

This document describes the processes a board builder and material supplier should follow as part of their ECOBOARD Project commitments.

#### **OVERVIEW & SUMMARY**

The ECOBOARD Project helps the board riding community to build, buy and ride high-performance sustainable boards. Launched in 2012, the ECOBOARD Project is an ambitious social transformation program, which educates and engages individuals about the environmental impacts of their lifestyle through the lens of their board.

The first, independent 3rd party consumer-facing "eco-label" for boards, the ECOBOARD Project is focussed on reducing carbon footprints, increasing the use (and reuse) of renewable, recycled and recyclable inputs, and reducing toxicity within the board manufacturing process.



#### Two ECOBOARD Levels

The ECOBOARD Project's science-based two level program provides a pathway for verification of more sustainable surfboard construction in specific surfboards.

ECOBOARD Level One, makes it easy for any board builder to get started making ECOBOARDS. By using one of the <u>Qualified Materials (core or resin)</u>, the board will have a significant reduction in environmental footprint without affecting performance, durability, or quality.

ECOBOARD Gold Level rewards the top sustainable boards and board builders – those with the greatest environmental impact reduction. Informed by <u>Sustainable Surf's ECOBOARD lifecycle study</u>, boards carrying this label are using more sustainable, boards carrying this label are using more sustainable materials, sourced from responsible supply chains, and made by board builders with improved manufacturing processes. materials, sourced from responsible supply chains, and made by board builders with improved manufacturing processes.



# **Key elements of ECOBOARD LEVEL ONE:**

To carry the ECOBOARD Level One designation, a board must:

- 1. Use at least one Qualified Material in its construction
  - Plant-based, low to zero VOC resin with at least 19% bio-carbon content
  - Core with at least 25% recycled or plant-based content, or wood constituting at least 50% of the core by weight
- 2. Be manufactured by an Approved ECOBOARD builder

There's a minimum \$1 (USD) fee per board designated as an ECOBOARD.

For large brands, and those using OEM (Original Equipment Manufacturer) production, to become Approved to sell boards carrying the ECOBOARD Level One and Gold Level logo, additional verification is required (see below). The program also requires an Annual Program Fee for large brands.

# **Key elements of ECOBOARD GOLD LEVEL:**

To carry the ECOBOARD Gold Level designation, a board must\*:

- 1. Use at least one Qualified Material specific to the Gold Level designation, and one other Qualified Material of any level (core or resin)
- 2. Be manufactured in a facility that has been Validated to produce Gold Level ECOBOARDS

To qualify as a material specific to the Gold Level designation, a material must meet the following requirements:

- Plant-based, low to zero VOC resin with at least 25% bio-carbon content and has received USDA Bio-Preferred certification for the fully cured resin (the sum of all component parts)
- 2. Core with at least 25% recycled or plant-based content, or wood constituting at least 50% of the core by weight
- 3. Has been the subject of a comprehensive lifecycle assessment (LCA) that has been undertaken by an independent third party LCA practitioner or reviewed by an independent practitioner approved by Sustainable Surf. The LCA should incorporate impact indicators relevant to the ECOBOARD Project's focus areas carbon footprint, renewable/recycled/up-cycled inputs and reduced toxicity
- 4. Demonstrate that Qualified Material inputs are sourced from a sustainably managed supply chain

Wooden boards that require little to no resin and/or fibreglass in their manufacture (Such as a traditional alaia made from FSC Certified paulownia), produced by board builders that have been Validated to build Gold Level ECOBOARDS, can also qualify as Gold Level boards.

In addition to being Approved as an ECOBOARD builder, to receive validation to build Gold Level ECOBOARDS an organization must:

- 1. Undergo a "sustainability audit" with Sustainable Surf identifying key sustainability opportunities.
- 2. Identify opportunities to reduce waste, and improve energy inputs.
- 3. Demonstrate efforts to improve worker health and safety, and minimize exposure to hazardous and carcinogenic chemicals.

Sustainable Surf is committed to helping board builders through this process and ensuring that there are business benefits associated with these commitments.

### 1. ECOBOARD Level One

A. Manufacturers/boards (shapers, glassers and OEMs)

Becoming Approved to build ECOBOARD takes five simple steps:

- To get started building Level One ECOBOARDS <u>sign up via our straightforward registration process</u> (making Gold Level ECOBOARDS requires some further commitments: see below). We'll get in touch once we hear from you to complete your unique listing on our site. The more info you give us the better your listing.
- 2. Make sure the materials you are using are included on our <u>Qualified Materials</u> list. Some examples of Level One ECOBOARD constructions include:
  - Qualified resin + any non-qualified core (such as PU)
  - Qualified core + any non-qualified resin
  - Qualified core + qualified resin
- 3. We designate a number of ECOBOARD logos for you use. There's a nominal fee per board designated as an ECOBOARD. Large brands, and those using OEM production are also required to pay an Annual Program Fee. Talk to us for further pricing information.
- 4. You start applying the ECOBOARD logo on any qualifying boards moving forward.
- 5. You send us interesting images and updates so that we can promote your brand online and beyond.

A voluntary "sustainability review" is available for small/medium manufacturers, with incentives when the review is complete. For larger manufacturers and OEMs, we require the review to occur within one year of signing up. The review will confirm that boards carrying the EBP logo have met the qualifying criteria listed below, as well as help participants begin to improve sustainability performance.

Reviews can be completed in person and/or remotely and will take between 45 minutes and 1.5 hours depending on the size of the facility and availability of key data points. Customized software will be used to make the process much simpler. We will strive to make the process efficient and useful, and help participants find valuable opportunities in reducing waste and energy consumption. Importantly, the process will help us to identify interesting sustainability-related stories that we communicate with the broader surf community.

### Support/recognition:

In addition to <u>a detailed listing on the ECOBOARD Project website</u> and ability to use the Level One ECOBOARD logo on boards, Sustainable Surf will publish a minimum of two social media posts and/or blog posts that feature/reference brands Approved to build Level One ECOBOARD each calendar year.

All board builders that complete a sustainability review will receive an additional feature post (at minimum).

Sustainable Surf will also provide resources with tips relating to energy use and waste reduction for all manufacturers. This follows the findings published in our recently completed lifecycle study that identify energy use and waste resin and foam within the board manufacturing process (shaping and glassing) as being key opportunities to improve carbon footprint - and ultimately save costs.

#### B. Materials

### Resin

The Qualifying Criteria for surfboard resins requires a minimum 19% biological carbon content of the fully cured resin (the sum of all component parts), and low Volatile Organic Compounds (VOCs).

Resin suppliers are required to provide the following information to Sustainable Surf:

- 1. A resin/hardener matrix (or similar) that will be used to populate the online list of 'qualifying materials'. Alternatively, if only one resin/hardener combination is to be listed, this can be provided in an email.
- Current radiocarbon dating lab test results according to <u>ASTM D6866</u> testing protocol. This test should be completed by an independent testing lab and detail the bio-content of all epoxy and hardener formulations/combinations.
- A self-validated questionnaire regarding the sourcing of the bio-materials used in the resin formulations being listed. Organizations with previously listed qualifying materials will have twelve months from notification of this requirement to complete this questionnaire (see Appendix One).

Note: to ensure any commercially sensitive data provided is managed appropriately, Sustainable Surf will work with the supplier to implement a confidentiality agreement between the two organizations.

### Cores

The Qualifying Criteria for cores is a minimum 25% recycled or plant-based content, or wood constituting at least 50%\* of the core by weight.

Core suppliers are required to provide the following information to Sustainable Surf:

- Proof of Recycled/Bio-based/wood content, which may include a site visit to the factory. Specific acceptable forms of proof will be discussed with each supplier. In the case of bio-carbon content, this requires an <u>ASTM D6866</u> test.
- 2. A self-validated questionnaire regarding the sourcing of the recycled/biological content used in the foam formulations being listed (see Appendix One).
- \*Makers of wooden boards who join the ECOBOARD Project are required to provide details regarding how they source wood used in qualifying boards.

Note – The use of a simple thin veneer of a renewable material (like bamboo, cork, hoop pine, etc.), laminated onto a foam core, will not be deemed as qualifying material. The wood must also provide a significant structural foundation for the board beyond the typical function of a stringer.

#### Wood used as a significant structural element

Generally speaking, wood is most often used in two different ways to reduce the carbon footprint of a surfboard:

 As the entire/complete structure of a surfboard and requires little to no resin and/or fibreglass in their manufacture (e.g. alaia made from FSC Certified paulownia).

Boards of this nature, that are produced by manufacturers that have met the additional reporting/assessment requirements of the Gold Level designation, qualify to carry the Gold Level designation.

2. As a structural element, laminated to a foam core, significantly reducing the amount of foam and resin required to produce a surfboard (e.g. Firewire's TimberTek boards with a 3mm paulownia 'skin').

Wood used in this manner must constitute a minimum 50% of the total core by weight to be listed as a Qualified Material.

# Support/recognition:

In addition to <u>a detailed listing on the ECOBOARD Project website</u>, Sustainable Surf will publish a minimum of two social media posts and/or blog posts that feature/reference Qualified Materials each calendar year.

# 2. ECOBOARD Gold Level

To carry the ECOBOARD Gold Level designation, a board must:

- 1. Use at least one Qualified Material specific to the Gold Level designation, and one other Qualified Material of any level (core or resin)
- 2. Be manufactured in a facility that has been Validated to build Gold Level ECOBOARDS

Examples of construction combinations that meet the Gold Level designation include:

- Gold Level Qualified resin laminated over a Qualified core
- Gold Level Qualified core laminated by a Qualified resin
- Wood board with no foam or resin, and made with sustainably sourced wood (e.g. a traditional Alaia)
- Wood board, without a foam core and made from sustainably sourced wood, laminated with a Qualified Material specific to the Gold Level designation.

The next two sections describe how material suppliers and board builders can meet the Gold Level Validation requirements

### A. ECOBOARD Gold Level for Board Builders (shapers, glassers and OEMs)

In addition to being Approved as an ECOBOARD builder, to receive validation to build Gold Level ECOBOARDS an organization must:

- Undergo a "sustainability audit" with Sustainable Surf identifying key sustainability opportunities. Assessments for smaller organizations will generally involve a telephone interview. Periodic updates should also be completed following the initial audit;
- 2. Identify opportunities to:
  - Reduce waste in the board building process generally by developing a strategy with Sustainable Surf's support.
  - Improve energy efficiency and find ways to save energy and/or attempt to use renewable energy and/or carbon offsets.
- 3. Demonstrate efforts to improve worker health and safety, and minimize exposure to hazardous and carcinogenic chemicals.
- 4. Use Qualified Materials and apply the ECOBOARD Gold Level logo:
  - One Gold Level designated material and one other Qualified Material of any level (resin and core)
  - There's a minimum \$1 (USD) fee per board designated as an ECOBOARD.



Sustainable Surf will provide support and guidance to assist each manufacturer through this process.

Audits can be completed in person and/or remotely and will take between 45 minutes and 1.5 hours depending on the size of the facility and availability of key data points. Customized software will be used to make the process much simpler. We will strive to make the process efficient and useful, and help participants find valuable opportunities in reducing waste and energy consumption. Importantly, the process will help us to identify interesting sustainability-related stories that we communicate with the broader surf community.

### Support/recognition:

In addition to <u>a detailed listing on the ECOBOARD Project website</u> and ability to use the Gold Level logo, Sustainable Surf will publish a minimum of four social media posts and/or blog posts that feature/reference Gold Level brands/boards each calendar year.

Using information gathered through the audit process, Sustainable Surf will also provide specific and targeted guidance relating to energy use and waste reduction improvement for all manufacturers. This follows the findings published in our recently completed lifecycle study that identify energy use and waste resin and foam within the board manufacturing process (shaping and glassing) as being key opportunities to improve carbon footprint - and ultimately save costs.

### B. Qualified Materials specific to the Gold Level designation

With the support of the ECOBOARD Project, there has been a significant increase in the number of boards built and sold that contain more sustainable materials. The surfing community now recognizes the ECOBOARD Project label as a symbol that indicates improved sustainability. Therefore, it is important that the materials used in the boards carrying this label are sourced from ethically-managed and ecologically sound supply chains, and have a quantified environmental benefit using an industrystandard lifecycle assessment methodology.

Qualified Materials specific to the Gold Level designation will undergo an additional burden of proof to demonstrate that components are sourced from sustainable supply chains. In other sectors, materials have had concerns related to issues such as food security, deforestation, habitat loss and displacement of indigenous communities. We will work Qualified Material suppliers to verify that their source components are not associated with any such concerns, and look for other sustainable certifications of source components.

In addition to the Qualified Material requirements listed above, materials specific to the Gold Level designation must meet the following requirements:

1. Independent review and validation that bio-inputs/recycled inputs are sourced from ethically-managed and ecologically sound supply chains. Material suppliers should complete Sustainable Surf's Supply Chain Sustainability questionnaire and submit to Sustainable Surf for review (See Appendix 2).

To ensure any commercially sensitive data provided is managed appropriately, Sustainable Surf will work with the supplier to implement a confidentiality agreement between the two organizations.

This information will be reviewed annually by Sustainable Surf and annual updates may be requested from each material supplier.

- A comprehensive lifecycle assessment (LCA) that has been undertaken by an
  independent third party LCA practitioner or reviewed by an independent
  practitioner approved by Sustainable Surf. The LCA should incorporate impact
  indicators relevant to the ECOBOARD Project's focus areas carbon footprint,
  renewable/recycled/up-cycled inputs and reduced toxicity
- Resin suppliers should submit a current radiocarbon dating lab test result confirming a minimum 25% bio-carbon content according to ASTM D6866 testing protocol and evidence that the fully cured resin (the sum of all component parts) has received USDA Bio-Preferred certification
- 4. Wood used as the entire/complete structure of a surfboard and requires little to no resin and/or fibreglass in their manufacture (e.g. traditional alaia made from FSC Certified paulownia).

Makers of wooden surfboards who join the ECOBOARD Project are required to provide details on how they source wood for their surfboards.

## **Large Brands and those Utilizing OEM Production**

# Verification Audit Process

For large brands and those using OEM production to become Approved to sell boards carrying the ECOBOARD Project label, the following must be completed:

- 1. A comprehensive audit of the board manufacturing site that is specific to the boards of the brand in question. This will include the review of:
  - The use and management of Qualified Materials and lams/logos
  - Systems to manage waste and recycling
  - Energy use and renewable energy inputs
  - Systems to manage worker health and safety
  - Systems and processes that the brand has in place to ensure Qualified Materials are used on boards carrying the ECOBOARD Project label
  - The brand's approach to developing artwork for boards and specifying the use of the ECOBOARD Project label
  - How the brand markets and communicates the environmental qualities of boards carrying the ECOBOARD Project label
- 2. A comprehensive review of the broader sustainability programs that the brand is implementing. This may include:
  - Sustainability initiatives for products beyond surfboards (i.e. paddles, fins, board-bags, clothing);

- Activities to manage and mitigate carbon emissions (i.e. procuring renewable energy, involvement in a carbon offset program);
- Support of environmental not for profits;
- Engagement with customers and the community regarding sustainability;
- Take-back and recycling programs for boards at end of life.

The results of the audit are confidential. Each brand will be provided a comprehensive audit report, which includes key results, observations and recommendations. Sustainable Surf will work with each brand to communicate key sustainability-related out-takes via the ECOBOARD Project website and other forums.

This information also allows Sustainable Surf and each brand to manage communications about boards carrying the ECOBOARD Project logo.

# Use of the ECOBOARD Project logo

The program requires all large brands to pay an Annual Program fee and a minimum \$1 (USD) fee per board designated as an ECOBOARD.

Sustainable Surf will work with each brand to develop a clear strategy for the use of the ECOBOARD Project label on boards. Generally, this will include a gradual 'rollout' specific to the boards and construction methods in question.

Communications regarding the brand's involvement in the ECOBOARD Project should also be discussed with Sustainable Surf.

### Annual Program Fee

In addition to a fee per board designated as an ECOBOARD, large brands are required to pay an Annual Program Fee. This contribution helps to fund:

- An annual audit
- Direct support and consultation from Sustainable Surf relating to surfboard sustainability
- Maintenance of a detailed listing on the ECOBOARD Project site