WAR ON WASTE
The battle lines are drawn; Pact Group has declared War on Waste
Pact’s War on Waste isn’t solely about being responsible at the end of packaging’s life; it’s about reducing and eradicating waste throughout the entire supply chain

### Food Waste
- Shelf life extension
- Damage and Breakage during transport
- Freight efficiencies (foodmiles)
- Portion size
- Safety & Integrity

### Resource Waste
- Light weighting
- Choice of substrate – inclusion of PCR/PIR
- Recycling
- Reconditioning
- Hard to collect schemes

### Operational Waste
- Labour costs
- Alternate energy
- Water
- Material
Every year Pact collects and processes **19,517** tonnes of plastic resin from Australia and New Zealand.

The collective annual environmental savings our recycling, reconditioning, take back schemes, hard to collect industry and customer programmes, use of PCR and PIR in products and light weighting initiatives is is the equivalent to:

<table>
<thead>
<tr>
<th>EMISSIONS</th>
<th>ENERGY CONSUMPTION</th>
<th>WATER USAGE</th>
<th>SOLID WASTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>78,591</td>
<td>42,669</td>
<td>267</td>
<td>276,321</td>
</tr>
</tbody>
</table>

- **Trees planted**
- **Household daily energy consumption**
- **Olympic swimming pools**
- **Household wheelie bins**

Every year Pact collects and processes **19,517** tonnes of plastic resin from Australia and New Zealand.
DID YOU KNOW?

Food Waste has a far greater negative environmental impact than packaging waste.

In Australia, approximately 8 to 10 billion dollars of food is wasted each year in commercial and residential waste.

$8-10B

Australians throw out one of every five shopping bags, which equates to every household throwing out $1,036 worth of groceries each year.

ONE IN FIVE

Approximately four million tonnes of food ends up as landfill in Australia.
Pact Group: Waging War on Food Waste

The number of Private label Eggs broken each Australian Supermarket’s:

$38M 15% BREAKAGE RATE

18,792 WHEELIE BINS

Pact’s PET carton / Crate egg packaging solution will save the supermarkets the wastage per year equivalent to
Pact Group have secured the exclusive license to Perfotec®. Perfotec® is shelf life extension technology applied on the packaging line. Exactly suited to each produce variety’s season and cold chain temperature range, this innovative technology keeps produce fresher for longer to simultaneously reduce waste and increase sales.
Pact Group: Waging War on Waste
Shelf life Extension – Heinz Tomato Sauce

Pact has the exclusive license to DiamondClear™ oxygen scavenging technology that enables longer storage of both empty and filled PET bottles, providing extended shelf life.

With DiamondClear’s™ superior O2 scavenging ability and leading edge barrier protection keeps to keep contents fresher and colour more stable for longer, by adopting this monolayer technology, Heinz was able to increase the shelf life of their iconic sauce from:

9 MONTHS → 2 YEARS

That’s an increase on

↑ 166%
Creating a suitable alternative to the hard to dispose of polystyrene trays has been a long running global environmental challenge. Pact’s rPET Moisturelock Meat Tray comprises 50% and is accepted by every kerbside recycling scheme in New Zealand. The real innovation however lies in the trays ability to capture fluid in the base removing the need for a soaker pad.

**Annual Environmental Savings are equivalent to:**

- **$1.8 MILLION PER ANNUM**
- **14 OLYMPIC SWIMMING POOLS**
- **full of polystyrene saved from landfill per annum**

The avoidance of the cost to landfill the community equates to:

70,000 HOURS FOR THE MEAT PROCESSOR
Pact Group: Waging War on Resource Waste
Light-weighting - Infini

Pact Group has the exclusive license to Nampak’s Infini technology and will launch the lightest milk bottle in the New Zealand market in August 2016.

20% lighter than the former milk bottle

Annual Environmental Savings is the equivalent to:

20% LIGHTER

562 TREES PLANTED PER ANNUM
Pact Group: Waging War on Resource Waste
Light-weighting – Extralok & 29/25 Closures

In the past 12 months, Pact has light-weighted 2 closures:
The 38mm SLJ Hot Fill Closure to the new 28mm Extralok Hot Fill Closure.
The 28mm CSD Closures (1810 & 1881) to the 29/25 closure.

The weight reduction for the Extralok is from 4.5 grams to 3 grams or 33% LIGHTER.

The weight reduction for the 1810 is 61% LIGHTER.

and for the 1881 is 52% LIGHTER.

Annual Environmental Savings is the equivalent to water usage of 19.8 OLYMPIC SWIMMING POOLS.

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Pact Group: Waging War on Resource Waste
Light-weighting – Flip Top Cream Cap

Pact developed an innovative and award winning flip top cream cap that has light weighted the cap by

14%

The weight reduction is from 4.5 grams to 3 grams or

33% LIGHTER

Annual Environmental Savings is the equivalent to water usage of

7 OLYMPIC SWIMMING POOLS
Pact Group has developed a “whole of life” solution that involves buying back damaged / unserviceable wheelie bins from local councils, recycling them and then using the recycled resin in the manufacture of new bins. The new bins are made with 30% recycled resin.

The weight reduction is from 4.5 grams to 3 grams or **33% LIGHTER**

Annual Environmental Savings is the equivalent to energy consumption of **1280 HOMES**
The AIP (Australian Institute of Petroleum) Oil Container Recycling Program is an industry led product stewardship program developed to recover domestic plastic oil containers less than 10L in size. The general public can dispose of their used motor oil containers and oil residues, free of charge, from selected transfer stations. As oil containers are not accepted via household kerbside recycling, prior to this program plastic oil containers were all sent to landfill.

In the 2015 calendar year, Pact collected over 500 tonnes of oil containers and granulated those containers for further recycling.

Annual Environmental Savings is the equivalent to energy consumption of

500 TONNES

80% OF THE AUSTRALIAN POPULATION

The weight reduction is from 4.5 grams to 3 grams or

347 HOMES
Leading New Zealand paint producer, Resene and Pact have collaborated to build a program that closes the loop for plastic paint pails. Resene’s customers can bring their unwanted paint and paint containers into their local Resene ColorShop stores. The paint is donates to local community groups and Pact subsidiary business’ wash and granulate the material, re-extrudes it and manufacture new pails from the material for Resene.

Almost 20 tonnes of HDPE has been recycled and processed into rHDPE in the last 12 months of the program.

Plastic Paint Pails to Landfill Vs Plastic Paint Pails Recycled is equivalent to:

20 TONNES 12 MONTHS

HOUSEHOLD DAILY ENERGY CONSUMPTION

11,459
PACT Group operates a fresh produce crate pool system for one of Australia’s major Supermarkets.

WITH FIVE CRATE-WASH AND LOGISTICS DEPOTS IN OPERATION, CRATES CAN BE RE-USED (WASHED) 20 TIMES

Annual Environmental Savings is the equivalent to:

**8253 TREES**

**54,000,000 CRATES ARE WASHED PER ANNUM**
Pact is one of major companies that collects drumMUSTER containers, servicing the majority of the south-east cost of Australia. It processes the material for further recycling & utilises the material in the manufacture of industrial containers – reducing the need for virgin resin.

In the 2015 calendar year, Pact collected over 400,000 containers or approximately 420 tonnes of material.

Annual Environmental Savings is the equivalent to filling 2,824 with solid waste.
Pact Group collect more than 116,000 used Intermediate Bulk Containers (IBC’s) for reconditioning per annum.

In FY16 – Pact invested more than $1 MILLION in a state-of-the-art wash line; the only fully automated facility in Australasia.

Automating the wash line can result in 70% reduced water usage.