

# BIOPAK



**2021 SUSTAINABLE PACKAGING DESIGN  
OF THE YEAR - GENERAL  
HIGH COMMENDATION**



## BioPak Blue Harvest Oyster Tray



### Key Outcomes and Measurement



Alternative to fossil fuel SUP



Replace Polystyrene



Bagasse/Sugarcane Pulp



Certified B Corp

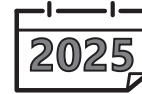


Compostable  
AS 4736  
AS/NZS 9199



compostable  
EN13432

Certified Compostable  
AS4736 / EN13432



Meets 2025 National  
Packaging Targets



End product is a non-toxic,  
nutrient-rich compost

**120 days**

Biodegrades within 120 days in  
commercial compost facility,



**Product:** Blue Harvest Oyster Tray

**Company:** BioPak

**Country:** Australia

BioPak was founded in 2006 and specialises in designing, producing and distributing certified compostable packaging made from rapidly renewable plant-based materials including bioplastics and bagasse pulp. Born out of an idea to eliminate problematic, unnecessary, and unrecyclable plastic packaging BioPak's focus has been on eliminating single use fossil based plastic used within the food and foodservice industry.

As more businesses seek to reduce their consumption of single-use plastic in order to meet government legislated targets and consumer demands, a new generation of fibre-based alternatives are the preferred choice where they provide the required functional performance along with the ability to be recycled in the paper or organic waste stream.

COORDINATED BY



ANZ REGIONAL AWARDS PROGRAM



INTERNATIONALLY ENDORSED BY



EXCLUSIVE ENTRY TO



- ✓ *BioPak saw an opportunity to reduce the large amount of plastic needed for packing oysters, and replace it with a home compostable and recyclable alternative.*
- ✓ *The design was a result of a collaborative effort, and the support of retailers, packers and producers has been crucial in the development process of the product.*
- ✓ *Switching to pulp has avoided the use of 2,000kg of plastic every year and offset 13,207kgs of carbon emissions.*

## **In the context of your packaging innovation, what do you see as Sustainable Packaging?**

Sustainability in packaging requires a holistic approach backed up by scientific-based evidence that takes into account the impact of a product at every stage in of its life cycle – it begins with responsibly sourced renewable raw materials, continues with environmentally certified and energy-efficient production processes, and ends with recovery and recycling of raw materials to ensure resources can be reused and returned back into the system.

While sustainable and environmentally friendly packaging are not considered to be one and the same, the use of sustainable materials in creating new packaging options do have a positive impact on the environment.

BioPak utilises agricultural residue generated in the production of sugar. This rapidly renewable and abundant material is given a second life when used to produce moulded pulp trays and containers. After disposal, the trays can be recovered and recycled in the paper recycling stream.

## **What would you say were the decision-making drivers (Internal and External) influencing your packaging design?**

Consumers are becoming more vocal about how important it is for companies to have a sustainability focus to the products that they generate and sell in the marketplace. More consumers, especially Millennials and Generation Z, are willing to switch to different brands based on a given company's commitment to the environment.

A growing awareness regarding the environmental impact of plastics coupled with a demand from retailers and consumers for brand owners to reduce the amount of single-use plastic packaging are all drivers motivating companies to rethink their use of plastic within their supply chain.

Plastic is a significant pollutant in the ocean and as such, those within the seafood industry are seeking ways to help reduce the amount of plastic used within their operations. BioPak worked closely with Blue Harvest, to create a solution with the equivalent functional performance of plastic containers that were previously used for this application. It needed to protect the product, withstand the rigours of the cold chain, be easily integrated into the existing packaging process in addition to visually differentiating their offer from the competition.

Collaboration is key and the support, input, and feedback from consumers, retailers, packers and producers must be taken into account when developing new packaging solutions.



## What benefit does this new design offer your business and your consumers? Why is the pack more sustainable?

The seafood industry relies on clean and healthy oceans, however, seafood transportation has its challenges, as the product is highly temperature sensitive and perishes quickly after harvest. The solution to this has historically been using materials like polystyrene.

The BioPak solution offers a sustainable alternative to plastic trays made from fossil fuels. Made from bagasse, it is sturdy and provides a moisture and grease resistant surface that maintains the quality of the oysters for a longer period of time. It protects the produce with the need to use fossil based plastics. BioPak's success depends on ensuring their products get to the consumer in time and in optimal condition. BioPak pulp trays help the team deliver on this goal in packaging that is both compostable and fully recyclable.

## What volumes of materials, packaging and waste have you saved by designing this new packaging?

### Did you do this through changing materials, lightweighting, recycled content, making the packs recyclable or reusable?

As pulp is recyclable in the paper stream and in Australia there is a 85% paper recycling rate it is expected that at least 85% of the pulp trays will in fact be recycled.

Switching from single-use plastic packaging derived from finite fossil resources to sugarcane packaging makes a big difference: For every 208,000 oyster trays made from sugarcane over conventional plastic packaging, it will avoid 2,000 tonnes of fossil-fuel plastics and offset 13,207 kgs of carbon emissions. As it is a natural material it will not persist in the environment in the event that it escapes collection.

## How much on-pack and off-pack information do you provide your customers?

The trays have home compostable and recyclable logos embossed on the base to guide the end-users on the disposal options. The carton has the seedling, home compostable and recyclable logos. They regularly communicate the impact that the customers have made, with impact data statements sent out and the cumulative impact data stated on all invoices.

## Please share a little bit about each of the partners/collaborators who worked on this packaging design.

### Can you explain each of their roles?

In-house industrial and graphic designers worked on the technical and aesthetic aspects from the start to finish. Throughout the development process, there was a close collaboration with BioPak customers, Blue Harvest, as well as end-users, and several prototypes, to make sure there were no adverse functional or operational performance impacts. The retailer provided feedback to parties.

## What do you feel will be needed to further improve packaging design in the future? (e.g. education, investment, policy/legislation, tech, etc?)

Packaging design will continue to improve as new production technologies coupled with the development of new materials that offer improved functional performance and reduced environmental impact.

*"BioPak believes it will continue to improve without any external drivers however policy and legislation will speed up the process of eliminating unnecessary and problematic packaging. Recovery and recycling infrastructure will also play a part in driving change within the packaging industry as they are intrinsically linked."*

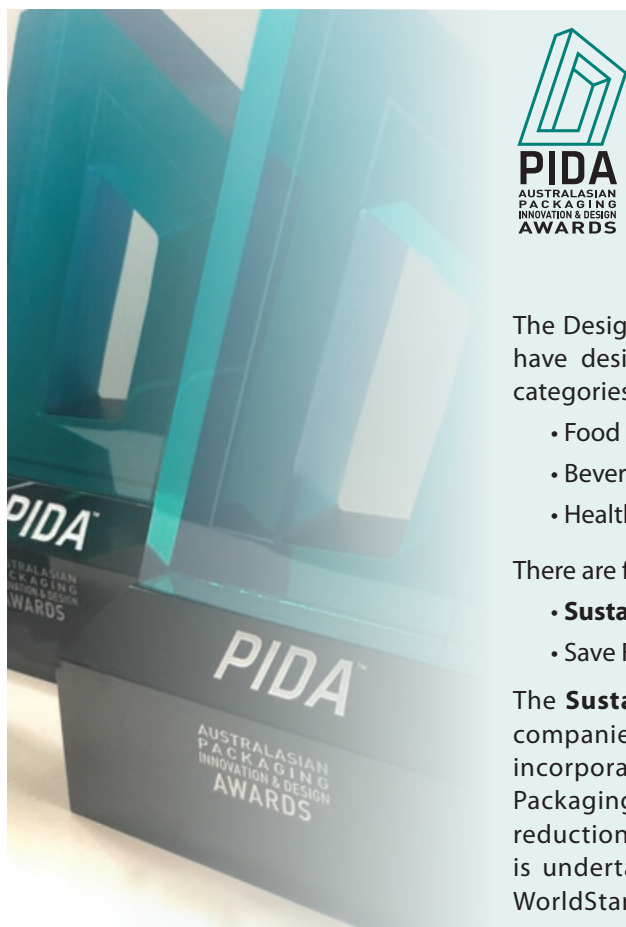


## As a winner of the PIDA awards, how valuable is the award to your organisation?

*Gary Smith, CEO, BioPak says, "It is a great honour to receive this prestigious award from the Australian/ New Zealand Packaging industry. Co-ordinated by the Australian Institute for Packaging, these awards recognise businesses that are making a difference in their space and it is wonderful to be recognised by the packaging industry for sustainable packaging. These awards in particular are also a feeder into the WorldStar Packaging Awards, for which BioPak won global recognition for the Blue Harvest Oyster Tray in 2021."*



## How is winning a WorldStar Packaging Award valuable to your organisation?



The Australasian Packaging Innovation & Design (PIDA) Awards are an Australia and New Zealand program that is coordinated by the Australian Institute of Packaging (AIP). The awards recognise companies and individuals who are making a significant difference in their field across Australia and New Zealand. The PIDA Awards are the exclusive entry point for Australia and New Zealand for the prestigious WorldStar Packaging Awards.

The Design Innovation of the Year company awards recognise organisations that have designed innovative packaging within each of these six manufacturing categories:

- Food
- Beverage
- Health, Beauty & Wellness
- Domestic & Household
- Labelling & Decoration
- Outside of the Box

There are four special awards available:

- Sustainable Packaging Design
- Save Food Packaging Design
- Accessible & Inclusive Packaging Design
- Marketing Award

The **Sustainable Packaging Design Special Award** is designed to recognise companies that have developed innovative packaging solutions that incorporate sustainability considerations. All entries are judged on Sustainable Packaging Design considerations such as social impact, material, source reduction, energy and recovery and what packaging changes the company is undertaking to meet the 2025 National Packaging Targets. This is also a WorldStar Packaging Awards category.



The Australian Institute of Packaging (AIP) is the peak professional body for packaging education and training in Australasia. The AIP helps shape the careers of generations of packaging professionals – from packaging technologists to international packaging business leaders along with a host of people in associated disciplines – sales and marketing, purchasing, production and environment.

### Australian Institute of Packaging

Australasian Office: [info@aipack.com.au](mailto:info@aipack.com.au) For PIDA enquiries: [pida@aipack.com.au](mailto:pida@aipack.com.au)