

# Bio-Epoxy for the Surf Sports Market

Change Climate, in collaboration with academic and industry partners introduce our Bio-Epoxy resin to the surf sports market. After five years of research, development and testing Change Climate is confident that this Bio-Epoxy is the overall best epoxy product in the market today.

Many eco-friendly epoxies have established the awareness and created a demand for superior “bio” product, but have fallen short in direct comparison with the petrochemical based epoxies or have misled the market with cunning branding, hiding the fact that the bio content is a minimal blended content of the finished product. Change Climate’s Bio-Epoxy is safe to use with no impact on the surrounding environment.

- ❖ **100% Bisphenol-A free** – no other bio epoxy on the market is BPA free.
- ❖ **Low odour** – from very low Volatile Organic Compound content.
- ❖ **UV stable** – stays strong and clear, non-yellowing.
- ❖ **Ideal viscosity** – very good to work with and minimizes wastage
- ❖ **Smooth, glossy or matt** – suitable for hot and gloss coats
- ❖ **Hard cure** – compression strength tested at 80-90Mpa.
- ❖ **Superior flex profile** – gives boards amazing drive
- ❖ **Bio Content** – current leading epoxies are 20% bio content, where Bio-Epoxy is 70%
- ❖ **Renewably sourced ingredients** – turning organic vegetable waste into superior resins

## Collaboration Project with Wallbridge Surfboards

Change Climate teamed with renowned surf craft innovation expert, Ben Wallbridge to conduct trials that culminated in the first board shaped and glassed with Bio-Epoxy. The appeal of using a renewable resource with superior performance characteristics was immediate for Wallbridge. Ben boldly decided to combine a new design concept glassed with the Bio-Epoxy at his South Australian Lonsdale facility with his first attempt at using the materials. One of the immediate benefits noted was the ease with which the Bio-Epoxy is handled in mixing and spread across the foam blank. The board was glassed with a hot coat only and the strength aspect was underestimated. The water trials were a huge success, it appears boards made with Bio-Epoxy and Wallbridge’s progressive designs incorporating the use of carbon fibre will be lighter and stronger than any epoxy, petrochemical or eco on the market today. The scientists at Change Climate are currently working on improvements which include UV cure formulations and a 100% bio content epoxy.

## Some of the comments made by Ben Wallbridge – Wallbridge Surfboards

*“I’ve created a cutting-edge shape, which itself takes time to create but now with a bio resin should be very interesting.”*

*“Hi Guys, board feels very structurally sound underfoot, probably no reason for extra strengthening for future boards.”*

*“Surfed good 4ft plus today down @ Victor. One of the quickest Boards I’ve ever made, so responsive and speed through flat sections. Glass is very strong”*

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The board that Wallbridge shaped was 6'3" x 21" x 2 13/16" and was suited to Ben who's 185cm and weighs 90kg. Ben experimented with bottom channels and concaves along with flyers. The blank was reinforced with a carbon fibre stringer and carbon fibre hatching on the deck above the tail.



Ben Wallbridge in the shaping bay.



Double to quad concave and carbon stringer.



Double flyer, Innegra inlay & quad axial tail patch.



Ben and Sean Steed - Change Climate CEO



### Change Climate Pty Ltd

40-46 West Thebarton Road,

Thebarton South Aust. 5031

Sean Steed: +61 417 778 020

Leigh Whicker: +61 437 809 261

info@changeclimate.com.au