



Creation, Implementation, and Maintenance of an

Environmental Sustainability Plan

for Dive Operators and Professionals



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Overview

Purpose

An Environmental Sustainability Plan (ESP) is a guideline for industry professionals and operators to demonstrate and promote acts of environmental stewardship. This document outlines information pertaining to ways in which “green” measures can be implemented into business models so that the diving environment can be protected and preserved. The health of the underwater world directly correlates to the health of the dive community, so establishing an ESP is a critical step in ensuring the longevity of the industry.

Scope

Dive operations differ from location to location, activity to activity, and resource to resource, so an ESP should not be copied and pasted. It should encompass all aspects of the operation that have the potential to impact the environment, such as waste management, “green” energy, and compliance with local regulations. An ESP should also establish procedures for evaluating its effectiveness over time and subsequent steps for improvement.

An overview of the process to establish an ESP within an operation can be found on Page 4. An example of an ESP can be found in Appendix A.

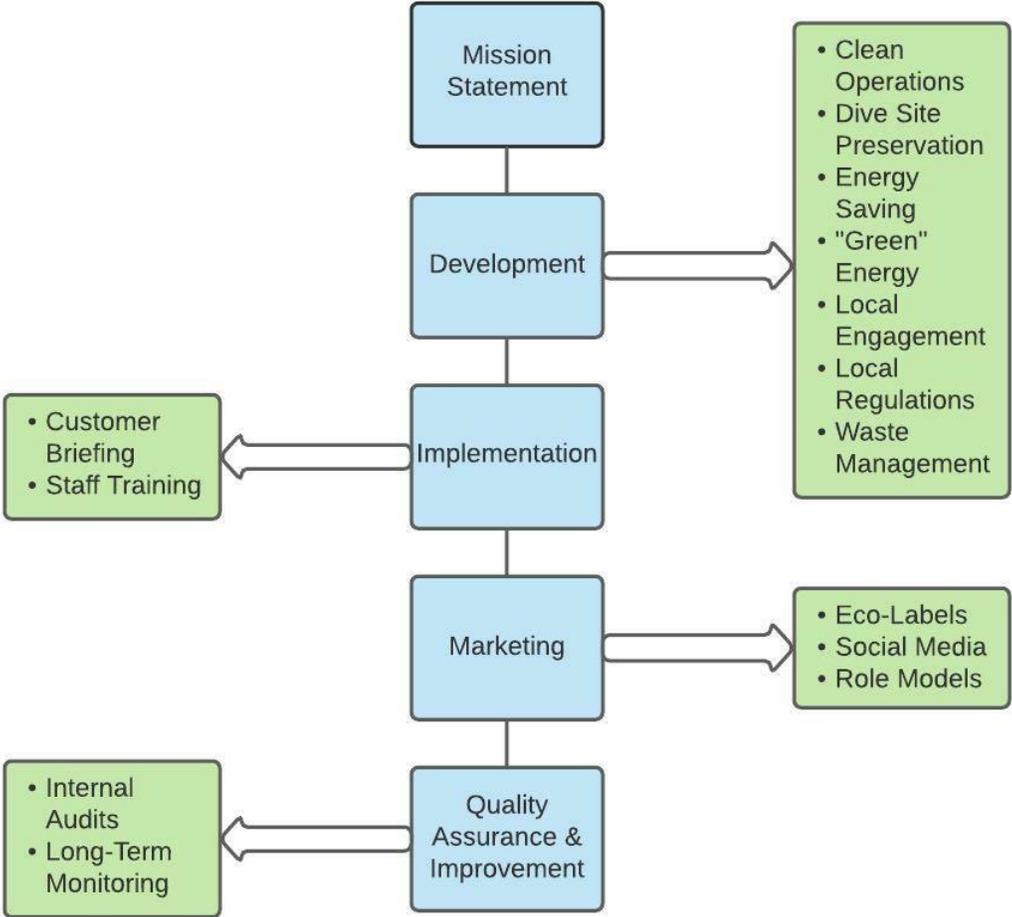
Benefits

Developing, implementing, and maintaining an ESP has many benefits not just for the environment, but for the dive industry as well. Implementing “green” measures can minimize negative impacts that may result from several facets of a dive operation. These will help ensure the longevity of the topside and underwater worlds so that their beauty and resources can be preserved for generations to come.

The dive industry can directly benefit from the establishment of ESPs as many customers prefer to work with entities that have demonstrated commitment to the environment. Serving more customers generates more revenue for both the business and the local community.

Developing an ESP can also assist a business in partnering with local, regional, national, and international organizations that are dedicated to the environment.

Environmental Sustainability Plans (ESPs) for Dive Operators and Professionals



Mission Statement

A mission statement is a key component of an ESP. It sets the stage for what “green” measures dive professionals and operators commit to implement, and it describes the goals of an operation on a large scale.

Meaningful mission statements are short, concise, and specific to the operation or business for which they are written. Most mission statements contain the following components:

- The Purpose of the Operation
- Why the Operation is Valuable
- How the Operation Functions and Achieves its Purpose
- Why the Operation is Committed to its Purpose
- What the Operation Hopes to Achieve in the Future

Writing ideas in a list or table format may help in the collection of thoughts to construct a thorough mission statement. The following are two examples of well-written mission statements that are aimed at describing operations that are committed to protecting the environment.

“We are passionate about teaching scuba at a level that is fun, informative and safe. Our mission is to transform your adventure into a lifetime activity that will educate, inspire, and energize you unlike any other activity. We want to expose people to the amazing diversity of marine life in both fresh and salt water while at the same time teaching divers about an environment that can benefit from their care - one dive at a time.”

- Sunken Treasure Scuba Center, Pennsylvania

“To strive for perfection in sharing Hawaii’s underwater world, with a focus on friendship, a spirit of adventure, and a commitment to safety, the environment, and our community.”

- Jack’s Diving Locker, Hawaii

Development

Developing an ESP may seem like an intimidating task. There are countless “green” measures that dive professionals and operators can address that are specific to their activities. The following sections outline some areas to think about and add into an ESP where applicable. Start small and implement measures that are easy to attain. Continue to add to and develop the ESP over time.

Clean Operations

Regardless of where an operation takes place, it is important to consider environmental impacts and how they may be mitigated. At the dive center and dive site(s), keep walkways and trails clear for customers to use and enjoy. If the area is well-maintained, they are more likely to stay on designated walking paths, rather than trampling through flower beds, grass fields, sand dunes, etc. The dive industry should also commit to only using biodegradable cleaning and disinfecting products. Eco-friendly cleaning solutions can be easily made from scratch. Those that contain quaternary ammonium compounds are toxic to the environment and should therefore be avoided or at least disposed of safely. More information from Green Fins on the process can be found in Appendix B.

If operations take place on a boat, specific considerations should be made to protect the environment while at the dock and out on the water. Bilge and sewage waste must be properly managed. An appropriate number of trash, recycling (if applicable), and compost receptacles should be provided so that customers are discouraged from throwing waste overboard.

Special attention should also be paid to diver behavior. If they are using products that are harmful to the environment, it is the responsibility of the dive professional or operator to intervene and educate. Consider briefing customers before they even arrive and consider providing complementary products (e.g., sunscreen) for them to use.

Dive Site Preservation

Dive site preservation should be taken seriously by the dive industry. While in the water, dive professionals should be mindful of their trim and buoyancy, and they should critique customer behavior where it is deficient. Guides should never handle marine life, and the hunting and collecting of organisms should be prohibited.

Considerations should also be made regarding how a boat will be attached to a dive site. Moorings should always be utilized over anchoring.

If trash is seen in the water, dive professionals and operators should make an effort to retrieve it. Strive to leave the dive site better than it was found. Take only memories, leave only bubbles.

Energy Saving

Mindful use of energy not only benefits the planet, but it also benefits the wallets of dive operators. A few simple ways to save energy include:

- Using Natural Lighting and Ventilation (Where Possible)
- Ensuring the Proper Insulation of Buildings and Boat Cabins
- Choosing LED Over Incandescent Lights
- Turning Off Devices When Not in Use (E.g., AC Units, Desktop Monitors, Etc.)
- Selecting Electrical Equipment that is Energy Efficient

“Green” Energy

The use of “green” energy is becoming more popular around the world. It should be made a priority as it helps to minimize the impact of operations on the environment. A few examples of “green” energy that can be incorporated into a business include:

- Solar Power
- Wind Power
- Biomass

Local Engagement

Part of maintaining a responsible operation involves engagement with local endeavors. Dive professionals and operators should give serious consideration to partnering with and supporting local, regional, national, and international conservation organizations and initiatives. This support can be in the form of financial endorsement, in-person engagement, or even just promotion.

Chamber of Commerce organizations and Tourism Bureaus should also be part of initiatives to become environmentally sustainable. Engage with these organizations to determine areas of need in the local community. Make a plan to address problems related to the environment and take action to solve them. This is a good opportunity to rally a team of stewards together to make a bigger impact through collaboration.

Local Regulations

Without enforcement, efforts to protect the environment may be ineffective in the long term. Dive professionals and operators should have a plan in place to ensure that all local regulations and internal policies are followed by customers, staff, and the public.

If an environmental regulation or policy requirement is violated, swift action must be taken to address the issue and to prevent it from happening again in the future.

Waste Management

Ensuring responsible waste management is essential to a dive operation. An adequate number of well-maintained trash receptacles, recycling bins (if applicable), and compost containers should be provided around the retail space, in the classroom, at the dive site, on the boat, etc. This will help keep both the land and water clean. Metrics (e.g., volume of compost collected) could be recorded on a regular basis to show commitment to being a steward.

Dive professionals and operators should promote recycling if it is available in their region, and they should educate their customers on its importance. Encouraging the use of reusable products (e.g., silverware, tote bags, etc.) and avoiding bringing unnecessary disposable packaging to the dive site is recommended. These are simple measures that can add up to create significant change.

When performing maintenance on compressors, be mindful of the toxic waste that is produced. Liquid that is released by interstage separators contains both oil and water, so it should never be poured down the drain. Drain lines from separators should be placed into a suitable container to contain the waste. Proper disposal of all compressor liquid waste is essential.

Implementation

An ESP is only effective if it is properly implemented. This is not as simple as beginning on the first page and working through the content step-by-step. It is an ongoing process that involves briefing customers, training staff, and engaging in long-term monitoring programs.

Where staff do not follow the ESP or regulations, further education and even disciplinary intervention may be required. Stewards not only take care of the environment, they also act as role-models.

Customer Briefings

Customers should be informed of what “green” measures are being taken by dive professionals and operators. Signage and graphics (e.g., eco-labels) are simple ways to reach a broad audience. Posting these at the entrance to a dive center, on the deck of a boat, or on the pool deck ensures all customers are informed. They also convey the message that a business is committed to ecological sustainability.

Verbal measures to educate are also recommended. Include expectations from customers in all dive briefings. Let them know how to dispose of trash, what not to do while on the dive, etc. These briefings should be clear and concise.

In addition, let customers know how they can make a difference while engaging with the operation. Provide information about upcoming reef checks, beach-up events, environmental education seminars, etc.

Staff Training

To ensure the sustainability of an ESP, consistent and comprehensive staff training must take place. At minimum, training should cover the following topics:

- ESP Content
- Expected Staff Behavior (In and Out of the Water)
- Components of a Pre-Dive Briefing
- Role Model Reminders
- Process to Report Environmental Violations and Concerns
- Methods to Submit Input to Improve ESP
- Potential Consequences of a Failure to Act or to Set an Example

Without adequate training, an ESP may never achieve its full potential. Dive professionals and operators should make this a rewarding process for staff so that they retain as much of the important information as possible. Consider offering both in-person and online training programs as variety helps to maintain attention spans.

Divers Alert Network® (DAN®) offers several free e-learning courses that focus on being an environmental steward. These courses can be accessed at dan.diverlearning.com.

Marketing

Marketing is highly influential, which makes it an important tool to consider in an ESP. There are several pieces to marketing that should be carefully considered and conveyed to potential customers and the public.

Eco-Labels

Eco-labels are a visual representation of commitment to the environment. Several dive training agencies have programs dedicated to environmental stewardship, and some dive professionals and operators will choose to display those logos on dive center doors, dive boat windows, etc. There are also many national and international organizations that work to build a culture rooted in environmental stewardship, so with relevant permission, those logos may be used as well.

Visual aids can influence consumer behavior. If a customer is looking for an operation that is committed to protecting the environment, they may look for recognizable eco-labels on a website, social media, or at a physical business location. These identifiers can also help recruit others to join the movement to ensuring the preservation of the diving environment.

Social Media

The power of social media should not be underestimated. Dive professionals and operators should leverage this tool often. The following social media campaigns could be considered:

- Current and Future “Green” Initiatives
- Planned Events (E.g., Beach Clean-Ups, Environmental Seminars, Etc.)
- Monthly Recycling and Compost Reports
- Environmental Triumphs (E.g., Banning of Toxic Sunscreen)
- “Green” Achievements (E.g., Installation of Solar Panels, Etc.)
- Customer Kudos/ Feedback
- Client Acknowledgement or Even Rewards for Exceptional Stewardship

It is important to note that social media can have both a positive and a negative impact. If dive professionals or operators post photos of boats anchored to reefs, it could be interpreted as either what to do or what not to do. Being mindful of what is posted and what captions are used can aid in clarifying intent and avoiding confusion. This will ultimately lead to more effective marketing campaigns.

Trip review sites (e.g., Tripadvisor, Yelp, etc.) should also be managed. When a customer writes a review, whether positive or negative, efforts should be made to acknowledge and respond to those posts. If a complaint is made, a solution should be pursued. These sites are frequented by potential customers and could heavily influence future business.

Role Models

The full impact of an ESP will only be made if the entire dive industry acts as a role model. In-water staff should avoid touching the environment, fill station operators should properly dispose of compressor fluid waste, and social media coordinators should be mindful when choosing photos as part of a campaign. If the dive industry acts responsibly, others will too.

Quality Assurance & Improvement

Quality assurance ensures an ESP is implemented and maintained in the way that it was intended. Metrics such as client infringements or inadequate management of recycling are a tool to determine the effectiveness of the plan and to provide the opportunity for reevaluation as to the comprehensiveness and effectiveness of the plan. All components of an ESP should be monitored and evaluated, and changes should be made when deficiencies are uncovered.

Internal Audits

It is important to periodically review all components of an ESP to assess their effectiveness. This should be a team effort to generate as many unique viewpoints as possible, as well as to encourage participation. Begin with the Mission Statement to determine if overall goals are being met. Auditing requires measurable activities, which should be set during the initial evaluation of the ESP and should cover each component. If an activity is not going to be assessed, then it should not be included. Be careful to highlight all areas that need to be improved, but also be aware of not measuring just for the sake of measuring. Deficient areas may include:

- Cost Effectiveness of the ESP
- Practicality of Sections of the ESP
- Flawed Mission Statement
- Lacking Comprehensiveness
- Messy Dive Sites or Damage to the Environment

If something is not working, find solutions. Be sure to test those solutions in future internal audits to determine their effectiveness. If there are still flaws, create new solutions and continue to adapt and change the document.

Long-Term Monitoring

Records of ESP performance through time should be retained. This recordkeeping could include deficiencies identified through internal audits, changes made as a result of those findings, and overall outcomes. Trends can be identified, and the effectiveness of changes can be monitored.

Keep written records that can be referenced in the future. Use those records to brief staff and to track long-term impacts of the ESP.

Appendix A

Below is an example of an ESP. Please note that it does not include all of the components that were previously discussed, but only highlights those that are relevant to this operation. The example should only be used as a guideline, and it should not be copy-and-pasted.

SCUBA-DOOBA-DO DIVE CENTER

Environmental Sustainability Plan

Rev. 1/2022

Our Environment Sustainability Plan (ESP) applies to all the relevant aspects of our operation and is the message we convey to our industry.

Mission Statement

“We are passionate about preserving the underwater world for current and future generations of divers. By showing people the beauty around the reefs of Jamaica, we can inspire them to protect our waters while stimulating the economy in our local communities. Our passion lies in our own experiences; our first breaths underwater were the beginning of a new life of adventure. Through partnerships with local and regional organizations, we work to achieve these goals while minimizing our negative impact on the environment. Every time we submerge, we strive to be better stewards of the earth and the entire dive industry.

Dive Site Preservation

All SCUBA-DOOBA-DO Dive Center staff work to ensure the protection of all dive sites utilized for classes and recreation. Measures taken include:

- Use of Proper Trim and Buoyancy
- Ban on Hunting and Collecting
- Prohibition of Touching Marine Life
- Establishment and Maintenance of Walking Trails
- Promotion of Mooring Ball Use

Energy Saving

Motion-detecting lights or on/off timers are installed in several areas of the dive center, including:

- Retail Space Displays
- Bathroom
- Storage Closet

“Green” Energy

Six (6) solar panels on the roof of the dive center provide supplementary power. These panels are inspected monthly by dive center staff to ensure good order, or more often as necessary. Annual inspections are conducted by professionally trained, contracted maintenance crews working for Island Green Power.

Local Engagement

In collaboration with local schools, SCUBA-DOOBA-DO Dive Center is committed to engaging divers and non-divers alike in activities that can make a positive impact on the environment. These activities include, but are not limited to:

- Beach Clean-Up Events
- Educational Seminars
- At-Home Environmental Challenges
 - Stewardship Poster Contest
 - Trash-to-Art Competition
- Guided Trash Collection Shore Dives

Furthermore, customers nominate and vote for their favorite “green” organization that they engage with. A drawing is held at the monthly dive club meeting and the organization that is drawn receives a \$100 donation on behalf of SCUBA-DOOBA-DO Dive Center.

Waste Management

Garbage cans, plastic bottle recycling bins, and compost containers are placed in the following locations:

- Inside the Front Door of the Dive Center (On the Right)
- Behind the Front Desk

- Next to the Compressor (On the Left)
- In the Classroom (At the Back Near the Bookshelf)
- In the Bathroom

These containers are emptied bi-weekly on Sunday and Thursday, or sooner if required. Dive center staff encourage customers to separate their waste appropriately and to choose reusable products when possible.

All compressor drain waste tubes are connected to an oil/water container and constantly monitored. Captured oil and waste from oil changes are sent for recycling at Island Waste Management and Recycling Services.

During the cooler months (December – February), open windows are the preferred cooling method. Fans are used while windows are open to facilitate air circulation. Windows are never opened while the AC is running.

Customer Briefings

Customers are an important component of this ESP. They are thoroughly briefed by staff to help us address our environmental goals and expectations during dive outings. While visiting the retail store or moving to the pool or dive sites, customers are encouraged to:

- Properly dispose of all trash and recycling.
- Refrain from smoking.
- Adhere to dedicated walking paths while outside.

While diving with SCUBA-DOOBA-DO Dive Center, customers are expected to:

- Refrain from polluting the environment in any way.
- Cover up, or only use environmentally friendly sunscreen/personal care products.
- Adhere to established paths to shore diving locations.
- Use proper trim and buoyancy.
- Prevent anything from touching the hard substrate or marine/aquatic life.
- Leave the environment the same or better than it was found.

Briefings are concise, but overly detailed. They highlight areas that pertain to each specific customer or group, and staff are instructed to attempt to answer all questions honestly and accurately.

Staff Training

All staff are required to attend and complete quarterly training programs as directed by the person in charge of continuing education at SCUBA-DOOBA-DO Dive Center. Classroom and in-water training sessions are regularly held and they include, but are not limited to, these topics:

- ESP Content
- Expected Staff Behavior (In and Out of the Water)
- Components of a Pre-Dive Briefing
- Role Model Reminders
- Process to Report Environmental Violations and Concerns
- Methods to Submit Input to Improve ESP

Performance reviews are also conducted annually. Evaluation areas may include:

- Delivery of Customer Briefings
- Enforcement of Environmental Violations
- In-Water Diving Skills
- Ability to Educate and Provide Feedback to Customers
- Engagement in Extra-Curricular Stewardship Opportunities (E.g., Beach Clean-Ups)
- Areas of Deficiency

Eco-Labels

SCUBA-DOOBA-DO Dive Center displays eco-labels in the windows of the retail store, as well as on the website to promote our commitment to the environment. These logos derive from our associated training agencies, as well as other organizations that we support.

Social Media

All social media campaigns launched by SCUBA-DOOBA-DO Dive Center positively promote the environment. Examples of unacceptable social media content may include, but is not limited to:

- Divers Kneeling on the Bottom
- Divemasters/Instructors Handling Marine or Aquatic Life
- Boat Captains Drinking from Single-Use Water Bottles
- Customers Using Toxic Personal Care Products (E.g., Sunscreen)

Screenings by a randomized group are conducted and approved before a social media campaign can go live. An internal audit of all social media posts is conducted annually. Details of this internal audit can be found in the "SCUBA-DOOBA-DO Dive Center Social Media Policy."

Customers are encouraged to rate SCUBA-DOOBA-DO Dive Center's environmental stewardship measures on popular trip review sites (e.g., Tripadvisor, Yelp, etc.). Concerns are addressed within 30 days of the review.

Role Models

All staff of SCUBA-DOOBA-DO Dive Center are expected to act as role models, even while off the clock. This is especially important when staff actions could shine a negative light on their commitment to being an environmental steward.

Infringements of this policy are taken seriously and handled on a case-by-case basis. Details of the review process can be found in the "SCUBA-DOOBA-DO Dive Center Staff Training and Expectations" manual.

Internal Audits

This ESP is constantly evaluated via quarterly internal audits. Where deficiencies occur, the ESP is assessed as to the reasons for non-compliance, and then modified and reimplemented as soon as practically possible. The evaluation form and more details about this process can be found in the "SCUBA-DOOBA-DO Dive Center Audits and Evaluations" manual.

Long-Term Monitoring

Performance of this ESP is also monitored over time. Metrics that are tracked include:

- Cost Effectiveness of the ESP
- Practicality of All Sections of the ESP
- Mission Statement Comprehensiveness
- Overall Goal Completion

Results of numerical metrics (e.g., volume of compost collected) are publicly shared via the website and social media.

Appendix B



CLEAN & GREEN RECIPES

Marine life and corals require a healthy balance of nutrients, oxygen and clean water to survive. Even small quantities of toxic products in the water can disrupt this balance, with lasting harmful effects!

You have two options in acquiring environmentally friendly cleaning products: You can 1) buy them or 2) make them yourself.

Environmentally friendly cleaning products are now more affordable and more widely available than ever before. Please contact info@greenfins.net if you have any questions about locally available products or concerns about their credibility.

Try these simple, homemade and environmentally friendly cleaning recipes as an alternative to more toxic products.

Ingredients



Method

Method		
WOOD & HULL CLEANER Mix 1 part white distilled vinegar with 8 parts warm fresh water.	ALL-PURPOSE CLEANER Mix ½ a cup of white distilled vinegar, ½ cup of baking powder and 4 litres of warm water and use with a scrubber.	WETSUIT DISINFECTANT In your wetsuit cleaning basin, mix 1 part white distilled vinegar with 8 parts warm fresh water. You could even add citrus juice like lemon to neutralise odours.

REMEMBER: Choose **GREEN** whenever you **CLEAN!**

