

PLANET PROTECTOR PACKAGING



**2017 SUSTAINABLE PACKAGING
DESIGN OF THE YEAR - CLOSED LOOP
GOLD WINNER**



**2017 SAVE FOOD PACKAGING
DESIGN OF THE YEAR
HIGH COMMENDATION**



**2018 WINNER
WORLDSTAR
SAVE FOOD
SPECIAL AWARD**



**2018 WINNER
WORLDSTAR**

Planet Protector Packaging Woolpack Thermal Insulation

Key Outcomes and Measurement



100% sheep's
waste wool



Superior Thermal
Insulation



Recyclable Food Grade
Liner



Compostable



Replaces EPS



Absorbs moisture



E-Commerce
Design



Renewable resource

Save Food Packaging Guidelines



Contain, protect &
transport



Protects product in
cold chain



Balance environmental
impacts



Product: Woolpack Thermal Insulation
Company: Planet Protector Packaging
Country: Australia

Planet Protector Packaging was established in January 2016. Their flagship product, Woolpack aims to reduce fossil-fuel based packaging by replacing it with a sustainable solution made 100% from sheep's waste wool. Woolpack, multi-award winning, is a 'game changer', as is transforming the cold supply chains and it thermally outperforms other packaging options for many different industries such as food, seafood and pharmaceutical. Since winning the PIDA Awards, Planet Protector Packaging has expanded its geographical footprint with operations in Sydney, Auckland and presently establishing a pilot facility in India.

COORDINATED BY



ANZ REGIONAL AWARDS PROGRAM



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EXCLUSIVE ENTRY TO



PLANET PROTECTOR PACKAGING

When considering your services and products within the supply chain through to the end consumer, what is your organisation's understanding of food loss & waste?

Joanne Howarth MAIP, Co-Founder and CEO of Planet Protector Packaging says, "We are involved in the Fight Food Waste Cooperative Research Centre and we are very big on food loss & waste."

Food loss is seen in transportation and the product that is in transit. It is seen if a product gets outside of the regulated food safety zones or the temperature profile. Food waste is more around, not using the whole of the plant, the whole of the material, or the whole of the vegetable. Planet Protector Packaging has multiple projects happening at the moment, looking at materials testing for new verticals of our product."

What prompted your organisation to consider packaging design or redesign that aims to minimise food loss & waste?

Food loss & waste is a huge problem. Planet Protector Packaging are in business to solve these problems. They are a sustainable packaging company, so these questions are at the essence of their being. Planet Protector Packaging was established to use wool to replace polystyrene. All of their decisions are driven by product stewardship, and end of life.

The team would never design anything that would not have a sustainable and easily recyclable or compostable end of life. The reason that Planet Protector Packaging exists is to deliver food safely, and to provide insulated packaging, to businesses that need to ship, temperature sensitive food, seafood and pharmaceuticals. These categories are predominantly their three target markets. As those markets are the biggest users of polystyrene in supply chain.

\$30 billion of wastage is in pharmaceuticals. When you consider the importance of vaccines in developing countries and if they don't have a cold chain then imagine the waste. It would be astronomical. Everyone needs to do better to minimise product waste across supply chains and that is what Planet Protector Packaging does every day of the week.

What was the packaging like before the new design?

Expanded polystyrene (EPS) has been the global industry standard in food and pharmaceutical cold chain perishable transport since 1954. Until now, there has been no a sustainable alternative to EPS that can deliver equivalent or superior thermal performance. There have been a lot of imposter products and a lot of greenwashing that implies the products are 'recyclable, compostable and biodegradable'.

Owner Joanne Howarth has always been a passionate greenie and seeing the volume of food that was packaged in polystyrene horrified by the negative impact up on the environment. PPP team created a solution to this shocking problem, the R&D took 2+ years to develop their patented technology.

What factors prompted you to enter the PIDA awards?

When Planet Protector Packaging entered the PIDA Awards they were a start up. The first thing that they did was look at what industry associations they would like to join and participate with. One of the first ones that they reached out to was the Australian Institute of Packaging. They entered and then the team did not give it a second thought as they were only 12 month's old. They truly did not think that they would come in and 'scoop the pool', so when they did it was remarkable. The reason Planet Protector Packaging wanted to enter was to receive confirmation that they were on the right track.

"Awards are really the reinforcement of what you are trying to achieve. It gives you credibility in the market, an opportunity to leverage those wins, to try and get your message out there. When you are a startup, you have very finite resources. So, you need to be smart about how you spend your time, and where you get the most return on your investment."

*because
there's no
planet B!*



PLANET PROTECTOR PACKAGING

When thinking about developing your award-winning packaging, what was the design considerations for minimising food loss & waste and why?

Planet Protector Packaging works with their clients to understand their pain points. Each customer has different thermal requirements to keep their products within the safety zone, whether it is food, seafood or pharmaceuticals. The team considers temperature parameters such as whether it needs to be 2 or 5 Celsius degrees, or if you need more stability between 5 and 10. Planet Protector Packaging can control within their proprietary blend of fibres, such as thickness, the fibre blend, the density of the product, and the different grades. PPP provides fit for purpose solution. If they are sending chemotherapy from Sydney to Darwin or if it is a Meal Kit box from Sydney to Melbourne.

The solution looks simple that often people look at it and think, "Oh, it is just wool inside some plastic. It is more than that." But there are years of R&D behind Woolpack and the company has environmental testing chambers, where they simulate the outside conditions, the ambient conditions, they test and validate everything.

Are these considerations implemented in your NPD process every single time?

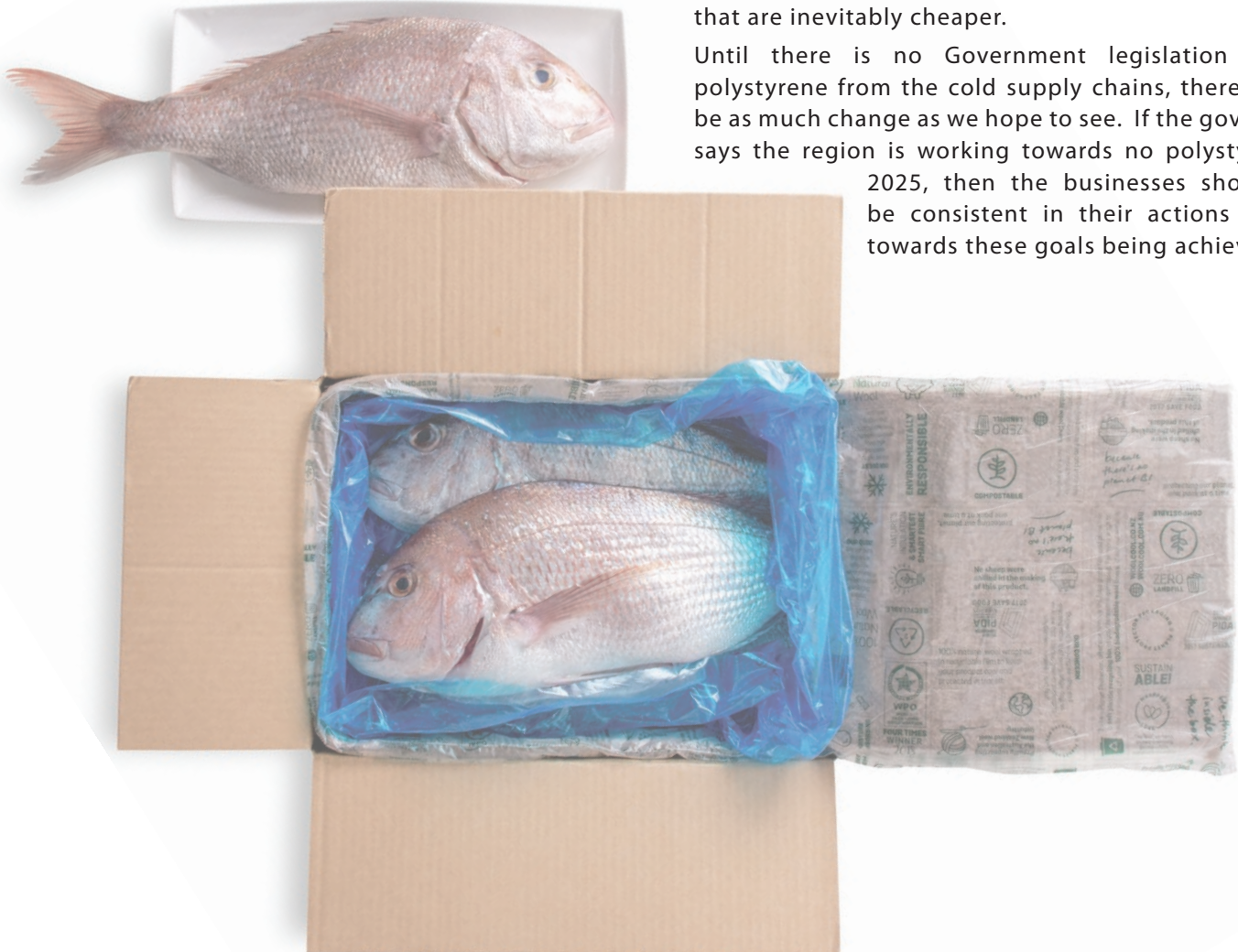
The market was vastly different. Polystyrene has dominated the cold supply chains for over 70 years. Planet Protector Packaging have gained a lot of traction by eliminating polystyrene and problematic plastic materials within the packaging industry. But now customers are driving the change and demanding for more sustainable packaging solutions.

What do you believe is the most successful outcome/benefit from this design?

Planet Protector Packaging have been quite successful thus far and has been awarded multiple awards since the PIDA recognition. When they started crowdfunding a few years ago they received messages from people saying how much they loved their product; WOOLPACK, and how fantastic and solution to tackle the waste ocean crisis. This is very reassuring, and it makes you confident that people are aligned with the Planet Protector Packaging vision.

So why don't they change? Sadly, still see so many businesses unwilling to move to a more sustainable alternative. There is still a lot of resistant to change. To move away from polystyrene and problematic plastics that are inevitably cheaper.

Until there is no Government legislation to ban polystyrene from the cold supply chains, there will not be as much change as we hope to see. If the government says the region is working towards no polystyrene by 2025, then the businesses should also be consistent in their actions to work towards these goals being achievable.



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Was the award-winning Save Food Packaging design comparatively more expensive than standard packaging? If so, could you estimate in percentage how much more?

Generally, Woolpack would be 5 to 10% more than polystyrene. It is obviously based on tiered volume.

However, when you consider other factors, Woolpack is cheaper than polystyrene. Woolpack arrives flat-packed, this translates to fitting more units of Woolpack on a pallet compared to polystyrene; less space in the warehouse and therefore its less pallet movements, reduces the labour costs and freight costs. Unlike polystyrene that is made from fossil fuel, Woolpack is fire retardant, this equals to lower warehouse insurance.

Moving to Woolpack significantly reduces the costs of the industry.

As an award winner and a best practice leader, would you recommend/promote to other organisations the Save Food Packaging design benefits? If so, what would these be?

"Planet Protector Packaging would be one of the biggest supporters for the AIP and the PIDA awards and the WPO and the WorldStar awards. You cannot enter the WorldStar awards in Australia and New Zealand without first winning a PIDA award. It was incredible when the President of the WPO came over to our table at the awards and congratulated the team. I remember, he came to congratulate us and said "In all my years in packaging, I have never seen a product that is as simple as Woolpack. It has got the potential to change the world. You are only at 1% of what is your potential. I always remember that it was such a profound moment."



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

Joanne Howarth MAIP, Founder and CEO of Planet Protector Packaging says, "We never thought we would win, it was just such a memorable thing. I will never forget it until the day I die. Winning the PIDA awards were really the start of our success, because it really gave us the credibility and industry recognition. It all started with the PIDA awards and Nerida Kelton; she has been amazing, so supportive."



How is winning WorldStar Packaging Awards valuable to your organisation?



2018 WINNER
WORLDSTAR
SAVE FOOD
SPECIAL AWARD



2018 WINNER
WORLDSTAR

Joanne Howarth MAIP, Co-Founder and CEO of Planet Protector Packaging says, "It has put us on the world stage, as a small packaging company from down under, we are now a very proud one that has won multiple PIDA awards. I remember the day that after we won the PIDA awards and we got our trophy, I was back at work and then Nerida Kelton rang and said if we wanted to go through to the WorldStar? As the winners from Australia & New Zealand are eligible now to go through to the WorldStar Packaging Awards to represent our region on a global stage. So that was definitely a game changer for us."

"It was a very nerve wracking experience. But that was really the point that we became not just a packaging company in Australia, we became somebody who has a global vision for achieving our mission. We are on a mission to become the market leader in sustainable thermal packaging, that does not harm the planet. This was a wonderful platform for us to raise awareness, and it generated a lot of enquiries from other countries, mainly enquiries that we have not been able to service yet. It opened up the dialogue with people that are interested in being distributors and learning more. It is the combination of the PIDA and the WorldStar that got us to where we are, I believe."



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

The **Save Food Packaging Design Special Award** is designed to recognise companies that are working to minimise or prevent food waste from paddock to plate using innovative and intuitive design features that can contain & protect, preserve and extend shelf life; all the while meeting global sustainable packaging targets. This is a WorldStar Packaging Award 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

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