



GREENSAIL

Tour Operator Partner Report Green Sail Footprint

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Sail La Vie

A Message from Green Sail



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Congratulations on taking the first step toward a more sustainable future for your business. By measuring your CO₂e footprint, you're joining the Green Sail network of forward-thinking partners who recognise that investing in sustainability is essential to securing the future of the nautical tourism industry.

With a clear view of your environmental impact, you are now better positioned to make meaningful, strategic decisions that support long-term growth while fulfilling your corporate social responsibility.

This marks the beginning of a journey that will not only benefit your business, but also contribute to a collective effort toward a cleaner, more responsible nautical sector. We're excited to support you as you lead the way toward positive change.

Achieved So Far

1,955

Yachts Flying Our Flag

110

Partner Companies

1,000

Educated Students

50

Volunteers

Green Sail Footprint Overview



Objective

To quantify the environmental impact (CO₂e emissions) of tour operator journeys by measuring fuel use, freshwater consumption, electricity usage, meals served, and laundry, tour and route-specific data.

CO₂e Definition

CO₂e, or carbon dioxide equivalent, is a standardised metric used to quantify the impact of various greenhouse gases by expressing their global warming potential in terms of the equivalent amount of carbon dioxide. This approach enables the aggregation and comparison of emissions from gases such as methane and nitrous oxide within a unified analytical framework.

Green Sail Footprint Importance

Awareness to Action

The EU and international bodies are introducing stricter regulations related to emissions, especially in tourism and transport. The tourism industry, historically under-regulated in this area, will increasingly be held accountable for its environmental impact. Understanding baseline emissions is the first step toward compliance with upcoming environmental laws and ESG reporting frameworks.



Eco-conscious travellers are on the rise. Measuring and publishing CO₂e data demonstrates transparency and builds trust with customers seeking low-impact travel experiences. These calculations allow companies to differentiate their brand and appeal to this growing market segment.

Breaking down emissions by category (fuel, water, meals, etc.) reveals which elements of the operation are most resource-intensive.

This enables tourism operators to identify inefficiencies, reduce costs, and invest in green technologies (e.g. fuel alternatives, electricity sources, the type of meals served on tour etc.)

These calculations also help to educate stakeholders: staff, management and clients about the unseen environmental costs of their activities. It moves the conversation from general "green" claims to measurable impact and action.

This transparency builds trust and awareness, showing customers and stakeholders that tourism operators are actively taking steps to reduce their impact. The system also shifts public perception by positioning tourism companies as proactive leaders in marine conservation and empowering tourists by educating them about their role in reducing environmental impact during their charter experience. The system addresses a gap in public understanding: the importance of data collection for long-term marine conservation.

Methodology

Footprint Framework

CO₂e emissions were calculated using standard emission factors relevant to operations in Greece. The following were applied:

- **Fuel Emission Factor:** 2.64 kg CO₂e/litre
- **Freshwater Emission Factor:** 0.45 kg CO₂e/litre
- **Electricity Emission Factor (Greece):** 0.256 kg CO₂e/kWh
- **Meal Emissions:** 2.29 kg CO₂e per meal (averaged for Greece)
- **Laundry Emission:** 0.53 kg CO₂e/kg laundry (average per guest per day)



Note: Meal emissions were calculated by multiplying the number of meals served by the average emission per meal. Laundry was calculated as one load (approx. 1 kg) per guest per day of journey (assumed one-day trips unless otherwise stated).

Summary of Results

Vessel	Total CO ₂ e	Avg CO ₂ e / Guest	Avg CO ₂ e / Guest / Day
Aeolis Alpha 56ft	105.08 kg	13.13 kg	13.13 kg
45ft Lagoon Catamaran	1097.34 kg	137.17 kg	19.60 kg
Bounty Motor Sailer	928.54 kg	20.63 kg	20.63 kg

Key Insights



Strategic Learnings

- **Fuel Use** is the primary contributor to emissions, especially on motor-powered vessels.
- **Meal-Related Emissions** are substantial on longer journeys or with more passengers.
- **Electricity Usage** while docked adds a notable footprint, depending on marina infrastructure.
- **Laundry Emissions**, though smaller, accumulate with higher guest turnover.

Recommendations

1. **Optimise Fuel Efficiency:** Adopt slow cruising speeds and efficient engine maintenance.
2. **Reduce Onboard Energy Use:** Install solar panels and monitor port power usage.
3. **Offer Low-Emission Menus:** Emphasise vegetarian or locally sourced meals.
4. **Minimise Water Use:** Use water-saving fixtures and onboard desalination.
5. **Track Laundry Loads:** Encourage sustainable laundering practices.