A Vision for a Sustainable New Zealand in 2050

The Pathway For Waste & Materials
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Workshop: All
(for a summary of the workshop please email duncan@3r.co.nz)
VISION 2050
WASTEMINZ 2013

“FOCUS ON THE FUTURE”
WBCSD’S 2050 VISION FOR THE WORLD

9B people live well and within the limits of the planet
NZ Vision
2050
Unlocking the immense potential within this country
The Project
The Vision
The Pathways
The Opportunities
The Action
COMING TOGETHER IS A BEGINNING, 
KEEPING TOGETHER IS PROGRESS, 
WORKING TOGETHER IS SUCCESS.
HENRY FORD
VISION

In 2050...New Zealand has 6 million people, living well and within the limits of the planet.
<table>
<thead>
<tr>
<th>Inequality</th>
<th>Emissions</th>
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<td>Productivity</td>
<td>Water Quality</td>
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<td>Innovation</td>
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<td>Health &amp; Education</td>
<td>Renewable Energy</td>
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<td>Crime</td>
<td>Soil Health</td>
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URGENCY

ALL THESE CHALLENGES ARE INTERCONNECTED AND URGENT.

WE NEED A WAY FOR BUSINESS TO THINK ABOUT A POSITIVE FUTURE FOR NEW ZEALAND.

WHICH AREAS WILL IMPACT YOUR BUSINESS?

WHAT ARE SOME OF THE KEY OPPORTUNITIES AND CHALLENGES THAT THIS FUTURE MAY HOLD?

OUR VISION 2050 PATHWAYS PROVIDE THIS FRAMEWORK.
Pathways added:
- Cultural Diversity
- Marine
- Tourism

Pathways removed:
- People’s Values
Example: Energy & Power
OUTCOMES – THE MURAL
A NATION ON THE CUTTING EDGE OF THE WORLD

OPPORTUNITIES
OPPORTUNITIES

Science & technology

Energy

Emerging markets

Production & consumption systems

Growth in emerging middle class
Interconnectedness and Collaboration are key themes of Vision 2050
COLLABORATION

- Supply Chain
- Society
- Industry

...collaborative tools and technologies
DELIVER: VISION PROJECTS

1. Business and Biodiversity
2. Resource efficiency and value chain
3. ACTION 2020!
JOIN US

WHICH PATHWAYS WILL IMPACT YOUR BUSINESS?

WHAT ARE YOU DOING NOW THAT YOU WON’T BE ABLE TO DO IN THE FUTURE?

IF YOU STAY THE SAME, WILL YOU STILL BE IN BUSINESS IN 2050?

WHY?

WHY NOT?
THANKS!
Retail trends affecting waste & materials
Omni channel

- Being Omni-present to customers, available anytime, anywhere, any product.
- Same customer experience and flexibility whether in-store, online, or even pop-up store
  - Example 1: click and collect, shop online, but collect at store.
  - Example 2: store as showroom. Limited range for display purposes only. Product is ordered off the sample and then delivered from efficient distribution centre direct to customer

Implications for waste
- reduced range = reduced store footprint and transport costs
- less discounting to clear unsold stock, only deliver what is purchased
- materials handling / recycling at distribution centres far easier than at remote stores
  (already close to 100% diversion from landfill of packaging materials at DC’s)
Data and customer analytics

- Sounds boring but is the key to effective stock management
- Better prediction of what customers want to buy, using purchase / preference data
- Less ‘wastage’ and extreme discounting to clear, especially with fashion products or items with an expiry date
- Greater stock-turn and more efficient retailing
Waste & Materials Pathway
Waste & Materials Challenges

Pick 2 elements from your decade

• Do you agree or disagree?
• What infrastructure change might be required?
• Is legislation required or will the market provide the solution?

Be prepared to report back!
2010s

Smart materials innovation

"IN MY BACK YARD" programme creates culture change

Product stewardship schemes mandatory

Prolonged recession

INNOVATIVE USES FOR GLASS DEVELOPED

100% NZers have access to recycling & organic collection

VISION 2050

Sustainable Business Council
2020s

**Material Consumption Peaks**

**Reduce, Reuse, Recycle**

Landfill mining extracts value for production

Biomaterials industry comes of age

Less than 5% of waste sent to landfill is organic

Product costs include recycling & recovery

Waste exchange & recycling programs

Energy from waste schemes established & accepted

Short-term cycles dictate approach & thinking

VISION2050
2030s

Illegal dumping escalates

Waste decoupled from economic growth

UNRECYCLABLE MATERIALS BANNED

Biomaterials key input for plastics

ZERO FOOD WASTE

Councils only collect recyclable waste

LIFE CYCLE ASSESSMENTS CREATE INNOVATION & COST SAVINGS

Consumer apathy to waste recovery

VISION 2050
2040s

PRODUCT DESIGN EXTENDS LIFESPAN

Alternative treatments of hazardous & medical waste cheaper & easier than land filling

100% of materials can be recycled

CLOSED-LOOP PRODUCTION MAINSTREAM

Traditional growth & waste model remains

LANDFILLS CLOSED

VISION 2050
2050s

Positive Imagination 2050

People's Values

Measures of Success

Sustainable processes and principles are the basis for material management. New Zealand has zero waste.

Responsibility for waste is localised but supported by business and government. Ownership of the product life cycle is a core business value.

- Landfills are shrinking and are used as a source of product materials
- 100% of materials are recovered for reuse and recycling
- Life-cycle assessment and whole of life costing is applied to all consumer products
- Consumers and business understand the importance of local treatment and processing of waste
- All materials and products meet zero harm requirement
- Waste water is considered a resource and 100 million litres per year is recycled
- Production cycles reintegrate waste into the process as a matter of course
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