sailing campaigns of similar scale.

Priorities will be assessed on an ongoing process as part of stakeholder engagement and periodical review-feedback loops.

A key target is to produce a new benchmark for each stage of the 2019-2022 campaign.

THE CLIMATE ACTION PLAN

The Team's Climate Action Plan outlines the Team strategy with regards to all its Greenhouse Gas Emissions (GHG) measured as the equivalent tonnes of Carbon dioxide equivalent (tCO2e) and separated into operational Scope 1, 2 & 3 emissions.[3] Scopes describe the level of ownership for carbon emissions: Scope 1 includes infrastructures owned or controlled; Scope 2 includes direct electrical consumption; Scope 3 includes procured services and products. A final sector, Well to Tank (WTT) takes into account the upstream impacts of the Scope 3 inventory.

The Team aims to avoid, reduce, measure, manage and report total GHG emissions, and support a range of programs to compensate for unavoidable GHG emissions associated with the campaign.

GHG FOOTPRINT 2017 vs 2019

The 2019 11th Hour Racing Team footprint described below shows the primary impact was in the material & services procured sector. This is consistent with the first year of the campaign where the emphasis is on procurement of infrastructure and services, design and analysis and the first stages of manufacturing.

2019 Total: 537 tCO2e

	2017-18	2017-18 RECALCULATED	2019
Total tCO2e	1,218	1,402	537

Table 6: Annual CO2e footprints

COMPARING THE FOOTPRINTS FROM THE PREVIOUS CAMPAIGN (2017-18)

The 2017/18 Vestas 11th Hour Racing campaign was the result of 12 months of operating during the Volvo Ocean Race. Travel, logistics and freight represented the majority of this footprint, and materials were initially thought to be less than 10% of the final footprint.

2017-18 Initial Total: 1,218 tCO2e [4]

Recalculating the materials sector of the 2017/18 total figures based on new information, establishes a *new benchmark for the race year:*

2017-18 Recalculated Total: 1,402 tCO2e

The comparative results indicate a range of **500-1500 tCO2e annual footprint** for an Ocean Race campaign depending on the phase of operation. This seems consistent with benchmark data referenced from other studies and events.

The Team will continue to track impacts over the coming years, and explore how sector breakdowns change based on the operational phases between design and build, operations and sailing.

11th Hour Racing Team tCO2e Footprint - 2019

2019 - tCO2e

WTT - Business travel air 2.8%
Business travel - land 8.3%
Business travel sea 0.1%
Business travel -air 25.7%
Waste disposal 0.0%
Material use 54.9%
Overseas electricity 0.1%
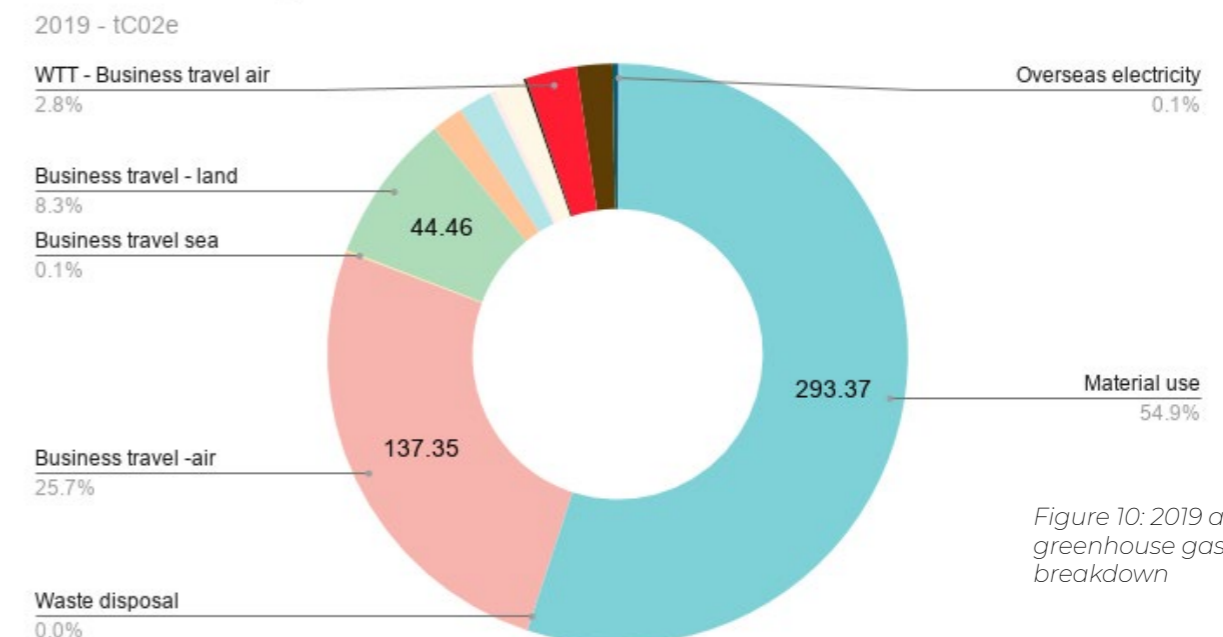
44.46
293.37
137.35

Figure 10: 2019 annual greenhouse gas footprint breakdown

[4] Note: The material footprint for 2017-2018 was recalculated in 2019 using new updated information, this had the effect of boosting the material sector, and the overall footprint.

Table 7: 2019 annual greenhouse gas footprint breakdown

11TH HOUR RACING TEAM 2019 OPERATIONAL FOOTPRINT	TCO2E	TOTAL	SCOPE	TOTAL SCOPE TCO2E
Fuels	2.87	0.67%	1	2.87
Overseas Electricity	0.489	< 1%	2	0.49
Water supply	0.069	< 1%	3	505.49
Material use	293.37	54.61%%		
Waste disposal	0.025	< 1%		
Business travel - air	137.35	25.57%		
Business travel - sea	0.48	<1%		
Business travel - land	44.46	8.27%		
Freighting goods	9.33	1.73%		
Hotel stays	9.9	1.84%		
Managed assets - remote workers	1.75	< 1%		
Managed assets - digital footprint	8.76	1.63%		
Transmission & distribution	0.13	< 1%	3 - UPSTREAM/ DOWNSTREAM	28.26
WTT - fuels	0.77	< 1%		
WTT - UK & overseas	0.13	< 1%		
WTT - Business travel air	15.04	2.80%		
WTT - Business travel sea	0.02	< 1%		
WTT - pass veh & land travel	10.62	1.97%		
WTT delivery vehs & freight	1.55	< 1%		
TOTAL	536.11			

GRI Disclosures:
305-1 Direct (Scope 1) GHG emissions

DIGITAL FOOTPRINT - DESIGN AND ANALYSIS

As a Team which worked remotely for a significant part of the first phase of the campaign, in addition to the concentration on design and analysis services, the Team's digital footprint was one we wanted to observe and calculate. The inventory of services used that have been calculated include G Suite hosting, email and website traffic, digital asset cloud storage, computer time and web searching, sail design and online server use associated with yacht design and analysis.

Figure 11: 2019 annual digital greenhouse gas footprint

The method for calculating the GHG and water footprint of the Team's digital services has been through a combination of the UK GHG Reporting Protocol, direct inputs (where number of servers running, energy required to power each server and the carbon intensity of energy sources used to power those servers are known), online research and estimations.

These services have been categorized as either team and administrative, sail design, boat design or design coordination.

Figure 12: The breakdown of the Team's digital and online services

Table 8: Digital and online services

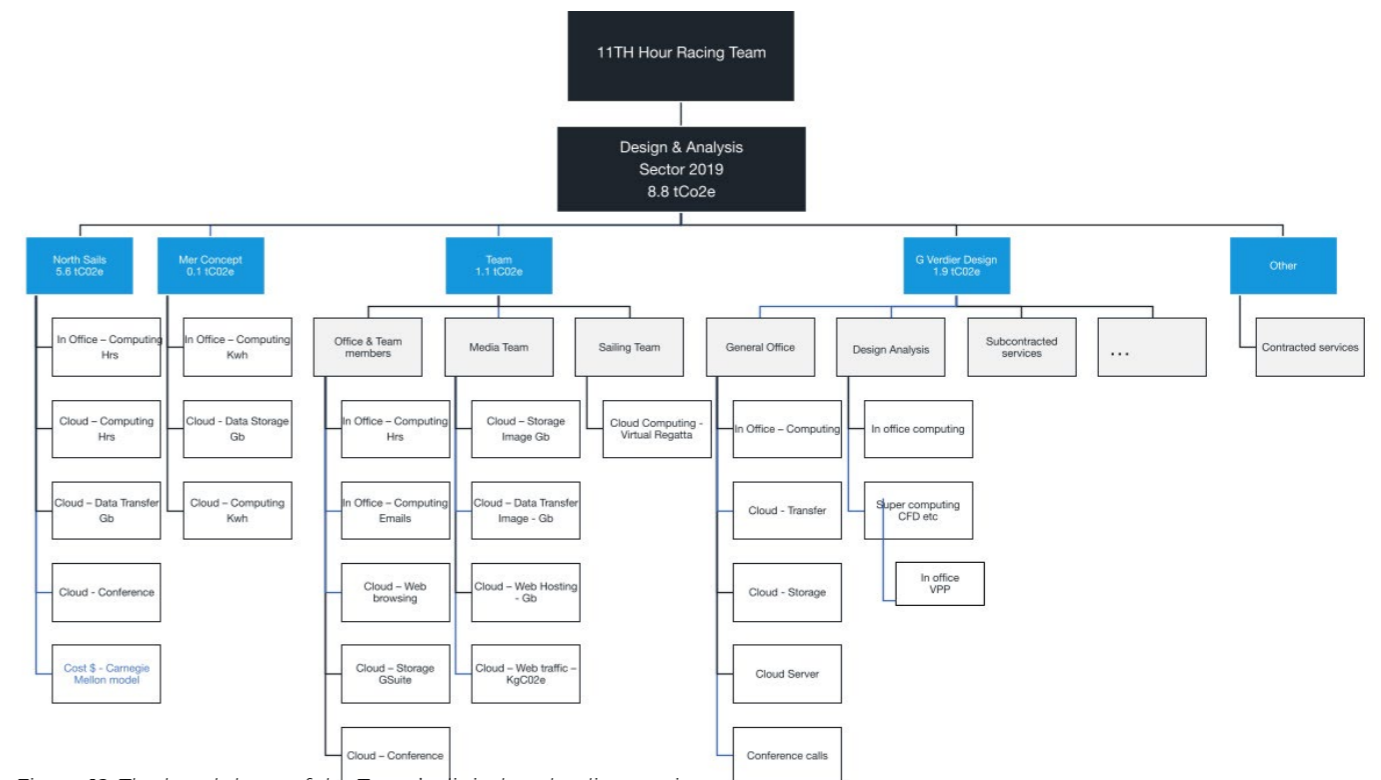| 2019 EMPLOYMENT CONTRACT	TOTAL	TCO2E
Team and Admin	• G Suite hosting • Texting, conference calls • Website hosting • Image relay cloud storage • Image relay online data transfer • Staff web search • External server use	1.07 tC02e
Sail design Consultant 1	• In office computer system • Cloud storage and transfer • Super-computer use	5.63 tC02e
Boat design Consultant 2	• Refit design • Performance analysis • In office computer system • Cloud storage and transfer • Super-computer use	1.89 tC02e
Design coordination Consultant 3	• In-house design	0.16 tC02e
TOTAL		8.76 tC02e

The total footprint for the Team's use of **digital services is 8.76 tC02e, 1.63% of the Team's total CO2e footprint**. Reduction measures in place include:

1. The net carbon emissions associated with the Team's GSuite platform is zero. This is due to renewable energy purchases to offset the emissions from the Google data centre energy use. Google matches 100% of the electricity they use with renewable energy, including the Google cloud. Visit Google's environmental report (pgs 13, 24-34) for their emissions statement.
2. The Team uses Kinsta for its website hosting which uses the Google Cloud Platform.
3. The Team uses Image Relay, a certified B-Corp, for its Digital Asset Management.. They use Amazon Web Services to hold the digital assets which exceeded 50% renewable energy usage for 2018 (latest available data) (n.d., AWS).
4. North Sails uses two supercomputers at the Wolfson Unit at the University of Southampton which have been rated in the Top 500 amongst the world's greenest machines. (Greenlist, 2013, 2017).

It is also of note that the Team calculated the footprint of remote workers [5] (1.75 tC02e): this impact is measured as a function of electricity consumption. By combining both **digital and remote worker impacts** we can get a more complete picture: **Total - 10.51 tC02e (2% [6] Total GHG)**

MATERIALS FOOTPRINT

It is to be expected that in these initial phases of the campaign, the material sector has a significant impact. The types of materials being tracked can be viewed in the Annex. The Team is reducing, tracking and calculating this inventory by:

• Engaging with key stakeholders to apply sustainable sourcing within the supply chain.
• Capturing the build and design process footprints.
• Using MarineShift360 tool (which is capable of delivering ISO14044 compliant LCA reports) to evaluate the full life cycle impacts of the boat
• Using UK Government greenhouse gas measurement protocols
• Using Carnegie Mellon Input-Output model ($ spend)[7] - to calculate remaining inventory

Where possible the results are compared across the models to ensure consistency and accuracy.

The material breakdown showing more than 80% assigned to the maintenance of the training boat (11.1) is consistent with the 2019 training phase of the campaign.
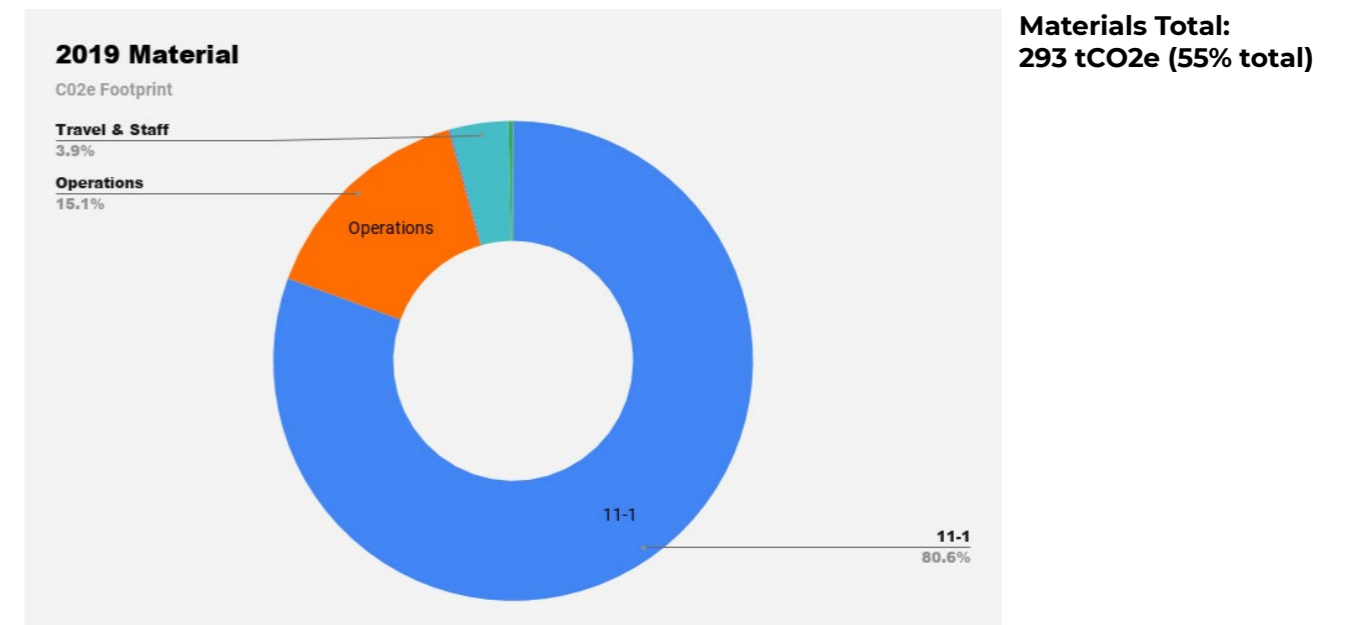
Materials Total: 293 tCO2e (55% total)

2019 Material
C02e Footprint

Travel & Staff 3.9%
Operations 15.1%

Operations

11-1

11-1 80.6%

Figure 13: 2019 annual material footprint

Averaging the GHG impact of material spend in 2019: **$1 = 0.19 kgC02e** gives a rough but useful reference to understanding the carbon emissions associated with budget spend. Comparison with the Marine Shift 360 tool indicates that actual impacts may be lower.

In 2020-21, the Team expects the material impacts balance to shift significantly towards a higher overall total figure associated with the material impacts of building the race boat 11.2, this will be the focus and reported in future studies:

• LCA 1 - to predict the impacts using data from a previous IMOCA build
• LCA 2 - to calculate the actual impacts of 11.2, defining a new marine industry benchmark

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[5] See 2020 Annual sustainability report for methodology
[6] This is consistent with global impacts of the internet

[7] Note: The Carnegie Mellon model uses generic industry sector data, and therefore over-estimates the results for specific high-end marine industry products, to account for this results have been reduced by a factor of 2.0 to provide a more accurate total.

FUEL FOOTPRINT

The Team's fuel use is broken down below by vessel and by fuel type. It is clear that the Team's biggest fuel impact is caused by the chase boat at 86.4% and 2.5 tonnes of CO2e. This was a result of the Team training in Brittany, as well as pre-start for the Transat Jacques Vabre in Le Havre. The chase boat use is projected to rise across the campaign as race, training and activations increase. As a result, the Team has put in place resources to research the current technology and options for retrofitting the chase boat to reduce in 2020 the carbon emissions in this area.
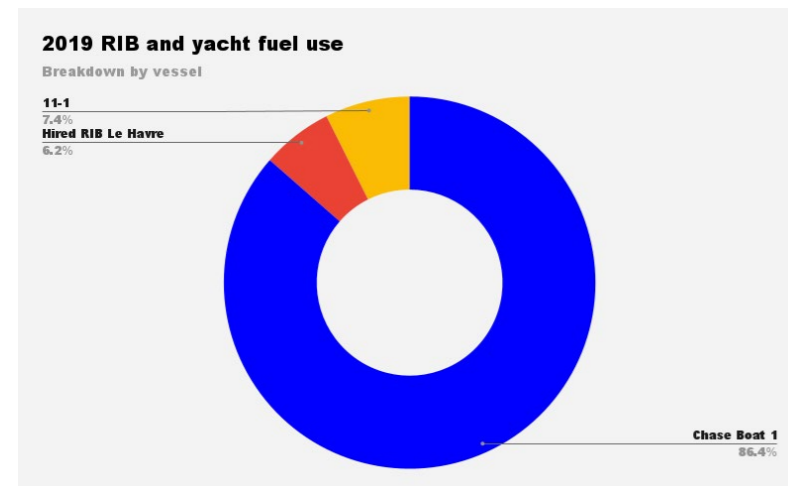
Fuel Total: 2.87 tCO2e

Figure 14: 2019 annual RIB and yacht fuel use breakdown by vessel

VESSEL	FUEL (LITERS)	KG CO2E
Chase boat 1	1120	2,474.12
Hired RIB Le Havre	80	176.72
11-1	82	211.59
Total	**1,282**	**2,862.44**

Table 9: 2019 fuel breakdown by vessel

Figure 15: 2019 annual RIB and yacht fuel use breakdown by fuel type

FUEL TYPE	FUEL (LITERS)	COEFFI- CIENT	KG CO2E
Petrol	1200	2.20904	2,650.85
Diesel	80	2.59411	207.53
	2	2.03053	4.06
Total	**1,282**		**2,862.44**

Table 10: 2019 fuel breakdown by fuel type

> *GRI Disclosures:*
> *302-1 Energy consumption within the organization*

PERSONNEL TRAVEL FOOTPRINT

Personnel logistics comprises a significant part of the Team's impacts, this is a function of both where people are travelling to and from.

The Team have taken key decisions and applied specialist resources to this sector to reduce impacts:

- Given the international makeup of the Team, remote working solutions are defined as the default method for team collaborations and meetings, reducing significantly the need for onsite work and travel.
- By basing the Team's activities in the marine industry hub of Brittany, France this has had a direct reduction in distance travelled for products, services and personnel. The exception is the increased international travel distance for certain team members and this is reflected in air travel, however the overall result is a lower impact than it would otherwise have been if the Team's operations had been based in a less centralized venue.
- To optimize the logistical tasks, balance economic concerns, personnel needs and mitigate the impacts, The team has employed logistics specialist, Aimee Famularo.
- A priority has been placed on providing eco-friendly accommodation within public transport range of the Team's operations.
- Team members are expected to reduce their individual impacts by availing of car share, public transport and the Team provides bikes for personnel for low impact travel options.
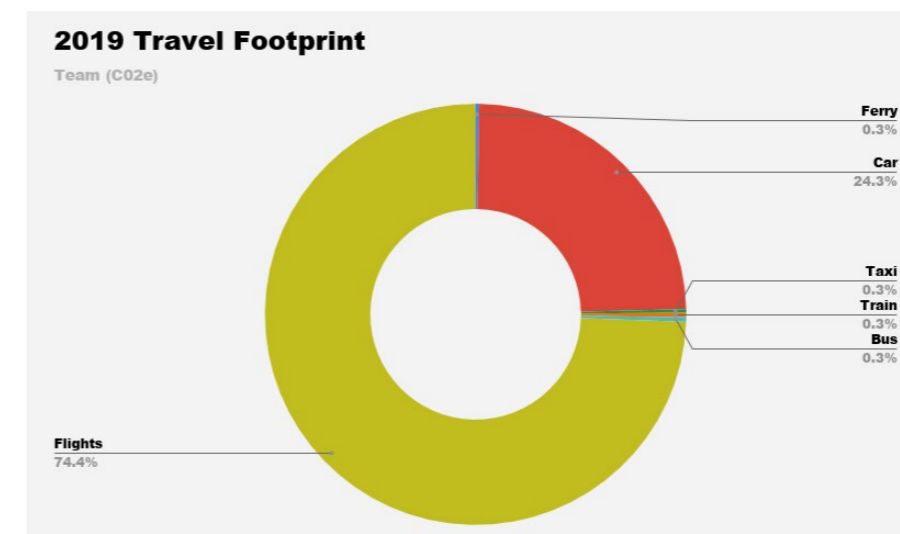
Personnel Travel Total: 2.07.9 tCO2e (39% total)
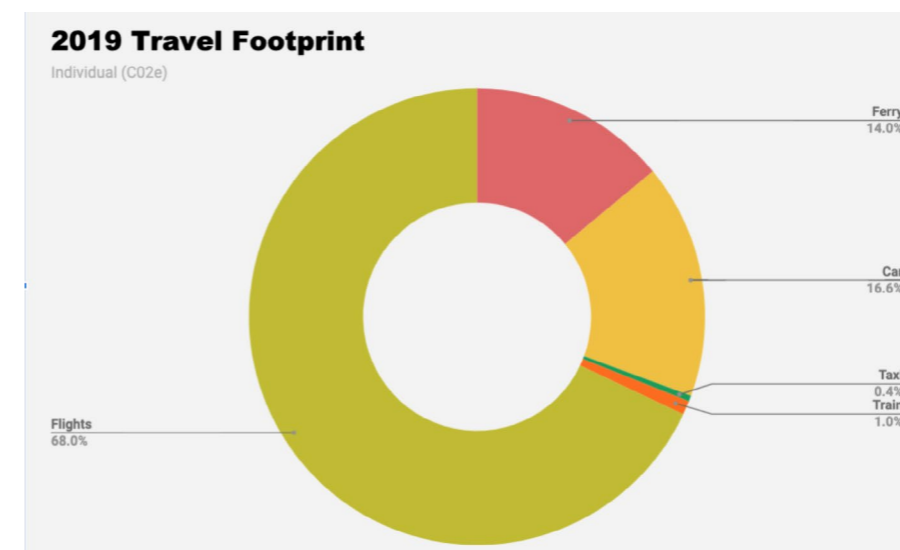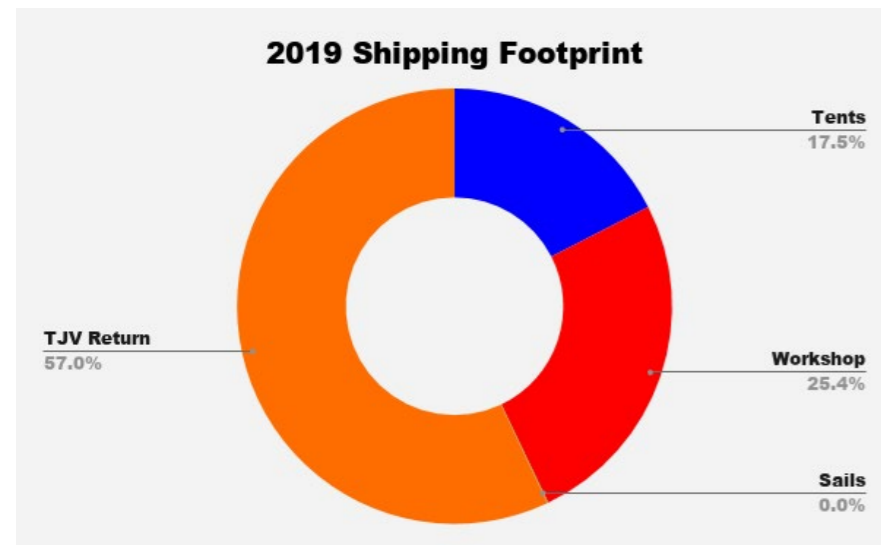

Figure 16: 2019 annual travel footprint

Figure 17: 2019 Individual footprint example

SHIPPING FOOTPRINT

Goods shipped by the Team in 2019 include the movement of 40-foot containers, pallets and yacht parts. While there were only three pallets that were air-freighted, making up just 1.2% of the shipments by weight, air freight makes up 57% of the shipping footprint, compounding the need to avoid air freight whenever possible.
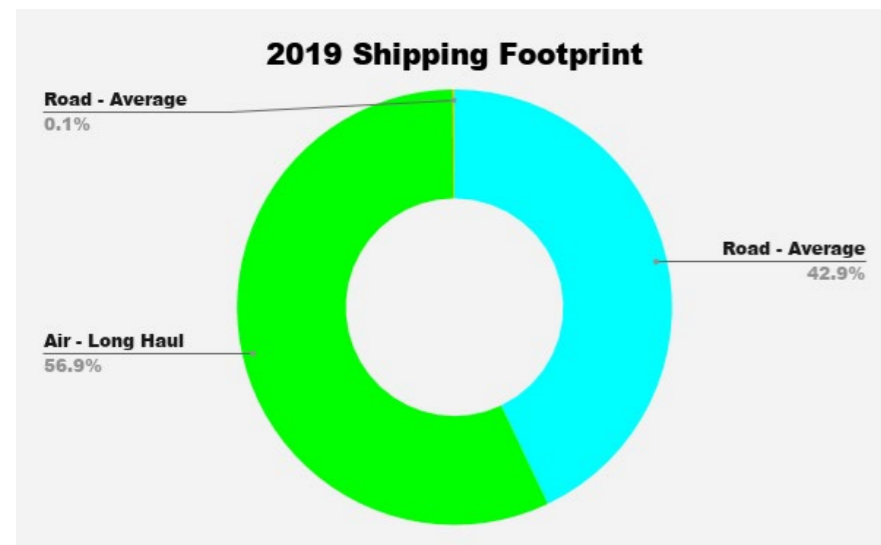
Shipping Total: 9.3 tCO2e

Shipment ID	Goods Description	Total Distance (km)	Mode 1	Dist (KM)	Mode 2	Dist (KM)	Weight (tonnes)	Total kgCO2e
Tents	2x 40' containers	925km	Road - average HGV	925			16	1,630.96
Workshop	1x 40' container	1720km	Road - average HGV	1720			8	1,516.35
Workshop	1x40' container	480km	Road - average HGV	480			8	423.17
Workshop	1x40' container	430km	Road - average HGV	430			8	379.09
TJV return supplies	1x pallet	440km	Road - average van	240	Sea - general cargo	200	0.3	8.90
TJV return supplies	1xpallet	8063KM	Air - long haul	8063			0.3	2,737.57
TJV return supplies	1xpallet	7588KM	Air - long haul	7588			0.3	2,576.29
Workshop	1x40'container	64km	Road - average HGV	64			8	56.42
Outrigger	1x outrigger	58km	Road - average HGV	58			0.2	1.28
Outrigger	1x outrigger	58km	Road - average HGV	58			0.2	1.28
Sails	1/3 of sail order	58m	Road - average van	58			0.2	1.28
Sails	1/3 of sail order	58km	Road - average van	58			0.2	1.28
Sails	1/3 of sail order	58km	Road - average van	58			0.2	1.28

2019 Shipping Footprint

- Tents 17.5%
- Workshop 25.4%
- Sails 0.0%
- TJV Return 57.0%

The breakdown of the shipping by pack type shows that the majority of the footprint was caused by three pallets of supplies and materials sent to Brazil in preparation for the return yacht delivery in The Ocean Race configuration to Brittany. The total weight of materials shipped in 2019 was 49.2 tons.

The breakdown of the footprint by freight mode shows that air freighting is clearly the biggest proportion at 57% and 5.3 tonnes of CO2e.

2019 Shipping Footprint

- Road - Average 0.1%
- Road - Average 42.9%
- Air - Long Haul 56.9%

In 2020, the Team will work more closely with our logistics partners and suppliers on consolidation of shipments, identify potential for use of more sustainable shipping lines and make smart logistics decisions at the beginning of the operations planning. Through better planning the Team estimates it can make a 10-20% reduction in footprint by reducing air freight.

EMBEDDED WATER FOOTPRINT (EmH2O)

The benchmark for the **2017/18 Vestas 11th Hour Racing campaign** is simply the consumed (direct) water metered: **Total: 15,000 Litres H20.**

11th Hour Racing Team has set a new goal to reduce its total water footprint by taking into account all direct & indirect water footprints associated with the campaign:

- Consumed water (direct):
    - Operations: boat washing, etc (tap and hose pipe consumption)[8]
    - Personal consumption:(drinking, showers, washing)[9]
- Embedded water (indirect) within the supply chain of products and services
- Waste water impacts

Water footprint can be further broken down as:

- Green water footprint: water from precipitation stored in soils and used by plants
- Blue water footprint: sourced from surface and groundwater
- Grey water footprint: the amount of freshwater used to assimilate pollutants and waste water back to specific water standards.

The Team will build sector partnerships to explore this responsibility further in 2020.

Embedded water within products and services purchased by the campaign are calculated in parallel with the GHG calculations using the models: MarineShift360 and Carnegie Mellon LCA model.[10]

In 2019 to implement reductions:

- Water flow has been monitored in CDK Technologie's boat building facilities resulting in recommendations for closed circuit cooling system for laminate ovens, as well as optimizations in staff facilities
- Team dock and shore operations have monitored water use
- The Team has provided filter water solutions for all Team bases of operation, as part of the drive to eliminate single use plastic.

The Team's full list of services and products purchased in 2019 (the inventory) has been calculated to establish a new baseline. Including consumed water, the comparative breakdown is:

LITERS	2017-18	2017/18 RECALCULATED	2019
Consumed H2O (operations)	15,000	15,000	8,500
Consumed H2O (personal)	-	300,000	190,000
Embedded H2O (products & services	-	19.38 mm	35.26 mm
Total (million liters)	**0.01 mm**	**19.7 mm**	**35.5 mm**

The final 2019 total: **35.5 million liters EmH2O** highlights the importance of taking into account this environmental impact indicator. In 2020 the Team will reach out to specialist water conservation organizations to optimize the footprint reduction initiatives and search for relevant compensation programs.

> *GRI Disclosures:*
> *303-5 Water consumption*

[8] Estimated @200 liters/week
[9] Estimated @ 150 liters per person per day
[10] Factors adjusted for marine industry high-end products

WASTE FOOTPRINT

With market forces such as resource scarcity and the implications of policy such as APER, there are clear operational benefits to implementing waste management. By improving resource and waste management, we can challenge the prevailing economic growth model that seems to suggest there can be infinite growth with finite resources (Gliding, 2018), and reframe waste as a resource.

Waste generated by the Team in their temporary base in Port-la-Forêt, at The Transat Jacques Vabre start in Le Havre and finish in Salvador, as well as waste generated by their build activities at CDK Technologies and refit activities at Multiplast, have been included in these figures. In total, the Team produced half a ton of waste, equivalent to 25.38 tonnes of CO_2e. A recycling rate of 61% was achieved largely through the selection of PEFC wood panels for the mock-up and down to the recycling and waste management systems in place at CDK Technologies.
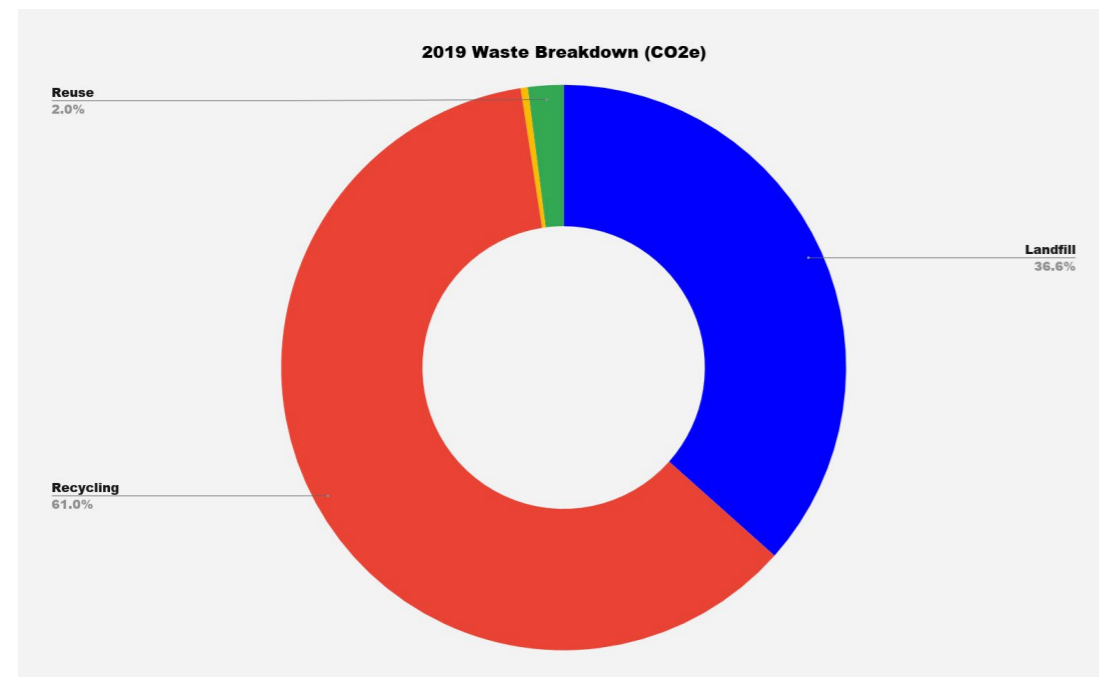
During the modifications to the mock-up in December, offcuts and used panels were processed locally and recycled into particleboard.

One of the challenges of 2019 was the onboard waste generated during the Transat Jacques Vabre race, and as a result the Team have put together a new Onboard Sustainability Plan and set of actions for reducing onboard waste by at least 50%. A particular focus is on food packaging waste which makes up approximately 90% of the waste generated onboard.

The Team have worked closely with Multiplast, to support their implementation of a Waste Management Plan, and aims to develop this further and capture the improvements in the 2020 report.

Looking to the future, as we complete the boat build facility audit and implement recommendations outlined in the Team's Sustainable Design and Build Plan we will look to get closer to our ultimate target of 90% diversion from landfill.

Shipping Total: 25.38 tCO2e

2019 Waste Breakdown (CO2e)

Reuse
2.0%

Landfill
36.6%

Recycling
61.0%

GRI Disclosures:
306-2 Waste by type and disposal method

COMPENSATION

The Team will compensate for the unavoidable GHG, water and waste impacts associated with the Team's operations to achieve neutral footprints. Relevant compensation projects will be defined at a future date by prioritizing:

1. As a minimum, balance the original environmental impacts
2. Address the original sector and source of impacts
3. Be geographically relevant
4. Leave a legacy
5. Align with the Team sustainability goals
6. Leverage collaborations

INNOVATION

INNOVATION GOAL 7: EMBED CIRCULAR ECONOMY PRINCIPLES

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Apply innovative solutions across team operations through the application of circular economy principles.	Design out waste and pollution	Commit to setting up a collaborative build and design working group with a remit that contributes to the boat building industry's uptake of circular economy principles	●	9.4
		Minimize leakage of waste by identifying 5 areas to develop a boat design strategy for circularity** **e.g. Material selection, standardised components, designed-to-last products, design for easy end-of-life sorting, separation or reuse of products and materials, and design-for-manufacturing criteria that consider possible useful applications of by-products and wastes.	●	12.5
		Achieve % manufacturing and packaging waste reduction over the campaign on identified projects	●	12.5
	Keep products and materials in use	Identify 2 partners per year to implement reverse cycles with. Projects could include collection, refurbishment and resale / establishing reverse supply chain / remanufacturing projects / leasing or sharing economy initiatives / packaging take back schemes.	●	12.2
	Preserve and enhance natural capital	Identify one project to tackle using a biomimicry approach to problem solving	●	12.2
		Reinvest in natural capital through grant and offsetting programmes. (Mangrove / seagrass projects)	●	11.4
		Promote a specific marine protected area each year/ race leg, or similar ocean conservation issue	●	14.5
		Support the TOR onboard science program	●	14.3

● Complete   ● In Progress   ● Not Started   This goal aligns with World Sailing Agenda 2030 Objective 2 and UNFCCC Principle 4

WORKING GROUP

In Q4 2019, a Working Group was set up with a remit that contributes to the boatbuilding industry's uptake of circular economy principles. The key stakeholders include the Team, MerConcept, Guillaume Verdier Design, CDK Technologies, and Kairos.

The first meeting included stakeholder discovery and an exercise to understand the needs and expectations of interested parties, followed by a review of the existing benchmarks including the life cycle assessment of the Veolia 2010 IMOCA project, which helped to define further strategies focussing on areas of high impact.

The Group also reviewed lessons learned in other circuits such as the America's Cup, as well as existing and developing tools to support the sustainable design and build plan, such as the MarineShift360 Life Cycle Assessment Tool. The Group looked into the current market for alternative sustainable materials and as a result commissioned a report into biocomposites by Kairos, to further understand the materials that could become candidates for onboard and shore based components.

The second Working Group meeting took place in Le Havre before the start of the Transat Jacques Vabre, with priorities to review the biocomposites report and define an environmental audit outline which was to be undertaken in collaboration with the build facility at CDK Technologies.

The Working Group also attended and actively contributed to the Sustainable Design and Build Workshop at the Ocean Summit in Genoa in September which addressed the state of the industry, the latest best practices in waste management, a roadmap for sustainable rules development and a discussion around the benefits and challenges of an industry-led accreditation standard.

BIOMIMICRY

The 'biomimicry' circular economy school of thought is an important one for the Team. In nature, there is neither waste that it cannot recycle, nor pollution that it does not know how to regulate.[11] In 2019, the Team implemented plans to engage internal team members on how to apply biomimicry at the design stage and commissioned a study on PowerRibs, a leaf vein inspired composite stiffener.

[11] Guillaume Masse, Station de la Marine Concarneau

INNOVATION GOAL 8: TRANSFORM MANUFACTURING

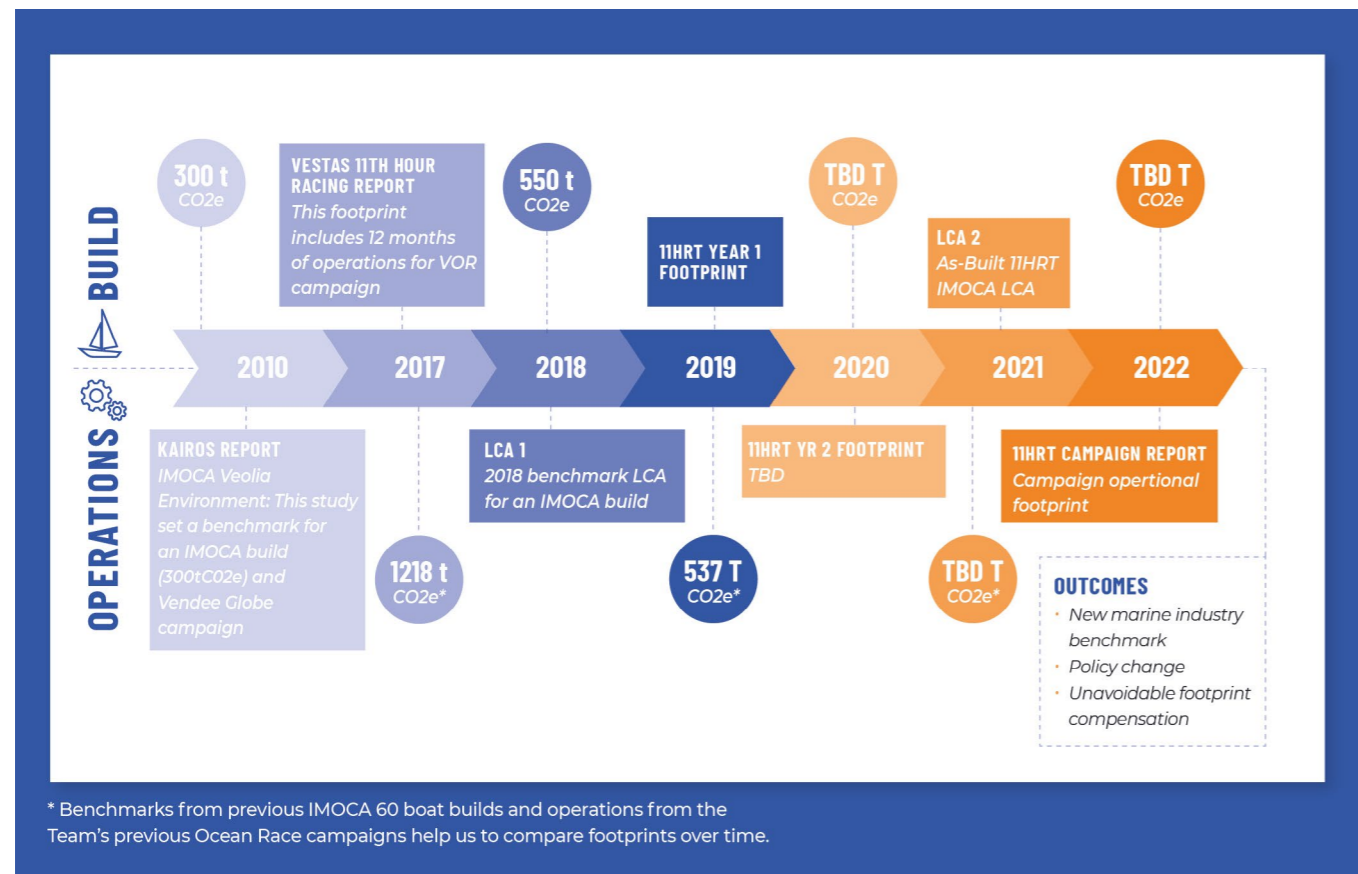| OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Employ a sustainable design and boat build process particularly with regards to resource management, production, and end of life options.	State of Play	All contracts to include Supplier Sustainability Commitments	● In Progress	12.7
		Commission a survey of state-of-the-art alternative materials that are available for marine industry build options	● Complete	12.2
		Audit of boat yard energy, waste and resource with recommendations for improved efficiency	● In Progress	7.3
	Improvement	10% improvement - boat yard energy and resource management	● In Progress	12.2

● Complete ● In Progress ● Not Started   This goal aligns with World Sailing Agenda 2030 Objective 8 and UNFCCC Principle 4

In order to deliver the goal of transforming manufacturing, the Team have created a Sustainable Design and Build Plan which falls under the pillar of Innovation. The objectives are to embed circular economy principles, apply life cycle assessment, inspire supply chain action and transform manufacturing by employing a sustainable design and boat build process particularly with regards to resource management, production and end of life.

High level design and build strategy:

BENCHMARK → INFORM NEW BUILD → INFLUENCE OTHERS → ESTABLISH POLICY

The first step involved assessing the current industry benchmarks and putting together a roadmap for the design and build of an IMOCA 60 ocean racing boat for The Ocean Race, which is summarized in the graphic below.

* Benchmarks from previous IMOCA 60 boat builds and operations from the Team's previous Ocean Race campaigns help us to compare footprints over time.

A number of manufacturing innovation research and inputs will contribute to the optimization of the AThe diagram here describes the work streams which have been identified as part of the Sustainable Design and Build Plan.

ALTERNATIVE MATERIALS

In 2019, the Team commissioned a report of the current state of play with regards to sustainable alternative materials and build processes that could be used within this and future performance yacht builds, by Kairos. The report is aimed at sustainability professionals, naval architects and boat builders to provide them with tools and data to introduce low impact materials and processes into sailing boats. It also provides considerations to help better understand the potential and limitations of 'eco design' in racing boats.

The report compares the environmental and structural properties of a number of biobased composite materials, which has driven the Team to undertake further research in the form of testing panels with the intention of selecting between three and five onboard components to be built from fibers with a lower embodied carbon footprint.

MANUFACTURING EFFICIENCY

The boatbuilding facility CDK Technologies had already started putting in place a range of sustainable practices before the Team arrived and this positive approach has enabled both parties to openly discuss the sustainability challenges and associated solutions with the build of a new race boat.

The Team undertook an audit of the boatbuilding facilities, allowing both parties to better understand and anticipate the different impacts associated with the design and build process. Particular attention was paid to materials, production methods, waste, energy, water and travel.

The audit resulted in a list of recommendations for the boatyard and the build process highlighting the key inputs to be taken into account during the life cycle assessment (LCA) of a new race boat build.

Objectives of the audit:

- To understand and map the boat build facility's infrastructure
- To understand the material and utility flows in and out of the facility
- To make recommendations to inform our future build
- To create templates to efficiently track the information generated for the purposes of life cycle assessment

The results of the audit will be published in a set of recommendations which will be actioned in 2020 and fed into the Team's Sustainable Design and Build Plan.

INNOVATION GOAL 9: IMPLEMENT LIFE CYCLE ASSESSMENT

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Apply Life Cycle Analysis to production processes to inform sustainable choices.	Measurement	Production of exploratory LCA report using historical data and the most recent IMOCA build	🔵	12.4
	Interpretation and implementation	Interpretation of study to inform x# process/material/transport/production/EOL improvement choices, and a comparison to 'business as usual' to be made.	🔵	12.4
	Validation	Production of as-built LCA report	🔵	12.4
		Develop 1 case study describing better design choices made as a result of LCA studies, including recommendations/lessons learnt	🔵	12.4

🔵 Complete 🔵 In Progress 🔵 Not Started   This goal aligns with World Sailing Agenda 2030 Objective 8, and UNFCCC Principle 4

DECK MOCK-UP LIFE CYCLE ASSESSMENT

The Team identified life cycle assessment (LCA) as a key measurement and diagnostic tool in this campaign. In 2019, the Team built a deck mock-up in order to configure various elements of the cockpit and incorporate feedback from the sailors into the ultimate design. The Sustainable Sourcing Code was applied to the purchase of materials for the mock-up and the subsequent LCA study was undertaken by our sustainability team to determine the footprint of the build, use and deconstruction.

The build took place at CDK Technologies in Port-la-Forêt, France. The construction was started in November 2019, modified in January 2020 and deconstructed in March 2020. The materials included three types of PEFC certified wood: plywood, particle board and MDF. Post deconstruction, some panels were retained for container fit out and contractor applications, and the rest was recycled through CDK Technologies' waste management contractors. The mock-up was built for deconstruction: minimal adhesives were used and was constructed in a jigsaw format, so the value in the panels, as much as possible, was retained after deconstruction.

The purpose of the study is to understand the environmental benefits of selecting wood from sustainable managed sources, in addition to the reuse and recycling applications versus landfill. This information will:

- Help identify best practices and areas for improvement.
- Establish a new benchmark within the 11th Hour Racing Team's 2019 Annual Report and carbon footprint.
- Be used to define the intensity metric of Euros spent and to scale the footprint to other budgeted comparable products within our campaign when other data is unavailable.

LIFE CYCLE ASSESSMENT 1

The Team has made significant progress with the completion of a life cycle assessment (LCA) for an IMOCA project completed in 2018, with the purpose of identifying impact hotspots and creating case studies for the comparison of business as usual with alternative sustainable initiatives. The final report will be completed in 2020. Through the creation of this LCA, while the MarineShift360 model was still in its development stages, the Team tested and supported the creation of the life cycle assessment tool for the industry, by the industry.

MARINESHIFT360

The datasets and LCA method used are those within the MarineShift360 model. The MarineShift360 model is a bespoke marine industry tool that provides a cradle to grave assessment of the materials and processes involved in yacht construction. The methodology used in the model has been reviewed by experts at Anthesis to ensure it conforms with best practice and is suitable for producing ISO14044 compliant reports. The database behind the tool is made up of primary research conducted in a number of marine products and processes, as well as data points from a wide range of third party sources including, for example, the European LCI database.

DELIVERING ON PRINCIPLE FOUR

LEGACY

LEGACY GOAL 10: INVEST IN COMMUNITY OUTREACH

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Develop a legacy grant program as part of a wider outreach strategy promoting ocean health and sustainable communities.	Develop programme	One legacy per quarter, & One for each race leg	🔵	14.2
	Participate	Each team staff will participate in at least 1 community outreach / industry sustainability event per year	🔵	12.8
		The team will integrate a local community project in Newport, RI	🔵	14.2
	Showcase	Amplify the sustainability efforts of coastal marine communities and cities visited during the campaign	🔵	14.2
		The team will collaborate with Internal, External staff and TOR teams to leverage the value of the message locally and internationally	🔵	12.8
	Follow up	The team will support 11HR with the development of long-term relationships with each of the Grant recipients.	🔵	14.2

🔵 Complete   🔵 In Progress   🔵 Not Started   This goal aligns with World Sailing Agenda 2030 Objective 3 and UNFCCC PrincipleS 3 and 5

LEGACY GRANT PROGRAM

The Team supports the 11th Hour Racing grant legacy program on a global scale. In line with the 11th Hour Racing grant making strategy, the grant's themes support grassroots projects, organizations and innovations which highlight sustainable solutions to relevant issues, and promote ocean health initiatives that:

- Reduce ocean pollution
- Foster ocean literacy and stewardship amongst sailing and ocean communities
- Advance clean technologies and best practices that reduce the environmental impact of the sailing and maritime communities
- Promote projects that tackle the effects of climate change and water quality issues through ecosystem restoration.

The Team involvement in the legacy grant program includes:

1. Facilitating legacy grants based on the strategic themes
2. Plan and collaborate with 11th Hour Racing and recipients to maximize impact
3. Place priority on long term collaborations and partnerships
4. Promoting staff participation within the Team

The first two grantees were selected and engaged in 2019 in Brittany, France where the Team were operating: The Concarneau Marine Station and Explore.

The Concarneau marine station is the world's oldest active marine biology station. The center places science and marine conservation at the heart of the visitor's experience. The partnership with 11th Hour Racing and the Team helps to reinforce the educational activities for pupils aged 4-17, extends the access to the Living Beaches project connecting communities with their coastlines, and supports the Young Reporters of the arts, sciences and the environment program.

Explore was created in 2014 by the French sailor Roland Jourdain. Their mission is to transform environmental issues into new fields of exploration for the benefit of people and the planet by understanding, innovating and raising awareness of the challenges facing ocean health.

The grant project with Explore supports the development of new educational kits to enable young people with inspirational ideas to put in place concrete local action.

> *GRI Disclosures:*
> *413-1 Operations within local community engagement, impact assessments and development programs*

LEGACY GOAL 11: DEVELOP AND TRAIN

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Provide education and training opportunities for key groups highlighting key ocean health issues.	Exploration zone	The Exploration zone will be neutral environmental impact	🔵	12.2
		The Exploration zone staff will have in-depth knowledge of subjects interpreted within the displays	🔵	4.7
		The exploration zone materials will have a meaningful/relevant 'end/next life' post-race.	🔵	12.5
	Intern program	One intern per stopover or campaign period, supported by all departments	🔵	8.6
		The team facilitates ongoing opportunities post placement for deserving interns	🔵	8.6

🔵 Complete   🔵 In Progress   🔵 Not Started   This goal aligns with World Sailing Agenda 2030 Objective 5 and UNFCCC Principles 3 and 5

INTERNSHIP PROGRAM

The Team recognizes the challenges faced by young professionals and recent graduates in accessing opportunities to develop their career pathways. The Team is promoting new pathways in the marine, sports and events industry for young professionals through the creation of an internship program which will create opportunities in various departments and sectors of the campaign.
The Team have collaborated with Kairos & CDK Technologies to create an internship focused on the design and build phase of the campaign.

The internship was filled by James Harwood, a Masters student at University of Nice Sophia Antipolis, focusing on alternative materials, industry & management, quality control, energy and the environment.

The primary tasks of the internship included:
- A sustainability audit of CDK Technologies' infrastructure, energy, material and waste flows
- Providing recommendations to improve the environmental footprint of the design and build process
- Collating all data for input to MarineShift360 LCA tool

The initial internship term is 12 months from September 1, 2019 to August 31, 2020.

> *Working as part of 11th Hour Racing Team has been a great experience as a student. The scale of the project opens your eyes to all the aspects that can be affected by sustainable practices. Conducting the audit of the CDK facilities has been an interesting challenge because I've learnt how small impacts can greatly influence the project down the line. The whole team has put the effort to welcome me, and I look forward to continuing the work as the project gets closer to its goal. My future coursework will also help me integrate and better manage my work flow into the sustainability program.*
>
> **- JAMES HARWOOD, 2019 INTERN**

LEGACY GOAL 11: COMMUNICATE AND INFORM

OBJECTIVE	SECTOR	TARGET	STATUS	UN SDG
Champion transparent reporting, sharing of challenges and successes, and guiding future policy to promote long term planning around sustainability.	Climate positive	Offset our Greenhouse Gas Emissions to achieve Carbon positive target.	🔵	13.3
	Water footprint	Monitor, reduce water footprint according to a recognised standard, and share learning and engage with the industry to support adoption	🔵	6.4
	Design and build report	Use the LCA and Design and Build reports to make industry recommendations	🔵	12.4
	Annual reports	Publish annual Sustainability reports in accordance with GRI reporting standards and map the team's contribution to the UN Sustainable development goals	🔵	12.6
		Inform improvements for the next cycle & updates to the team's Sustainability plan	🔵	8.4
	The survey	Create a Carbon footprint of sailing database for 15+ teams/classes and provide recommendations based on findings to World Sailing & Industry stakeholders	🔵	12.6

🔵 Complete 🔵 In Progress 🔵 Not Started   This goal aligns with World Sailing Agenda 2030 Objective 9 and UNFCCC Principles 3 and 5
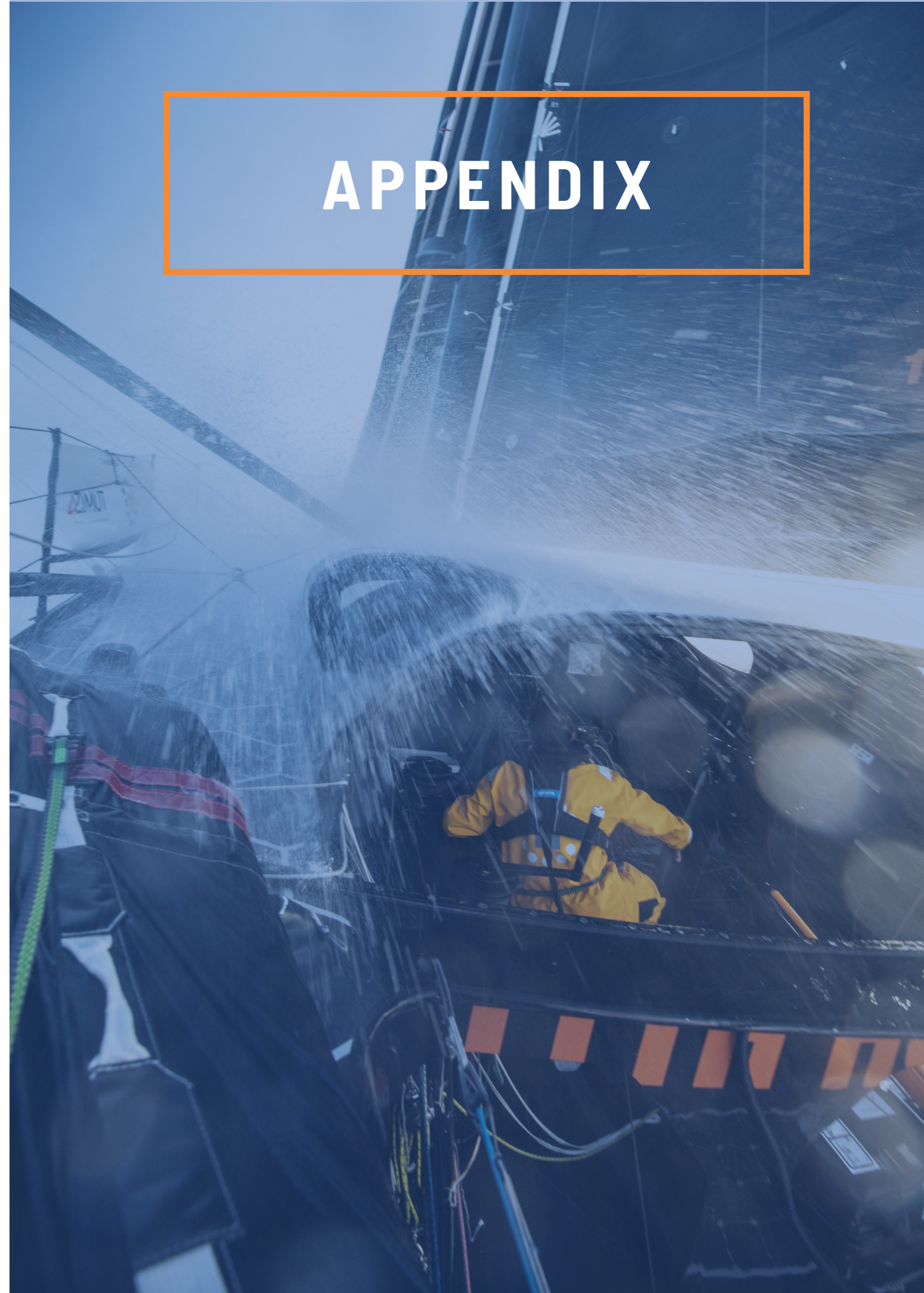
THE TOOLBOX

In 2019, The Team started to create the framework for the Sustainability Toolbox, a legacy project that can assist other teams with setting up a sustainability program.

The aim of this project is three-fold:

- Create a framework[12] and a series of templates with pre-filled sample information that define the step-by-step process of establishing the fundamentals of a sustainability plan, from establishing the scope and mapping stakeholders to defining the actions and the reporting process.
- To provide linked and standardized data collection spreadsheets and database management systems that calculate the organisations footprints.
- To provide a dashboard as a communication tool that reads and presents data and can be used to share live graphic progress snapshots with stakeholders, sponsors and others.

The Toolbox can be found as a set of How To guides at SustainabilityToolbox.com.

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[12] This will align with the ISO framework and be a practical application mirroring the IOC Sustainability Essentials framework

APPENDIX

ASSURANCE

This report is based on the GRI reporting standards but not formally GRI assured. It has been reviewed by Craig Simmons, Chief Technology and Metrics officer UK - Anthesis Group, and by Jill Savery, Sustainability Director - 11th Hour Racing.

GRI DISCLOSURES

In order to follow Global Reporting Initiative standards the Team referenced the relevant disclosures at each stage of the report.

GRI CONTENT INDEX

GRI STANDARD	DISCLOUSRE	CHAPTER	LEVEL OF REPORTING
GRI 101: Foundation 2016	GRI 101 does not include any disclosures		
General Disclosures	The list of general disclosures made		
GRI 102: General Disclosures 2016	102-1 Name of the organisation	Introduction	Full
	102-3 Location of headquarters	Introduction	Full
	102-4 Location of operations	Introduction	Full
	102-8 Information on employees and other workers	Organisational structure	Partial
	102-9 Supply chain	Partners & Suppliers	Partial
	102-14 Statement from senior decision maker	Foreword	Full
	102-15 Key impacts, risks and opportunities	Risks and opportunities	Full
	102-16 Values, principles, standards and other norms of behaviour	Vision, mission & stakeholders	Full
	102-18 Governance structure	Organisational structure	Full
	102-40 List of stakeholder groups	Vision, mission & stakeholders	Full
	102-42 Identifying and selecting stakeholders	Vision, mission & stakeholders	Full
	102-43 Approach to stakeholder engagement	Vision, mission & stakeholders	Full
	102-44 Key topics and concerns raised	Vision, mission & stakeholders	Full
	102-46 Defining report content and topic boundaries	Scope	Full
	102-50 Reporting period	Scope	Full
	102-51 Date of most recent report	Introduction	Full
	102-52 Reporting cycle	Scope	Full
	102-53 Contact point for questions regarding the report	Scope	Full

GRI CONTENT INDEX

GRI STANDARD	DISCLOUSRE	CHAPTER	LEVEL OF REPORTING
GRI 102: General Disclosures 2016	102-54 Claims of reporting in accordance with the GRI standards	Assurance	Full
	102-55 GRI content index	GRI Disclosures	Full
	102-56 External assurance	Assurance	Full
GRI 300	302-1 Energy consumption within the organisation	Footprint	Partial
	303-5 Water consumption	Footprint	Full
	305-1 Direct (Scope 1) GHG emissions	Footprint	Full
	306-2 Waste by type and disposal method	Waste	Full
	308-1 New suppliers that were screened using environmental criteria	Supply chain	Full
GRI 400	404-1 Average hours of training per year per employee	Internal engagement	Full
	413-1 Operations within local community engagement, impact assessments and development programs	Invest in community outreach	Full

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

TEAM GOAL	UNSDG	UNSDG DESCRIPTION	CHAPTER
GRI 102: General Disclosures 2016	4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Create Ambassadors
1.2.1 1.2.2 1.2.3 1.3.1 1.3.3 1.3.4 3.1.3 3.2.2 11.1.2	4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	Create Ambassadors Inspire Fans and Followers Educate and Train
1.1.2	5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life	Create Ambassadors
9.5.1 9.5.2 12.2.1	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Implement Sustainable Operations Communicate and Inform
9.1.2	7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	Implement Sustainable Operations
5.1.3	7.3	By 2030, double the global rate of improvement in energy efficiency	Transform Manufacturing

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (CONT.)

TEAM GOAL	UNSDG	UNSDG DESCRIPTION	CHAPTER
8.3.1 9.3.1 12.4.2	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead	Influence Supply Chains, Implement Sustainable Operations, Communicate and Inform
11.2.1 11.2.2	8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training	Educate and Train
4.1.1	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Embed Circular Economy Principles
1.1.4	10.2	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	Create Ambassadors
4.3.2	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Embed Circular Economy Principles
4.2.1 4.3.1 5.1.2 5.2.1 9.2.1 9.2.2 9.2.3 11.1.1	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Embed Circular Economy Principles, Transform Manufacturing, Implement Sustainable Operations, Educate and Train
9.4.3	12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	Implement Sustainable Operations
6.1.1 6.2.1 6.3.1 6.3.2 12.3.1	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Apply Life Cycle Assessment, Communicate and Inform
4.1.2 4.1.3 9.4.1 9.4.2 9.4.6 11.1.3	12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Embed Circular Economy Principles, Implement Sustainable Operations, Educate and Train
12.4.1 12.5.1	12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Communicate and Inform
5.1.1 8.1.1 8.1.2 8.2.1 8.2.2	12.7	Promote public procurement practices that are sustainable, in accordance with national policies and priorities	Transform Manufacturing Influence Supply Chains
10.2.1 10.3.2	12.8	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	Invest in Community Outreach

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (CONT.)

TEAM GOAL	UNSDG	UNSDG DESCRIPTION	CHAPTER
9.1.1	13.2	Integrate climate change measures into national policies, strategies and planning	Implement Sustainable Operations
12.1.1	13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Communicate and Inform
9.4.4 9.4.5	14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	Implement Sustainable Operations
3.1.2 10.1.1 10.2.2 10.3.1 10.4.1	14.2	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	Inspire Fans and Followers Invest in Community Outreach
4.3.4	14.3	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	Embed Circular Economy Principles
4.3.3	14.5	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	Embed Circular Economy Principles
9.3.2	15.3	By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	Implement Sustainable Operations
2.2.1 2.2.2	17.14	Enhance policy coherence for sustainable development	Support Peers
2.1.1 3.1.1 7.1.1 7.1.2	17.16	Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	Support Peers Foster Strategic Partnerships

WORLD SAILING AGENDA 2030

TEAM SUSTAINABILITY GOAL	WORLD SAILING OBJECTIVE	WORLD SAILING OBJECTIVE DETAIL	CHAPTER
Goal 7	1	Establish a robust approach to sustainability across the sport, sharing best practice and setting standards and targets, focusing on World Sailing operations, events and venues	Foster Strategic Partnerships
Goal 4, 8, 9	2	Reduce World Sailing's carbon footprint and promote resource efficiency across the sport	- Embed Circular Economy Principles - Influence Supply Chains - Implement Sustainable Operations
Goal 10	3	Respect and contribute to ecosystem health and biodiversity	Invest in Community Outreach
Goal 1	4	Promote diversity and accessibility across the sport, drive gender equity at World Sailing events in line with IOC 2020 targets	Create Ambassadors
Gaol 11	5	Ensure sustainability is embedded into teaching of sailing through teaching and coaching frameworks	Educate and Train
Goal 3	6	Promote a culture of sustainability by sharing best practice and increasing sustainability awareness across MNAs, events, venues and affiliated industries	Inspire Fans and Followers
Goal 2	7	Set technical standards by 2030 to reduce environmental impact of sailing industry focusing on end of life of composites and engine and energy technology	Support Peers
Goal 5, 6	8	Take a science based approach underpinned by research to understand our impact and identify solutions	- Transform Manufacturing - Apply Life Cycle Assessment
Goal 12	9	Ensure credibility and transparency through robust monitoring and reporting	Communicate and Inform

MATURITY MATRIX

As the Team has progressed from across three Ocean Race campaigns, a new level of commitment to sustainability has been applied at each stage, from the initial recognition of the importance of sustainability during the Alvimedica campaign, to sustainability being an integral part of the Team's strategy and operations across all departments of 11th Hour Racing Team.

Activity	Basic level	Intermediate level	Advanced level
Vision (and strategy)	Recognition that sustainability is important for the organisation to develop.	Sustainability included in corporate plans for the organisation.	Fully developed strategic sustainability vision consistent with the overall organisation's vision.
Policy and governance	Leadership commitment to adopt a sustainability programme.	Sustainability policy in place and lead person/department for sustainability identified.	Sustainability policy in place and clear responsibilities and accountability for sustainability across the organisation.
Stakeholder engagement	Initial soundings with selected key partners and staff.	Structured approach to sampling stakeholder views.	Regular engagement with all key stakeholder groups. Feedback used to inform and refine sustainability plan.
Scope, objectives and targets	Small-scale activities undertaken on ad hoc basis.	Some prioritisation of sustainability actions and initial development of an action plan.	Clear definition of scope of sustainability programme and objectives, and a range of quantitative and qualitative targets in place for each activity.
Measuring and monitoring	Purely qualitative assessment of outcomes.	Some data-gathering to complement general assessment of progress.	Formal processes in place for collecting and assessing data relating to sustainability performance, and using results to refine plans and targets.
Reporting, communicating and sharing knowledge	Basic mention in organisation's reports and communications.	Awareness-raising initiatives undertaken and initial attempts to report progress via existing corporate reporting mechanisms.	Regular and proactive public reporting of progress on sustainability programme via a range of communications channels. Contributing to knowledge-transfer programmes.

Grey: Alvimedica, Blue: Vestas 11th Hour Racing, Orange: 11th Hour Racing Team

TOOLS AND REFERENCES

INCLUSION	BOUNDARY
UK GHG Reporting Protocol	2019 conversion factors were used for tonnes CO2e calculations with the exception of: • Electricity, where the national emission figures were used. • Water, being only a small percentage of the total GHG footprint, the UK conversion factors (as opposed to using different factors per country visited) were used for all locations.
Carnegie Mellon EIO-LCA Model	This input-output model was used for materials and products purchased not related to the GHG protocol tool to give CO2e per US$ spent.
The MarineShift360 Life Cycle Assessment (LCA) tool was used to calculate the footprint of the deck mock-up	The datasets and LCA method used are those within the MarineShift360 model. The MarineShift360 model is a bespoke marine industry tool that provides a cradle to grave assessment of the materials and processes involved in yacht construction. The methodology used in the model has been reviewed by experts at Anthesis to ensure it conforms with best practise and is suitable for producing ISO14044 compliant reports. The database behind the tool is made up of primary research conducted in a number of marine products and processes, as well as data points from a wide range of third party sources including, for example, the European LCI database.
Other sources	Certain sectors required additional research, and sources such as Ademe were used to provide the best estimations
Air travel conversions factors were defined using UK GHG protocol ranges domestic, short haul and international flights	Domestic flights (<785 km) - as the Team's operations included travel across various countries, the UK domestic conversion factors were used for flights under 785 km in other countries as well Short haul conversion factors (>785<3,700 km) were used for flights in this bracket International conversion factors (>3,700 km) - was used for all flights above 3,700 km. All flights were factored as economy flights
Digital footprint	The Team has made a specific effort to include the digital footprint of internal team operations, as well as the design and analysis associated with the Team's boat build process Computing time, energy consumption, as well as the materiality of online services have been included ranging from texts and messaging at one end of the scale to super-computer time at the other Where possible direct energy consumption has been measured to generate emissions. When not possible, estimations have been applied using the best possible researched data.
Remote workers	The impact of remote working was included by using the methodology provided by Anthesis 2020
Embedded water	To calculate Embedded water footprint the team used the following methodologies: • Measurement of water flowed/used on site • Estimation of water flowed/used where measurement was not available • Life cycle assessment using Marineshift360 • Carnegie Mellon input-output model for $ spend A more detailed calculation will be used going forward using a sector specific calculation tools and data

EXCLUSIONS	BOUNDARY
Second Hand assets	The Team will not be including second hand assets on the basis that ownership of the footprint remains with the original purchaser. In 2019 this included: The purchase of a second hand Rigid Inflatable Boat (chase boat) from The Ocean Race. The original footprint of this vessel was tracked, calculated and acknowledged (but not compensated for) by The Ocean Race. The Team purchased a secondhand IMOCA from Alex Thomson Racing. The original footprint of this vessel has not been included in the Team's footprint
GHG emissions are stated in CO2e only	The breakdown of various GHG gases was not included: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sculpture hexafluoride (SF6) that comprise the final emission figures
Certain categories listed in the UK Government GHG Conversion Tables that have little or no relevance to the Team's operations were excluded or had no data to include	• Bioenergy was not relevant and the tab was excluded from the CO2e calculations • Refrigeration and air conditioning – The team bases had no air conditioning and only two small second-hand fridges which were not refilled or serviced • Company owned vehicles (scope 1) – no company-owned vehicles were used • Electrical vehicles (EVs) were not used - N/A • Managed asset vehicles – N/A
Digital hardware	Unless specifically embedded in the researched factors used for calculating certain aspects of the digital inventory, no upstream, manufacturing or end of life impacts were accounted for in the digital footprint. The digital footprint comprises the use phase only.

REFERENCES

• Amazon Web Services, n.d., (online) Retrieved from <https://aws.amazon.com/about-aws/sustainability/> [Accessed: 21 July 2020]
• (Gliding, 2018)
• Green500 List, 2013., (online) Retrieved from <https://www.top500.org/green500/list/2013/11/> [Accessed: 21 July 2020]
• Green500 List, 2017., (online) Retrieved from <https://www.top500.org/green500/lists/2017/11/> [Accessed: 21 July 2020]
• Grossman, Erwan (2019), State of the Art Biocomposites

ANNEX

Materials tracked as part of the GHG and Water footprints:

• Boats
• Cables and furlers
• Deck hardware
• Electrical
• Engine
• Keel hydraulics
• Keel/yokes/bearings
• Boat refit & maintenance
• Safety equipment
• Testing equipment
• Navigation equipment
• Containers and tents
• Foils
• RIB
• Sails
• Spars and rigging

• Computers
• Race deposit
• Composite
• Shore contractors
• Canvas work
• Lifting Gear
• Shore contractors
• Safety Equipment
• Service Parts
• Tools
• Workshop consumables
• Shore services
• Onboard food
• Onboard comms
• Onboard supplies
• Mooring

• Logistics service fees
• Boat Yard
• Airfreight
• Trucking
• Transport
• Accomodation
• Meals
• Technical clothing
• Crew training - required
• In-kind contribution expense - apparel
• Sustainability program support
• Laundry
• Office setup
• Mock-up

11TH HOUR RACING
SAILING TEAM

To keep up to date with our latest sustainability news please visit
11thhourracingteam.org/for-the-ocean

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