

OUR LAND
AND WATER

Tōtū te Whenua,
Tōiora te Wai

Enabling transformation to a bioeconomy

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What is a 'bioeconomy'?

“all sectors of the economy that derive their products from biomass” (BECOTEPS EU project 2010)

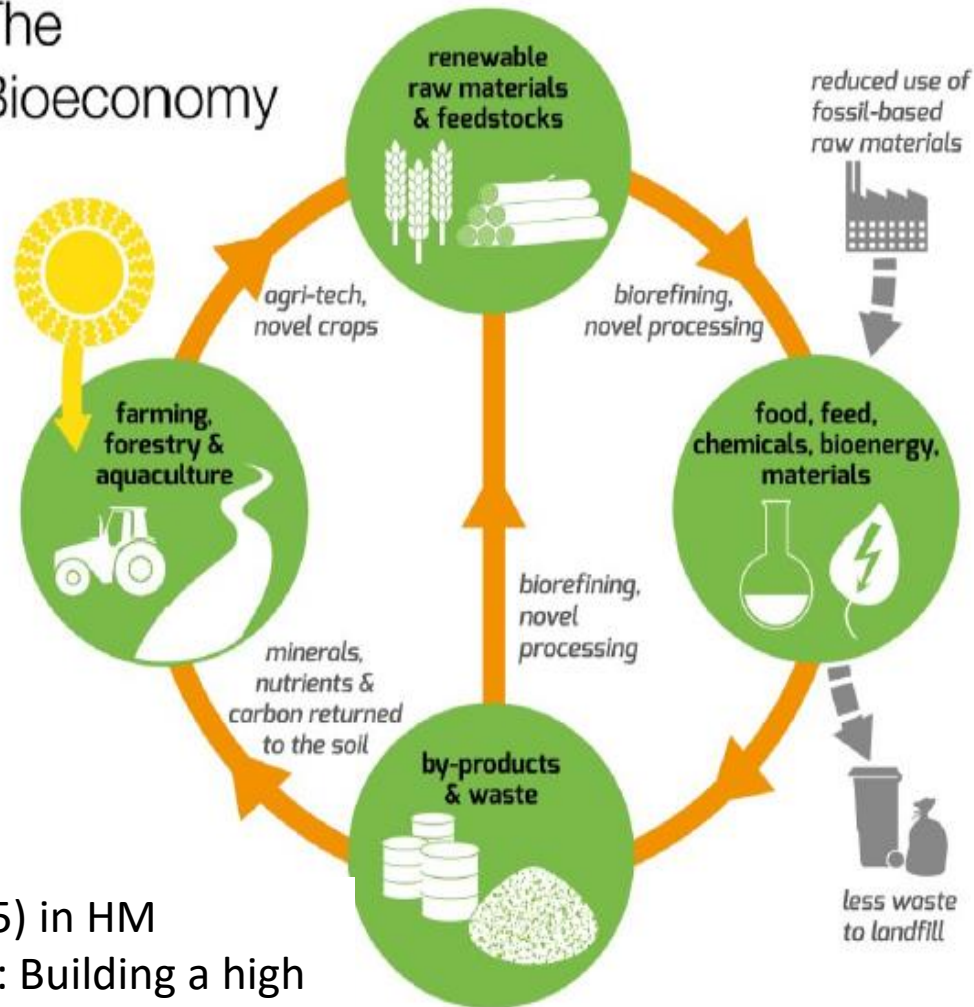
“those parts of the economy that use renewable biological resources from land and sea – such as crops, forests, fish, animals and micro-organisms – to produce food, materials, and energy” (EU Commission)

“the part of the economy using biological resources (biomass), or bioprocesses, for the production of value added products, such as food, feed, materials, fuels, chemicals, bio-based products and bioenergy” (UK Govt)

“ the bioeconomy includes renewable energy (fuels, heat and power) and biobased products” (USDA)

“the bioeconomy leverages innovations in the (life)sciences and bio-industries to achieve ecological and social sustainable growth and employment based on the wealth of biological resources” (German Bioeconomy Council)

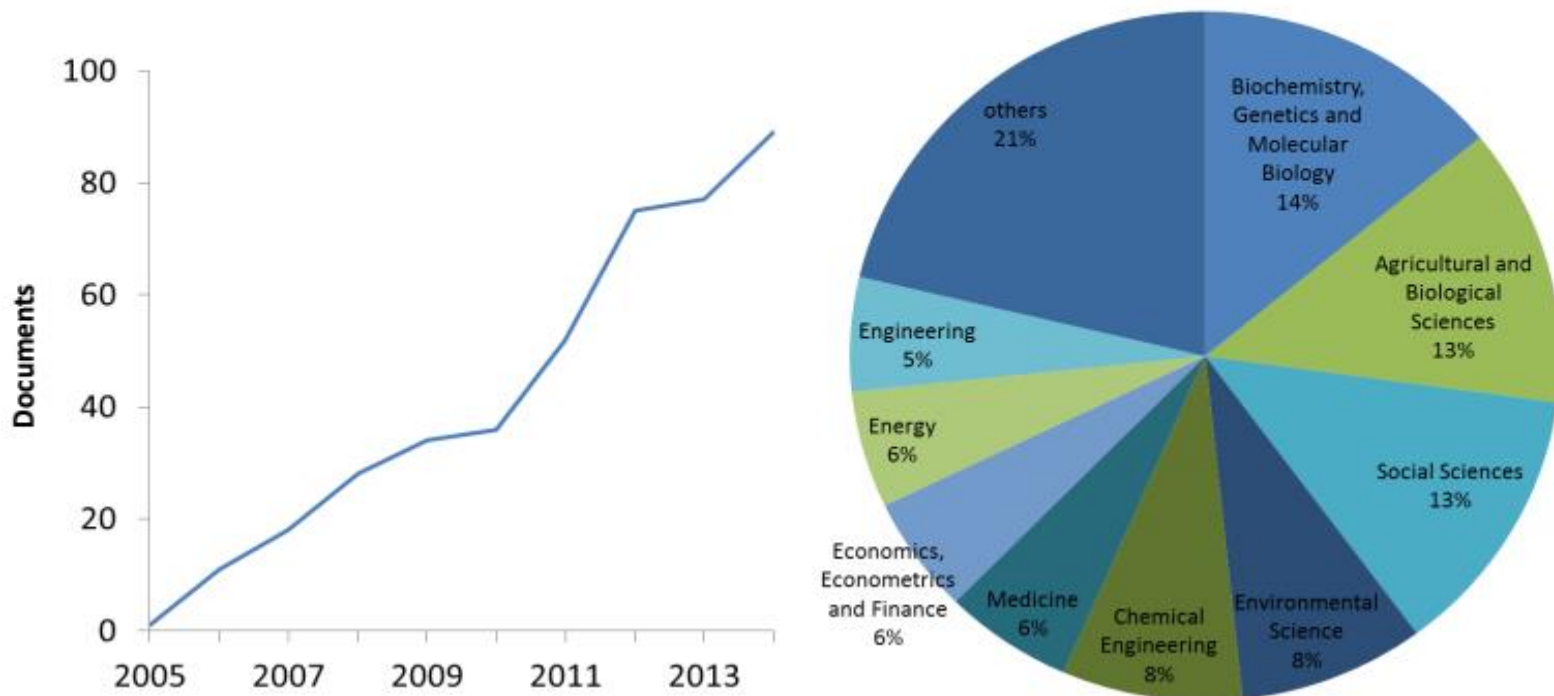
The Bioeconomy



Biovale (2015) in HM Government: Building a high value economy

Increasing use of 'bioeconomy' term (Glossl 2015)

Documents containing the term "bioeconomy" or "bio-economy" in title, keywords or abstract



Overview of political bioeconomy strategies



© German Bioeconomy Council

Potential benefits of a bioeconomy

- Shift from fossil-fuels and associated environmental effects (e.g. GHG emissions)
- Higher value products and new markets
- Improved health and nutrition
- Less waste to landfill
- Energy security
- Job creation
- Resource-efficient society

New Zealand

- Growth model has started to show its environmental limits
- Need to tackle GHG emissions, water quality, also biodiversity loss, erosion
- Greater value-added from the primary sector
- Regional rural development

“A long-term vision for the transition towards a low-carbon, greener economy is necessary” (OECD 2017)

New Zealand has potential to make an important contribution to a global bioeconomy

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- Significant natural resources
- Large volume of primary production
- History of innovation and efficient production



New Zealand bioeconomy examples?



Making wood fibre reinforced plastics



SCORPION LOLLIPOPS
From \$11.99

Tall wooden buildings



Growing up in New Zealand, Tim Brown couldn't help but notice all the amazing qualities of merino wool. In fact, it made him wonder why such an incredible, sustainable resource had never been used in footwear before.

MINIMIZES ODOR

REGULATES TEMP

WICKS MOISTURE

allbirds

Where is NZ's niche in the global bioeconomy?

- Map NZ's potential strengths in the global bioeconomy against current growth areas and emerging opportunities
- What is the potential value to NZ?
 - Financial
 - Social
 - Environmental
- Next steps: How do we get there?
- Cross-sectoral transformation



Thank you

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**Weaving the Korowai of
the Papatūānuku –
Adaptive governance and
supported environmental
decision making**

Weaving the Korowai of Papatuanuku

Papatuanuku

Mother Earth

Korowai

Cloak

Weaving inter-
agency collaboration



Adapting governance methods

