VOLVO OCEAN RACE NEWPORT STOPOVER

SUSTAINABILITY REPORT

Photo credit: Marc Bow / Volvo Ocean Race

Environmental Responsibility

On Land And At Sea

SAIL NEWPORT
HOST PORT

VOLVO OCEAN RACE
ROUND THE WORLD
NEWPORT

Newport, May 5-17, 2015

SUSTAINABILITY AT THE EXTREME

VOLVO OCEAN RACE NEWPORT STOPOVER

1,504 pounds of trash were removed prior to boat arrivals

LEAVE NO TRACE

FORT ADAMS was cleaner AFTER THAN BEFORE

CARBON NEUTRAL

1,123 square feet of seagrass was planted TO OFFSET **702** tons of CO_2

250 GREEN TEAM VOLUNTEERS

0 straws, plastic bottles, fireworks, balloons, styrofoam containers

14,020 people chose sustainable transportation

6 all BOATS left the dock powered by BIODIESEL

131,000 ATTENDEES doubling attendance of the America's Cup World Series BUT

23,000 less pounds of trash went to landfill with a **60%** diversion rate

1,153 PLEDGES TO PROTECT THE OCEAN

3,000 STUDENTS ON FIELD TRIPS LEARNED ABOUT OCEAN SCIENCE

Clean Regatta Certified Platinum 2015 · Sailors for the Sea · bike newport · BIODIESEL America's Advanced Biofuel · Clean Ocean Access · D·E·M · Sail Newport · SCA Care of Life · SeaGrass Grow · The Ocean Foundation · 11th Hour Racing

FOREWARD

Congratulations and thank you to everyone who made the Volvo Ocean Race Newport Stopover such a great success! When it came to hosting this event, Rhode Island set the bar high for environmental stewardship because we recognize that preserving our parks and protecting beautiful Narragansett Bay are integral to our state's heritage.

I am enormously proud of all the partners who came together to form such a strong and committed Sustainability Committee. From the Rhode Island Department of Environmental Management to for-profit companies to small non-profit organizations, a variety of committed individuals strategized and delivered an event that managed to leave Fort Adams State Park cleaner than before the Newport Stopover began.

As a result of choices made by the event organizers to encourage recycling and composting, I am proud to announce that the Volvo Ocean Race's Newport Stopover – the only one in the North America – was able to divert 60 percent of their waste away from our landfill. This was one among many other green practices and accomplishments, such as encouraging alternative forms of transportation and using locally-sourced biodiesel.

As we look forward to the next time the Volvo Ocean Race comes to the Ocean State, there is a lot of work that must be done to plan for its arrival. Sustainability does not have an end point, and it is my sincere hope that future events will learn from and build off of what we accomplished and reduce further their environmental footprint. By promoting sustainability, we not only safeguard our natural resources at these events, but also we influence others who will become better stewards of the Earth wherever they roam.

Yours for Sustainability,

Janet Coit
Director
Rhode Island Department of Environmental Management (RI DEM)

VOLVO OCEAN RACE NEWPORT STOPOVER SUSTAINABILITY COMMITTEE PARTNERS

JANET COIT, RI DEM • TYSON BOTTENUS, SAILORS FOR THE SEA • LIZA BURKIN, BIKE NEWPORT • LAUREN CARSON, NEWPORT ENERGY & ENVIRONMENT COMMISSION • BARI FREEMAN, BIKE NEWPORT • RON GAGNON, RI DEM • JENNY LYBECK, 11TH HOUR RACING • DAVE MCLAUGHLIN, CLEAN OCEAN ACCESS • SUSAN MICHINI, SCA • WILLIAM MITCHELL, RI DEM

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Introduction

The Volvo Ocean Race is the world's longest professional sporting event and consists of teams sailing nearly nonstop in the open ocean for nine months out of the year. The race first began as the Whitbread Round the World Race in 1973 and in over 12 editions and 42 years, it has redefined the concept of ocean racing. In 2001, its new owners rebranded the race as the Volvo Ocean Race and since then the race has become an event that is hosted every three years. Sail Newport Executive Director Brad Read joined Volvo Ocean Race CEO Knut Frostad and former Governor Lincoln Chafee on February 5, 2013 to announce that Newport, Rhode Island would become an official stopover for the 2014/2015 Volvo Ocean Race.

The Newport Stopover Sustainability Committee released their Sustainability Plan in April 2015, just before the start of the race village opening. The plan represented nearly six months of coordination between numerous state and non-governmental organizations focused on creating the most environmentally friendly Volvo Ocean Race stopover possible.

This Sustainability Report represents lessons learned and the results of the initiatives undertaken during the Newport Stopover of the 2014/2015 Volvo Ocean Race.

> **"The environment does not exist as a sphere separate from human beings, ambitions, and needs. Sustainability refers to a holistic perspective that harmonizes social, economic, and environmental dimensions and systems."**
>
> Our Common Future, 1987 Brundtland Report
> United Nations World Commission on Environment and Development

Themes and Objectives

The Sustainability Plan identified four themes for the Volvo Ocean Race Newport Stopover:

- Resource Efficiency
- Education and Outreach
- Climate and Energy
- Marine Environment

These themes were discussed and agreed upon by all members of the Sustainability Committee as the four most pressing issues that should be targeted. All strategies and objectives were aligned to fit these themes, although many of our initiatives overlapped multiple themes. For example, our goal to eliminate all polystyrene products could fit under every theme, but it was placed under "Resource Efficiency" because it was a key component of that section and resource management was undoubtedly one of the most visible aspects of the event.

How we created the Sustainability Report

Each theme below contains the initiatives, along with commentary about how effectively each theme was implemented. Lessons learned are also included. Initiatives were drawn from two "Sustainability Checklists" provided by Sailors for the Sea and the Newport Energy and the Environment Commission. Representatives from both organizations were involved in the crafting and execution of the Newport Stopover Sustainability Plan.

Sailors for The Sea's Clean Regattas Program

Sailors for the Sea's Clean Regattas program is the world's leading and only sustainability certification program for water-based events. Since 2006, more than 650 Clean Regattas have been certified in over 20 countries and the United States. Points are awarded through implementing best practices and the total number of points achieved dictates the event's certification level (Platinum, Gold, Silver or Bronze).

During the Newport Stopover, an independent, third-party Certification Subcommittee comprised of sustainability and legal experts met and discussed each of the plan's initiatives. Based on the Sailors for the Sea Best Practices, 41 of 42 points were awarded to the Newport Stopover.

Newport Energy and the Environment Commission's Best Practices

The mission of the Newport Energy and the Environment Commission is to advise the Newport City Council and to educate the public on energy-efficiency and renewable energy measures to foster a more sustainable community. Since 2012, they have supplied a voluntary "Sustainable Events Protocol" to local events such as the Newport Folk & Jazz Festivals, held at Fort Adams State Park. Their expertise in creating sustainable solutions at large events was invaluable in creating the Newport Stopover Sustainability Plan.

Resource Efficiency

***GOAL**: Ensure "Good Waste Management" practices such as recycling and composting, while also providing support for sustainable drinking water solutions for participants, spectators and race management officials.*

Recycling is the environmental activity most visible to people who attend large sporting events and festivals. It provides an opportunity for spectators, participants and event organizers to team up and reduce the amount of material that enters the landfill. In 2014, the Newport Energy and the Environment Commission conducted a study finding that 80% of respondents would separate their waste if event organizers provided recycling and compost bins. Following in the footsteps of the 2012 America's Cup World Series (and lessons learned afterwards), the Sustainability Committee urged that waste collection, recyclables collection, and compost collection be included in the Field Maintenance Request for Proposals (RFP).

Successfully hosting a large event with efficient use of resources however requires more than just procuring the necessary waste bins. In the months preceding the event, the Sustainability Committee looked for every opportunity to conserve water, energy, and to reduce the amount of waste produced at the Newport Stopover.

Initiative	RESOURCE EFFICIENCY	Performance
1	Ensure that all solid waste and recyclable materials generated at the Newport Stopover will be properly disposed of and/or recycled.	100%
2	Provide for collection and delivery of segregated recyclable materials to a recycling facility through an onsite hauler.	100%
3	Ensure that all vendors, staff and attendees know where recyclables and solid waste need to be deposited when discarded.	100%
4	Conduct a Waste Audit to determine what kind of waste is being generated by participants	100%
5	Ban the use of all polystyrene products.	100%
6	Provide the City of Newport with the weight of recycled materials diverted from the landfill to a recycling facility.	100%
7	Ensure that all Waste bins have Recycle and Compost bins placed side-by-side to them.	100%
8	Provide an equal number of Waste, Recycle, and Compost bins to give all attendees, sponsors, and participants the option to responsibly dispose of materials into the correct bin.	100%
9	Monitor and collect all cardboard so that it is disposed of properly.	100%
10	Ensure that all dinnerware is recyclable or compostable.	100%
11	Ban all straws from Fort Adams during the event's entirety.	100%
12	Require all Volvo Ocean Race participants to use reusable water bottles.	100%
13	Recommend and encourage all attendees to bring a reusable water bottle.	100%
14	Prohibit the sale of all single-use water bottles at Fort Adams State Park during the event's entirety.	100%
15	Provide an adequate number of Water Refill Stations on site for attendees to refill their water bottle with municipal tap water.	100%
16	Include information about Water Refill Stations in relevant materials.	100%
17	Use paper that is at least 50% post-consumer recycled product.	100%

Outcomes

The Sustainability Committee made every effort to reduce the amount of single-use plastic that vendors and caterers could use onsite. Efforts included the banning of straws and single-use plastic water bottles, along with sustainable sourcing of necessary cups, plates and food utensils. In addition, fireworks and balloons were prohibited due to the risk of creating marine debris.

Careful planning of how many waste recovery bins and field crew workers were needed at the Newport Stopover is very much indebted to the work performed by MTG Disposal and their dedicated field crew. MTG Disposal had prior knowledge (based on work done at previous events at Fort Adams State Park) and this prior knowledge helped the event meet its goal of 60% waste recovery.

Russell Morin Catering was also instrumental in the waste recovery initiative by agreeing to use compostable utensils, plates, and boxes. By putting an emphasis on early planning for the event, the Sustainability Committee and Russell Morin Catering were able to negotiate the appropriation of Boxed Water for purchase at the Stopover. Using Boxed Water instead of selling bottled water gave more profile to the Stopover's Sustainability Commitment and also created discussion about other opportunities where single-use plastics can be reduced. Boxed Water was more expensive, but it was overall agreed to be a better solution than forbidding all water sales (which inevitably happened during the 2012 America's Cup World Series).

2012 America's Cup World Series Newport, RI June 23 – July 1, 2012 (10 days)		
Attendees: 60,000		
Trash	**Recycling**	**Compost**
23.21 tons	7.37 tons	1.90 tons
Total Waste Created: 32.48 tons		
Total Diversion Rate: 28.5%		

2015 Volvo Ocean Race Newport Stopover Newport, RI May 5 – 17, 2015 (13 days)				
Attendees: 131,000				
Trash	**Recycling**	**Compost**	**Plastic (baled)**	**Pallets**
11.69 tons	7.50 tons	3.46 tons	0.38 tons	6.20 tons
Total Waste Created: 29.23 tons				
Total Diversion Rate: 60.0%				

Newport MRF Recycling Rate: 25.7% (RIRRC, 2014)

Waste during the Newport Stopover is divided into three segments:

1. Bump In (May 5 – 6)
   MTG Disposal cited that waste reduction during this phase was very difficult because construction materials could not be repurposed.

2. Public Involvement (May 7 – 19)
   During the phase, waste diversion was most efficient due to the sustainability initiatives listed above. From a personnel perspective, there was a member of the Sustainability Committee onsite everyday to meet Green Team volunteers and coordinate their efforts. In addition, MTG Disposal had a dedicated field crew working tirelessly to ensure that waste removal and waste diversion went efficiently and smoothly.

3. Bump Out (May 20 – 22)
   MTG Disposal stated that this phase was also challenging from a waste diversion perspective because construction workers and corporate members were not trained in sustainability practices. Hundreds of pounds of edible meats and produce were disposed of irresponsibly.

Lessons Learned

1. Pre-event planning between MTG Disposal and Russell Morin Catering was essential to the success of the sustainability plan.

2. Integrating sustainability requirements into RFP was also essential to achieving many of the initiatives.

3. Sustainability Committee should make an effort to meet with key players more than six months prior to the event.

4. Educating vendors about why sustainability initiatives (e.g., Dels Lemonade not being able to use single-use straws, MTG Disposal using zip ties on recycling containers) were put in place could make for more effective engagement.

5. Smaller vendors (Ben and Jerry's Ice Cream and Cape Cod Potato Chips) should have had their waste streams proactively addressed.

6. Food pantries could have benefitted had they been contacted before the event.

7. Having one Green Leader everyday onsite to train new volunteers about ongoing initiatives and how they can make a difference during their shift.

8. Waste coming out of the sponsor pavilions were not well sorted, indicating a lack of sponsor buy-in with regards to sustainability.

9. Having plastic bag collection infrastructure could have made baling plastic bags more efficient.

10. Much of the waste that was disposed of was from attendees bringing in outside food.

Education and Outreach

***GOAL**: Provide clear and consistent signage for all waste receptacles in addition to educating participants, spectators, and race management officials about basic concepts in sustainability and environmental awareness.*

AND

***GOAL**: Ensure the Newport Stopover sustainability efforts are highlighted and serve as a teaching opportunity for participants, spectators, and race management officials.*

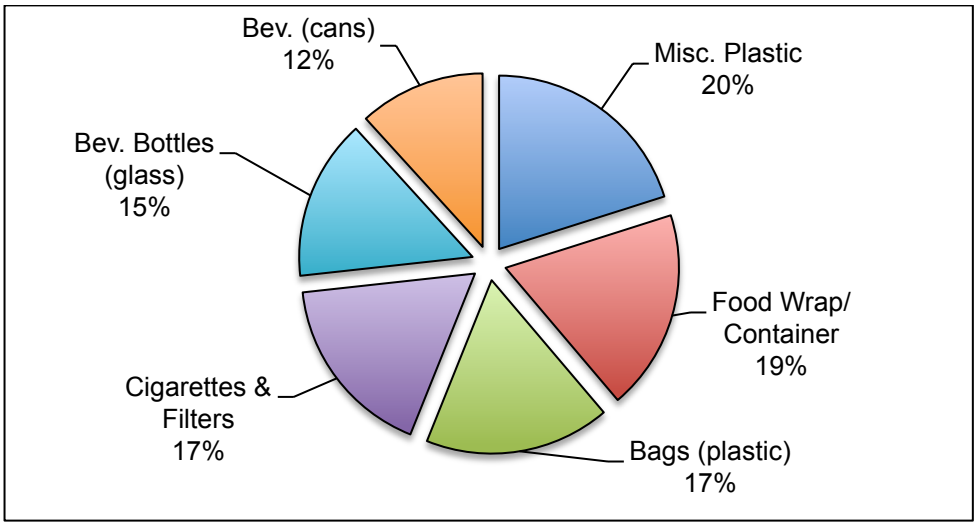
Large events such as the Volvo Ocean Race provide an excellent opportunity to model sustainable behaviors while providing a conduit for various conservation groups to interact with the general public.

With every Volvo Ocean Race sailor witnessing marine debris first hand while offshore, the issue took a center stage in the race village. Coordinated by a co-chair of the Newport Stopover Education Committee, the Ocean Summit on Marine Debris, sponsored by The Volvo Group took place on May 16, 2015. Delegates and media heard from speakers representing all sides of the issue, including academia, national and local government, special interest groups, philanthropic agencies, and the corporate world.

In addition, the Exploration Zone featured 22 educational exhibits on marine science, technology, geography and culture, mathematics and sustainability. Visitors had the chance to learn about the problems of marine debris, ocean acidification and other threats, along with solutions to engage these problems proactively.

Before the race village opened, a "Leave No Trace" policy was enacted and Clean Ocean Access facilitated a series of cleanups around Fort Adams State Park to ensure the park's cleanliness before the event. Over 207 volunteers removed 1,504 lbs. of small to medium size debris. During the event, Green Team volunteers made a conscious effort to pick up stray trash, and after the event, an additional round of volunteers combed Fort Adams to certify that the grounds would be left cleaner than they were prior to the event happening.

A total of 7,613 pieces of trash equal to 1,504 pounds was collected during three cleanups. Top six items collected during pre-race cleanups conducted at Fort Adams State Park.



Initiative	EDUCATION AND OUTREACH	Performance
1	Ensure that clear, consistent signage is visible above every Waste, Recycle and Compost bin.	50%
2	Ensure that all Waste, Recycle, and Compost signs are created so that they can be reused for future events.	0%
3	Educate attendees about alternative forms of energy such as wind power, solar power, biodiesel, etc.	100%
4	Outreach to hotels on Aquidneck Island about basic sustainability principles such as recycling.	50%

5	Educate attendees about sustainability initiatives they can take at home through website, press releases, and social media.	100%
6	Educate attendees about stormwater runoff.	25%
7	Create Legacy Project for the stopover (examples could include a rain garden, tree plantings, or other forms of green infrastructure)	100%
8	Leave No Tracy Policy: Implement a large-scale cleanup around Fort Adams State Park to ensure that the park is left cleaner than before the event.	100%

Outcomes

Educating over 131,000 attendees and spectators about what could and couldn't be recycled or composted took serious planning. Our port sponsor, SCA, designed a series of stickers that could be attached to each corresponding waste can.

In practice these stickers worked well and some attendees took time to investigate which bin their waste should be placed in. However, in the future the Sustainability Committee agreed, that these stickers could be improved if they were enlarged.

Another issue that came up (towards the end of the event) is that the glue that held the stickers to the bins started to wear off, creating multiple instances where bins became unmarked and contaminated. All bins were color coordinated (black for "trash", blue for "recycling" and brown for "compost") and it was also agreed that green bins would have been a better choice for the compost bins.

Recycling bins were zip-tied shut and had a small, circular opening at the top which prohibited people from opening the lid and tossing contaminated waste inside.

In areas (like dining tents) where the entire waste stream was either recyclable or compostable, trash bins were removed from the vicinity as they usually contained items that could have been diverted from the landfill. It's estimated that this had a large impact on increasing waste diversion over the course of the event.

A large Green Team consisting of roughly 250 total volunteers (spread out over the course of the event) were on hand to help the field crew separate waste, but more importantly to educate attendees about what could and couldn't be diverted. Their contributions were invaluable as

they frequently were the eyes and ears for the Sustainability Committee. Green Team volunteers checked into the Volunteer station upon arrival to the race village and were either greeted by the Green Team Leader or they were sent to the Sustainability Booth in the Exploration Zone to receive training. Hour long training sessions were provided in the weekend before the race village opened up but only 30-40 volunteers were in attendance.

Green Team Volunteer Positions:

1. Waste Educator: Duties included strolling around the village inspecting all waste bins to ensure that recyclables and compostables were disposed of properly. Picked up litter and educated attendees about the sustainability initiatives at the event.

2. Bike Parking: Bike parking greeters were onsite to provide assistance and information to attendees who chose to travel by bike. Bike Newport provided a bike repair kit and generously supplied movable bike parking racks that were used by upwards of over 100 bikes at a time on busier day. In addition, these greeters counted every bike that used the rack.

Lessons Learned

1. Cigarette disposal was an issue and frequently cited by the Green Team as the number one piece of debris that was most commonly found. There were no ashtrays for the public to use. Small pocketsize ashtrays were donated by Keep America Beautiful but did not get distributed effectively.

2. Having a Green Team Leader onsite to greet and train volunteers before their shift was pivotal towards creating a successful team of eco-volunteers.

Climate and Energy

***GOAL**: Limit greenhouse gas emissions through sustainable transportation initiatives and efficient event management protocols.*

This theme focused on mitigating the release of carbon dioxide into the atmosphere with the intention of creating a carbon neutral event. By working with partners such as Newport Biodiesel, the National Biodiesel Board, Bike Newport, and The Ocean Foundation, the Newport Stopover was able to reduce the amount of emissions that would have typically been associated with the event.

Strategies such as utilizing biodiesel instead of conventional diesel, incentivizing low carbon methods of transportation such as water taxis and bicycles brought numerous groups together and were very successful.

The Carbon Footprint Report for the Volvo Ocean Race Newport Stopover is included at the end of the Sustainability Report. Highlights of the report are:

Initiative	CLIMATE AND ENERGY	Performance
1	Optimize use of energy and minimize associated air emissions through efficient planning and technological innovation.	100%
2	Use a B20 blend of biodiesel in any diesel generators or equipment used onsite at Fort Adams.	100%
3	Create a Carbon Footprint Inventory	100%
4	Develop a partnership with an accredited carbon offset organization to create an innovative carbon compensation program to mitigate effects of any emissions created during the event's duration.	100%
5	Promote all alternatives to driving in individual vehicles on website and through social media.	100%
6	Encourage bicycling as a preferred method of transportation by providing secure bike racks and way finding resources to attendees.	100%
7	Develop partnership with RIPTA and local water shuttles to facilitate public transportation alternatives.	50%
8	Charge for all car parking.	100%
9	Encourage hybrid cars by providing a small discount.	0%

Outcomes

The total carbon footprint for the Volvo Ocean Race Newport Stopover was 702 tons CO_2e. The Sustainability Committee has negotiated with *SeaGrass Grow*, an innovative carbon offset program of The Ocean Foundation. *SeaGrass Grow* offers the first-ever and only verified "blue carbon" offset program that utilizes the targeted planting of seagrass in coastal watersheds in need of restoration.

The Sustainability Committee collected information about carbon "hotspots" that formed the majority of the footprint. Of the twenty identified sources in the carbon inventory, six groups were formed and their associated emissions were calculated.

Transportation (386,462 lbs. CO_2e): "Transportation" includes the shipment of the race village to Newport, Rhode Island; the fuel used in the water taxis that operated between downtown and Fort Adams; vehicular transportation by staff/participants; and transportation of all waste, recycling, and compost. Of the transportation, 92% of the carbon footprint is derived from the shipment of the race village from New Zealand to Rhode Island.

Hospitality (189,882 lbs. CO_2e): "Hospitality" includes the number of room nights used by Volvo staff, along with that of all race participants.

Staff Air Travel (566,682 lbs. CO_2e): "Staff air travel" covers the flights of the Volvo staff. Note that other Volvo guests and sponsors are allocated in the Associated section.

Support Boats (50,804 lbs. CO_2e): This group includes the fuel consumed for any support boats associated with Sail Newport.

Operations (209,790 lbs. CO_2e): "Operations" includes the carbon footprint of the B-20 biodiesel provided by the National Biodiesel Board and Newport Biodiesel.

Waste (1,206 lbs. CO_2e): "Waste" includes any associated emission derived from the waste and recyclables sent to the Rhode Island Resource Recovery Center (RIRRC).

Lessons Learned

1. Local water shuttles were an excellent strategy to decrease the amount of traffic headed towards Fort Adams State Park and provided spectators with an amazing view of Newport Harbor. Buses and shuttles often idled longer than permitted by city ordinances, impacting total carbon emissions.

2. Encouraging people to bicycle was also very successful, but could have been more successful if outreach and communication efforts were coordinated through the Newport Stopover website and social media. All messaging should be front and center on the website and should begin early in the promotion of the event.

3. Location of the bike parking was excellent and visible to people walking to the race village. Bike parking area is a good branding opportunity and revenue source.

4. Bicyclists coming into the fort struggled with the flow of cars and traffic as they made their way up to the bike parking area. Flow could have been improved by utilizing half of an "outbound" lane for incoming bicyclists to the fort.

5. Gators and golf carts impacted fuel consumption. Alternatives should be discussed beforehand next time.

6. Biodiesel partnership with the water taxis was a great partnership that could have been promoted with additional signage on the vessels.

Marine Environment

***GOAL**: Protect and support biodiversity, habitats, and wildlife in and around the waters and islands of Narragansett Bay.*

Narragansett Bay is a thriving ecosystem, home to diverse marine life and a buzzing recreational landscape. In an effort to minimize the environmental impacts of the Newport Stopover, strategies were enacted to protect the marine environment and enhance conditions in the surrounding area.

The Sustainability Committee made great efforts to create contingency plans in case of a disaster such as preparing for an oil spill or encounters with endangered species. Through the Marine Affairs Subcommittee, connections were made with the local harbormaster, the support

boats, and the Coast Guard. As required, the Coast Guard made daily spot checks to ensure that no sea turtles were in the racing area during any ProAm or VOR activities.

Indicator	MARINE ENVIRONMENT	Performance
1	Ensure that all motorized race committee/support boats are equipped with ONE bilge sponge and ONE fueling spill pad.	100%
2	Ensure that all cleaning products used by vendors, sponsors, participants and attendees are nontoxic, biodegradable and phosphate-free.	50%
3	Create “Safe Refueling Areas” and ensure proper training to all staff.	100%
4	Coordinate with authorities to have an emergency plan ready in case of a large oil spill.	100%
5	Coordinate with pump out services to ensure that all spectator boats are aware of their existence. Remind spectator boats that any holding tank discharge into Newport Harbor is illegal.	0%
6	Eliminate two-stroke engines and only use more fuel-efficient four-stroke engines.	100%
7	Attempt to use fuel-efficient rigid inflatable boats (RIBs) instead of fiberglass for any race committee/support boats whenever possible.	100%
8	Eliminate the use of harmful cleaning products by VOR participants during on-the-water activities.	100%
9	Encourage a “Water Only Washdown” protocol for all VOR participants during on-the- water activities.	100%
10	Ensure that all maintenance (fairing/sanding) be contained and collected.	100%

Outcomes

It’s estimated that over 1,000 spectator boats came out to watch the sailing between Thursday May 14th and Sunday May 17th and roughly 50% of those boats were counted just on Sunday. Marshall boats, the Newport harbormaster and the Coast Guard were integral parts in making this event safe for all, including the marine environment.

Before the arrival of the boats, a set of Team Guidelines was distributed to each boat with prescriptive instructions about the sustainability initiatives enacted by the Newport Stopover. This list included an overview of all pertinent environmental regulations (i.e. no discharge) along with a list of recommended non-toxic, biodegradable products that should be used. Water-only washdowns for the boats were put into effect and all maintenance was conducted inside a specially constructed tent.

Lessons Learned

1. While Team Guidelines were issued before the boats came to Newport, there was no vetting of any of the products used by the teams while they were onsite. Committee members should make a stronger effort to meet with integral stakeholders earlier to verify which products were used.

2. This same lesson can be applied to all “Safe Refueling Areas”. As many of them were not located at Sail Newport, a stronger effort should be made to engage local marina operators to learn more about their individual refueling practices.

3. Due to a lack of time before the event, pump-out operators were not contacted to coordinate their efforts with spectator boats.

- End of Sustainability Report -

Volvo Ocean Race Newport Stopover
CARBON FOOTPRINT REPORT

Acknowledgements:

The Volvo Ocean Race Sustainability Committee would like to thank all partners who were instrumental in creating this report. In particular we would like to thank Matt Gineo of Oldport Marine Services, Laurie Stroll of Newport Hospitality, Bob Morton of Newport Biodiesel, and Chris Jensen and Brad Read of Sail Newport. Finally, we would like to thank Jill Savery, former Head of Sustainability for the 2013 America's Cup. The initiatives and lessons learned from the 2013 America's Cup influenced the creation of this event carbon footprint report.

Executive Summary

The aims of this report are to quantify the total carbon dioxide emissions that the Newport Stopover for the Volvo Ocean Race is directly responsible for contributing to the environment. Additionally, this report aims to highlight all identifiable sources of emissions and to report on any "associated" and "shared" emissions that may have been emitted as result of the Newport Stopover.

In total, the Newport Stopover directly emitted an estimated 702 tons of CO_2e (carbon dioxide emissions) between May 5 – May 17, 2015. This included emissions from transportation, hospitality, event operations, staff air travel, event support boats, and waste. Emissions were estimated using the best available data (55% high quality data).

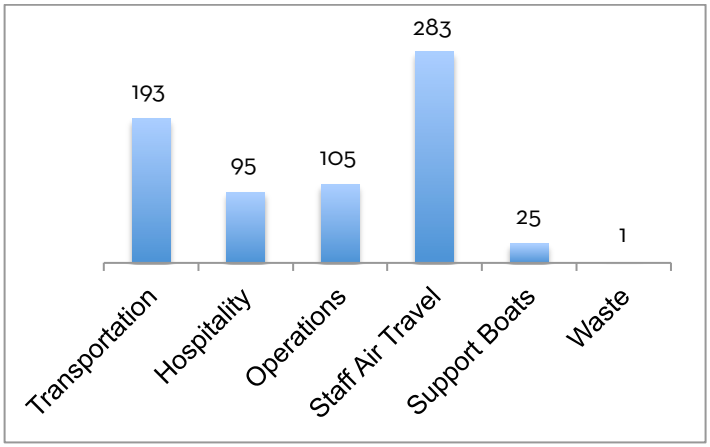
In partnership with The Ocean Foundation, the Volvo Ocean Race Newport Stopover will offset 100% of its owned emissions through the *SeaGrass Grow* carbon offset program.

Summary of Carbon Footprint

Volvo Ocean Race Newport Stopover total "owned" carbon footprint between May 5 – May 17, 2015

702 tons of CO_2e

Breakdown of "owned" footprint by category in tons of CO_2e



Introduction

The 2014/2015 Volvo Ocean Race is one of the world's premier ocean racing events and its arrival into Newport, Rhode Island ushered in a new era of high-performance racing in Newport since the America's Cup World Series (ACWS) in 2012. Event organizers learned many lessons during ACWS such as attracting a large number of spectators to Fort Adams State Park and how to handle and mitigate the impact of these spectators.

The 2015 Volvo Ocean Race Newport Stopover was built upon the lessons learned in sustainable event management and worked towards the following goals:

- Leave Aquidneck Island and the surrounding coastal zone cleaner than before the event
- Educate spectators about basic concepts in sustainability
- Demonstrate the benefits and ability to integrate impactful sustainability measures into high-performance racing events
- Achieve the title of "most environmentally responsible" stopover of the 2014/2015 Volvo Ocean Race

Newport, Rhode Island was selected to host the 2015 North American Volvo Ocean Race Stopover in November 2012. Former Governor Lincoln D. Chafee of Rhode Island noted that the state had "positive experiences" hosting the America's Cup World Series Event in 2012 and by investing in a few strategic marine infrastructure improvements Fort Adams State Park would "pave the way for a new era of racing in Rhode Island."

This report builds on the precedent set by the 2013 and 2014 Atlantic Cup to quantify a marine event's carbon footprint in Rhode Island in a meaningful manner.

Methodology

At present, there is no standardized methodology for calculating the carbon footprint associated with major sporting events. Prior events such as the 2012 London Olympics, the 2013 America's Cup, and the 2014 FIFA World Cup have used portions of the GHG Protocol Corporate Accounting Standard (GHG Protocol) and ISO 14064.1. Other available standards focused on sustainability at events include the BS 8901 and the ISO 20121 are also available.

The Sustainability Committee's approach to carbon management is outlined below:

1. Define the boundary of the event carbon footprint, and the scope of emissions associated with each phase of the event.
2. Identify emission sources included within the event boundary, and estimate those emissions using all available means.
3. Compensate for residual "owned" event emissions that cannot be avoided or reduced (see below for definition of "owned").

The Sustainability Committee delineated the organizational boundary of the event into three categories of activities based on the Sustainability Committee's degree of control and influence, as described below:

Owned: event activities that are solely funded by or under the operational control of the Sustainability Committee and its affiliates and contractors. Examples include emissions from event logistics, event energy use, travel and accommodations for the event workforce.

Shared: event activities that are jointly funded and are a direct consequence of hosting the event, but where various partner entities share control. Examples include sponsor affiliations. The Sustainability Committee has little ability to influence and track these activities.

Associated: event activities that are a consequence of the event, but which are not controlled or funded by the Newport Stopover host port. Examples include the activities of the spectators.

Scope and Boundaries

The primary objective of this carbon footprint is to estimate the GHG emissions from the beginning of the event on May 5 to the end of the event in Newport on May 17. The inventory seeks to reasonably estimate and quantify emissions with best available information.

It should be noted that there are two identical Race Villages that "leapfrog" each other throughout the entire race. When boats arrive at one stopover, another stopover is already in the midst of getting set up and prepared. For the purposes of this carbon footprint report, we have included the freight transport from Auckland, New Zealand to Newport, Rhode Island in this report. However we have not included the transport from Newport to Lisbon, as we consider this to be outside of our scope or fence line.

Challenges faced when carbon footprinting an event:

- There is no internationally agreed standard for the carbon footprinting of events.
- Events involve many interested parties; staff, spectators, sponsors, delivery partners, etc. making boundaries difficult to define.
- The financing of events is often complex with a variety of contractual arrangements and value in kind agreements making ownership and responsibilities unclear.
- Events are usually discrete one-off occurrences with no historical reference points.
- Legacy impacts and benefits are difficult to quantify.

This methodology distinguishes between "owned" emissions, for which the VOR Newport Stopover host party is wholly responsible, and "associated" emissions over which the host party only has limited control and influence. Sources do not include the construction of infrastructure associated with the event or the construction of boats.

Sources and quantities of owned emissions were identified from interviews with Sail Newport and Discover Newport, who had access to financial budgets. When the amount of a specific source could not be quantified reliably, it was considered zero.

Sources Included

Newport Stopover Carbon Inventory		
Sources	**Key Parties**	**Type (Owned, Shared, Associated)**
Air/Car Travel (Transportation)	Volvo Staff	Owned
	Sponsor Staff	Shared
	Participant Travel	Owned
	Spectator Travel	Associated
Hospitality	Volvo Staff Hotel	Owned
	Sponsor Staff Hotel	Shared
	Participants Hotel	Owned
Support Boats	Safety Boat Use	Owned
	Spectator Boat Use	Associated
Freight	Volvo Staff Freight	Owned
	Volvo Participant Freight	Owned
Ground Transportation (Transportation)	Staff Transportation	Owned
	Event-related Transportation	Owned
	Spectator Transportation	Associated
	Participant Transportation	Owned
Water Ferry (Transportation)	Ferry Transportation for Spectators and Staff	Owned
Operations	On-site Power Generation	Owned
Waste	Waste Generated from Participants	Owned
	Recycling Generated	Owned
	Transportation of Waste	Owned

Data Quality

To ensure the most accurate estimate of the carbon footprint, we include an assessment of the data quality used in this report. The intention of this analysis is to serve as a guide to reading this document and to highlight areas where improvement could be made in the future. Each item used to create the footprint is listed as “high”, “medium”, or “low” quality. These were defined as follows:

High: consumption data are available in physical units, which are considered to be reasonably reliable. This includes estimates based on good quality data available from primary sources such as Sail Newport and Discover Newport. An example of this type of data is the number of gallons of biodiesel used to power the generators, or the amount of fuel used to run the water taxis during the event.

Medium: consumption data are available in physical units but these are subject to some uncertainty. When proxy data is necessary to gather an estimate, this label is assigned. Examples of this type include the individual footprint of the trucks used to transport the waste, recycling and compost.

Low: Only financial data is available, with no available units. Examples include the fuel budget used for the Marshall boats used in race operations.

Data Gaps: No physical or financial data was available and therefore no estimate could be made. An example of this includes the amount of spectator boats that were on the water. Reports indicate that there were roughly 5,400 boats, but there was no reasonably accurate way to calculate the carbon emissions.

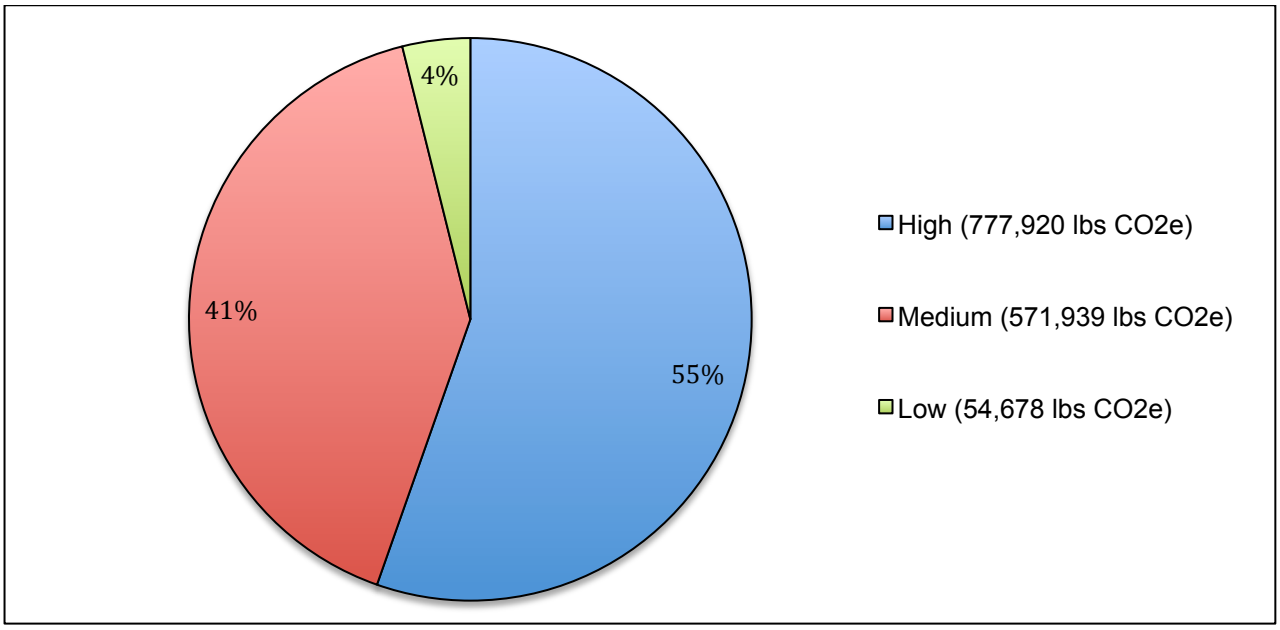


Figure 1: Data Quality (Note, data is presented in lbs. of CO2e)

Results

Owned Emissions

The Volvo Ocean Race Newport Stopover was calculated to have a carbon footprint of **702 tons of CO_2e** (1,404,712 lbs. CO_2e). Figure 2 shows the breakdown of this footprint.

The majority (40%) of this footprint consists of staff air travel followed next by the emissions due to transporting the race village from Auckland, New Zealand to Newport, Rhode Island (27%).

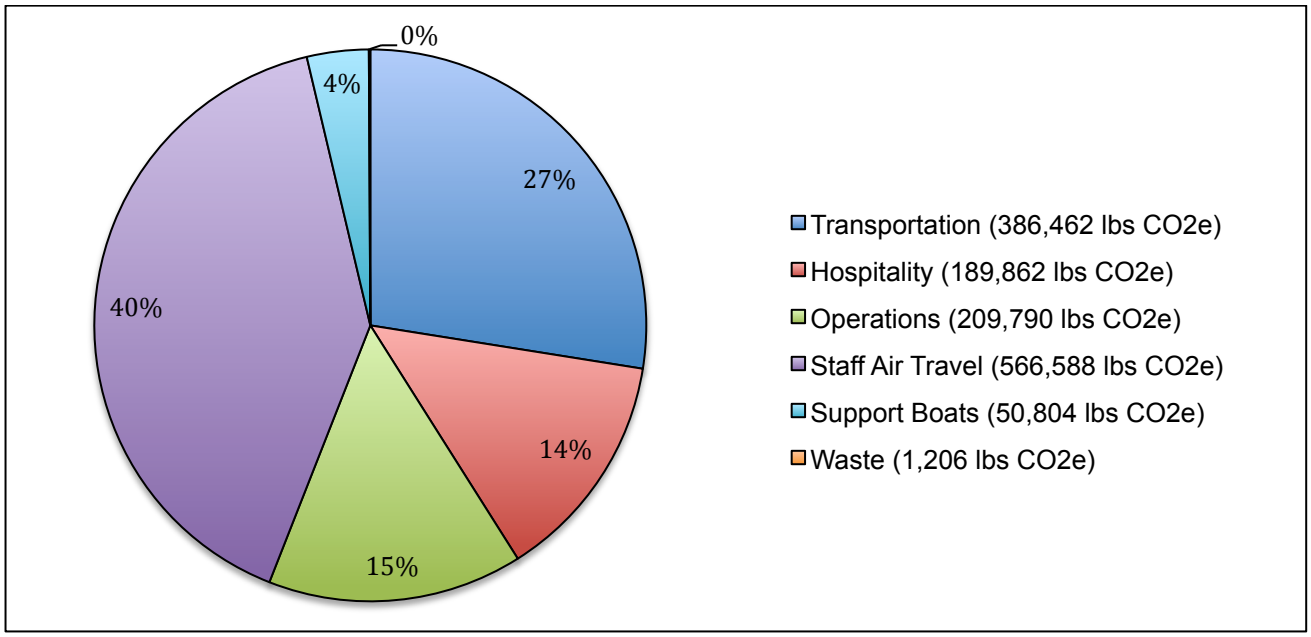


Figure 2: Breakdown of the VOR Newport Stopover Owned Carbon Footprint (lbs. CO_2e)

Breakdown of Owned Emissions

Six groups were formed from the 20 possible items from the carbon inventory. These major groups are broken down here.

Transportation (386,462 lbs. CO_2e): "Transportation" includes the shipment of the race village to Newport, Rhode Island; the fuel used in the water taxis that operated between downtown and Fort Adams; vehicular transportation by staff/participants; and transportation of all waste, recycling, and compost. Of the transportation, 92% of the carbon footprint is derived from the shipment of the race village from New Zealand to Rhode Island.

Hospitality (189,882 lbs. CO_2e): Includes the number of room nights used by Volvo staff, along with that of all race participants.

Staff Air Travel (566,682 lbs. CO_2e): Includes the flights of the Volvo staff. Note that other Volvo guests and sponsors are allocated in the Associated section.

Support Boats (50,804 lbs. CO_2e): Includes the fuel consumed for any support boats associated with Sail Newport.

Operations (209,790 lbs. CO_2e): Includes the carbon footprint of the B-20 biodiesel provided by the National Biodiesel Board and Newport Biodiesel.

Waste (1,206 lbs. CO_2e): Includes any associated emission derived from the waste and recyclables sent to the Rhode Island Resource Recovery Center (RIRRC).

Owned + Shared + Associated Emissions

Shared emissions are those that the Sustainability Committee have little control or influence over, but which are inherently linked to operation of the event itself. In future events, more responsibility should be assigned to sponsors to track and reduce their individual carbon footprint. Associated emissions are those outside of Sail Newport's direct control, emitted indirectly as a result of the event.

Associated emissions (10,131 tons CO_2e or 20,262,863 lbs. CO_2e) make up 86% of the total estimated carbon footprint (**11,831 tCO_2e** or 23,663,835 lbs. CO_2e). Spectator emissions were gathered from data derived from the Economic Impact Assessment released in October 2015. It should be noted that this estimate only factors in emissions from automotive transport and not emissions from international travel or from spectator boats.

The figure below shows the breakdown of the total estimated Owned, Associated, and Shared carbon emissions for the Newport Stopover footprint.

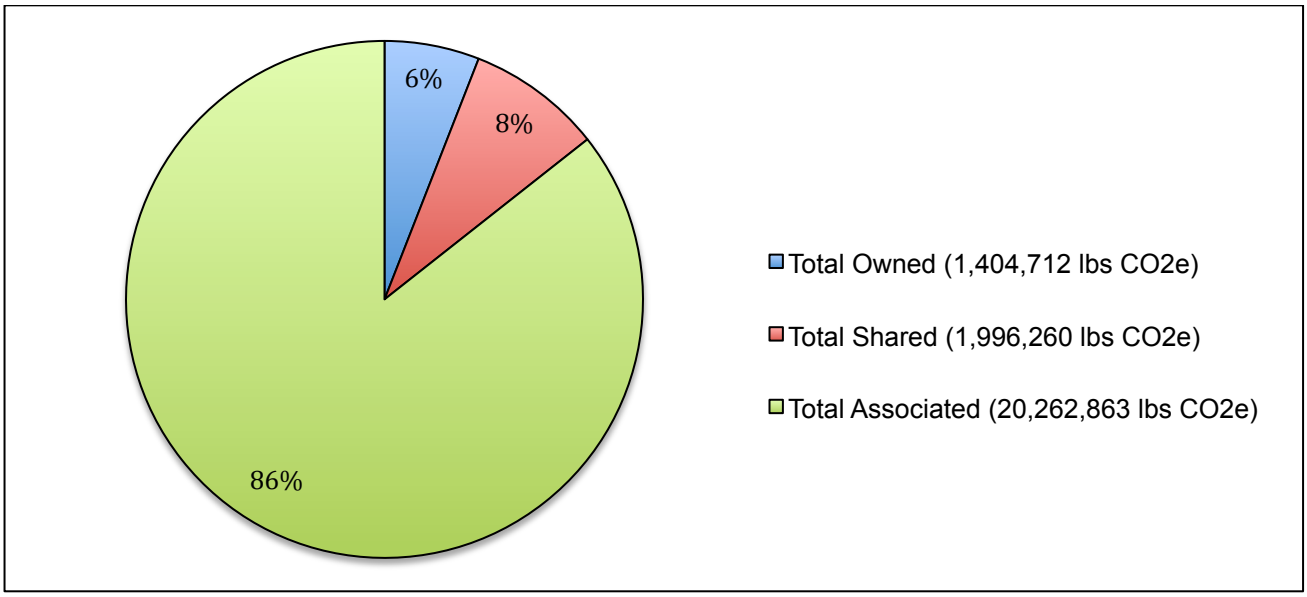


Figure 3: Owned, Shared, and Associated Carbon Footprint for the Newport Stopover (lbs. CO_2e).

Reduction Measures

As guided by the Sustainability Plan, measures were put into place to proactively reduce the carbon emissions associated with the Newport Stopover. These included the following:

1. Energy
    a. Optimized use of energy and minimized associated air emissions through efficient planning and technological innovation.

b. Use a B20 blend of biodiesel in any diesel generators or equipment used onsite at Fort Adams.
c. Developed a partnership with an accredited carbon offset organization to create an innovative carbon compensation program to mitigate effects of any emissions created during the event's duration.

2. Transportation
    a. Promoted all alternatives to driving in individual vehicles on website and through social media.
    b. Encouraged bicycling as a preferred method of transportation by providing secure bike racks and way finding resources to attendees.
    c. Developed partnership with RIPTA and local water shuttles to facilitate public transportation alternatives.
    d. Charged for all car parking.
    e. Encouraged hybrid cars by providing a small discount.

Offsetting Owned Carbon Footprint

The Volvo Ocean Race Newport Stopover is committed to offsetting the carbon emissions from their owned footprint. This will be done in partnership with *SeaGrass Grow*, an innovative carbon offset program of The Ocean Foundation. *SeaGrass Grow* offers the first-ever and only verified "blue carbon" offset program that utilizes the targeted planting of seagrass in coastal watersheds in need of restoration.

Seagrasses occupy 0.1% of the seafloor yet are responsible for 11% of the organic carbon buried in the ocean. Seagrass meadows can store up to 83,000 metric tons of CO_2 per square kilometer, compared to terrestrial forests, which store about 30,000 metric tons. In addition, as critical habitat, seagrass beds form the basis of the world's primary fishing grounds, supplying 50% of the world's fisheries. They provide vital nutrition for close to 3 billion people, and 50% of animal protein to 400 million people in the third world. For more information, visit www.seagrassgrow.org.

- End of Carbon Footprint Report -