Plastic: The Ugly, The Bad & The Good

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Plastics New Zealand

- Industry Association (NFP NGO)
- Supporting NZ Plastics industry for over 75 years
- Small industry of ~12,000 employees
- Enables >50% of GDP and >40% of Export Earnings
- 185+ Member Companies across NZ
- Broad based representation
Vision

To be the leading Industry Association facilitating the development, growth and success of our Members in an economically, socially and environmentally responsible manner.
THE UGLY
The Bad

Source: European Commission
The Bad

• Plastic treated as trash rather than a valuable resource (future mining potential?)

• Poor recovery rates
  • Collection system
  • Consumer behaviour / education
E-WASTE!
Packaging Nightmare!
Overconsumption!
Unnecessary Packaging
Unnecessary Packaging
THE BAD
GET RID OF PLASTIC!!
What alternatives are there?
385g Packaging (A) \[ A = 19 \times B \] 20g Packaging (B)
PLA – compostable (industrial)

PET
OXO-BIODEGRADABLE

- ‘Environment Friendly’
- Green coloured ink
- Picture of leaves
- Produced as per ASTM standard

**Problems:**
- ASTM Statement misleading – no certification
- Base material is HDPE – traditional plastic
- Microplastics: Prodegradant additive causes traditional plastic to break down faster. It turns into microplastics which may, over a long time, eventually become bio-available for microorganisms to ‘biodegrade’ the material
Active ingredient: Didecyldimethylammonium Chloride 0.36% W/W

This chemical is an antiseptic/disinfectant used for biocidal applications. This would actively counteract any natural biodegradation in a composting situation.
The Bad

- Alternatives can have unintended consequences:
  - Increased carbon footprint
  - Contamination of recycling system
  - Greenwashing & confusion
  - Increased food waste (& subsequent emissions)
THE GOOD HEALTH
LOW EMISSIONS
THE GOOD Collaborate
The Good

• Global change toward circular economy for plastics
• Rapid increase in solution-focused research
• The 6 Rs

**REFUSE**
Is it necessary? Do you need it?

**REDUCE**
Can amount of material be reduced?

**REUSE**
Are there reusable options?

**REPAIR**
Can it be fixed or parts replaced?

**RECYCLE**
Can resource be kept in use?

**RETHINK**
Can it be redesigned?
The Good – Cradle to Cradle View

- Produce & Assemble
- Product Life
- Collect & Disassemble
- Decomposition
- Biosphere
- Technosphere
- Recycling

PLASTICS NZ
NEW ZEALAND'S INDUSTRY ASSOCIATION

TOI TŪ TE WHENUA
whānau tapawhā he tangata
the land remains when
people have disappeared

waste MNZ
Local Recycling

PLASTIC
#1-2 ONLY

- Polypropylene (virgin)
- Packaging Manufacturer
- Food Manufacturer
- Retailer
- Consumer
- Collection & Sorting
- Landfill
- International Reprocessor
- NZ Recycler / Reprocessor
The Good

PLASTIC

#1, #2 & #5
The Good
The Outlook

- Plastic is here to stay
- We need it to achieve a low carbon circular economy and to maintain current quality of living
- Zero waste not zero plastic
- Industry wants to collaborate on solutions