



NZ FOOD WASTE CHAMPIONS 12.3

Food Waste & Climate

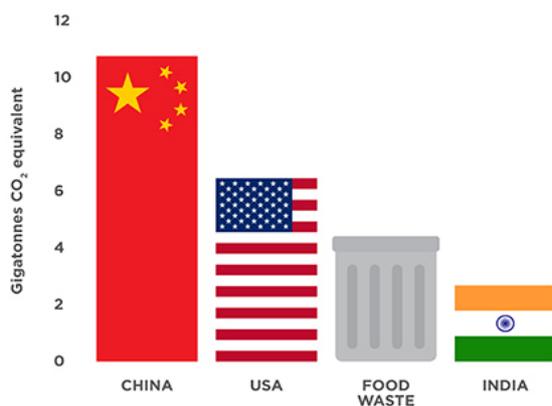
Reducing food waste represents a great opportunity for governments, companies and citizens to collectively tackle climate change.

Facts

- Food waste is responsible for 8% of global greenhouse gas emissions.¹
- If food waste were a country, it would be the third largest greenhouse gas emitter behind China and the US.²
- Reducing food waste has been ranked as the third best action we can take to tackle climate change.³

Food waste generates greenhouse gases (GHG), including methane when it ends up in landfill. **Producing uneaten food also wastes energy and resources – seeds, water, energy, land and fertiliser.** This has impacts on biodiversity loss, with around 30% of the world's agricultural area vainly occupied by uneaten food. The water impact of food waste is equivalent to 4.5 times the volume of Lake Taupo.⁴ The later food is wasted along the chain, the greater its environmental impact.

There are also negative impacts on soil fertility, which is an issue for New Zealand with **our major food export sector.**⁵ Other issues include incorrect food disposal contaminating recyclables, soil depletion and atmospheric pollution.⁶ In New Zealand, there are approximately 2.66 tonnes of CO₂-equivalent GHGs generated over the lifecycle of food for every tonne of food waste produced.⁷



¹ FAO, [Food Wastage Footprint & Climate Change](#).

² FAO, [Food Wastage Footprint](#), 2013.

³ Project Drawdown, '[Table of Solutions](#)', 2020.

⁴ FAO, [Food Wastage Footprint](#), 2013; BBC Kelly Oakes, "[How cutting your food waste can help the climate](#)", February 2020. They give a statistic for Lake Geneva (89km³), which is larger than Lake Taupo (59km³).

⁵ Environment Select Committee Report, [Briefing to Investigate Food Waste](#), p 6.

⁶ *The Mirosa Report*, Environment Select Committee, [Briefing to Investigate Food Waste](#), p 39.

⁷ WasteMINZ, Environment Select Committee, [Briefing to Investigate Food Waste](#), p 38.



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Food Waste & Food Insecurity

Food waste is difficult to justify, especially when people face food insecurity.

Facts

- Globally we produce enough food in the world to feed everyone but we throw one third of it away.⁸
- Around 1 in 9 people globally are undernourished⁹
- Around 1 in 5 children in New Zealand face food insecurity in New Zealand¹⁰ – with Māori and Pasifika hardest hit.¹¹



Food waste is difficult to justify, **especially when people face food insecurity**. Food rescue charities such as KiwiHarvest and Kaibosh, represented currently on our New Zealand Food Waste Champions 12.3 coalition, are working hard to stop good food going to waste and getting it to people in need. This helps in many ways:

- Providing nutritious food for people in need;
- Saving charities time and money to let them focus on other social needs;
- Protecting the planet by ensuring food does not go to landfill; and
- Reducing business costs for excess food disposal and helping business with corporate social responsibility objectives.

Food insecurity is a major issue in New Zealand. **The Government recently invested \$32 million to** invest in collaborative efforts to achieve food secure communities through NZ Food Network, Kore Hiakai and Aotearoa Food Rescue Alliance.¹²

⁸ As measured by weight. Food and Agriculture Organisation of the United Nations (FAO), 'Global Food Losses and Food Waste – Extent, Causes and Prevention', <http://www.fao.org/3/mb060e/mb060e.pdf>, 2011.

⁹ United Nations and FAO, 'The State of Food Insecurity in the World', <http://www.fao.org/publications/sofi/2014/en/>, 2014.

¹⁰ NZ Health Survey, 'Household food insecurity among children', for 2015/16, June 2019.

¹¹ Kore Hiakai, *The impacts of COVID-19*.

¹² Ministry of Social Development, *Food Secure Communities*, May 2020.



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Food Waste & Economy

Tackling food waste can save people money and create company-wide business benefits, especially when a data-driven approach is taken.

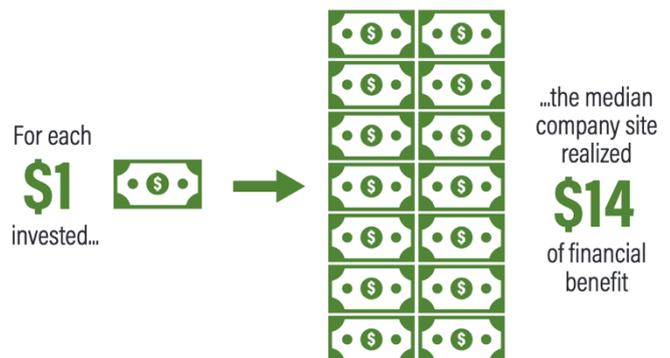
Facts

- Wasted food amounts to economic losses of US \$940 billion per year;¹³
- For companies, the return on investment in food loss and waste reduction is likely to be positive, with a median return for food businesses of 14:1;¹⁴
- In New Zealand, the average family throws out three shopping trolleys of food each year – equating to \$644.¹⁵

Reducing food waste can save money for farmers, companies, and households. The costs in addressing food waste for a business may include: purchasing equipment to quantify food loss and waste; training staff; or hiring new staff and technologies. These costs are likely to be outweighed by the benefits, which include: avoiding the costs of buying food; increasing the share of food that gets sold to customers; and reducing waste management costs e.g. landfill levies.

Many businesses are not aware of the extent to which financial benefits flow from addressing food waste. An international study found a 14:1 return on investment over 1,200 business sites assessed around the world once they introduced means to address food loss and waste. The greatest savings were found in restaurants, and further businesses cases for reducing food loss and waste in the catering, hotels and restaurants sectors have been made.¹⁶

For countries and individuals – there are further savings to be had. There are also a number of **broader nonfinancial motivators** for reducing food loss and waste. These include: food security, waste regulations, environmental sustainability, stakeholder relationships and a sense of ethical responsibility.



¹³ FAO, 'Food Wastage Footprint and Climate Change', <http://www.fao.org/documents/card/en/c/7338e109-45e8-42da-92f3-ceb8d92002b0/>, 2015.

¹⁴ Champions 12.3, [The business case for reducing food loss and waste](#), March 2017.

¹⁵ Love Food Hate Waste, [Don't let food go to waste](#).

¹⁶ Champions 12.3, [The Business Case for Reducing Food Loss and Waste](#).



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Food Waste & Global Action

“Increasingly, the externalities of the food system can no longer be ignored and need to be accounted for nationally and internationally” – Miranda Miroso¹⁷

- In the **United Kingdom**, WRAP’s Courtauld Commitment contributed to a 27% reduction in food waste between 2007 and 2018.¹⁸
- **Globally**, countries representing half of the world’s population have formally adopted the Sustainable Development Goal Target 12.3 (SDG 12.3).
- Two thirds of the world’s 50 largest food businesses have adopted SDG 12.3

Global ambition

In September 2015, the **United Nations General Assembly adopted a set of 17 Sustainable Development Goals** (SDGs) for 2030. SDG 12 seeks to “ensure sustainable consumption and production patterns”. The third target under this goal (Target 12.3) calls for halving per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains (including postharvest losses) by 2030. Over 20 countries (including Australia, the United States and Japan), and businesses have set targets in line with SDG 12.3.

Other global coalitions aligned with SDG 12.3, include: [Global Champions of 12.3](#), [Sustainable Rice Platform \(SRP\)](#), [World Resources Institute – 10x20x30](#), and [Consumer Goods Forum’s Food Waste Resolution](#). This [website](#) shares 21 other inspiring world-leading initiatives.¹⁹

Three country initiatives

Fight Food Waste Cooperative Research Centre (CRC) Australia

This brings together industry, research and the community to capitalise on Australia’s food waste opportunities. Winning this fight will apparently save Australia \$20B per annum. The centre has support from the government.



Food Waste Charter Ireland

The EPA is leading a programme to support businesses in the food supply chain to reduce food waste. Businesses commit to at least one action – concrete and achievable and the first signatories were retailers.



Prohibiting supermarkets to throw away food France

France recently earned the top ranking in the 2017 [Food Sustainability Index](#). They have other policies to teach students about food sustainability, companies to report food waste statistics in environmental reports and restaurants to make take-out bags available.



¹⁷ *The Miroso Report*, Environment Select Committee, [Briefing to Investigate Food Waste](#), p 38.

¹⁸ WRAP, [Food surplus and waste in the UK – key facts](#) [web blog], January 2020.

¹⁹ Foodtank, [21 Inspiring Initiatives Working to Reduce Food Waste Around the World](#), January 2015.



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Food Waste – & Opportunity

Reducing food waste is an accessible and tangible climate change action for everyone.

Government, business, NGOs, research institutions and individuals all can play a role in tackling food waste in Aotearoa, New Zealand.²⁰ One priority is for government and business to **adopt the United Nations Sustainable Development Goal Target 12.3** to commit to halving food waste by 2030. A few other ideas are below:

Government

1. Adopt a national definition of food waste;
2. Measure and invest in a **national baseline data** collection project;
3. Include food waste as part of the national waste strategy; and
4. Invest in local composting infrastructure, especially local government.

Business

5. Start measuring (and reporting) food loss and waste – following other companies like Tesco, Kellogg Company and Nestlé;
6. Consider the robust business case for food waste reduction; and
7. **Engage with a voluntary commitment** to reduce food waste, following the United Kingdom and 20+ other countries.

NGOs

8. Continue and scale up the good work on food rescue, engaging in new initiatives e.g. NZ Food Network and Aotearoa Food Rescue Alliance.

Individual

9. Follow the [Love Food Hate Waste Campaign](#),²¹ and
10. Teach your children (and yourself) how to compost at home.

²⁰ *The Mirosa Report*, Environment Select Committee, [Briefing to Investigate Food Waste](#), p 38.

²¹ WasteMINZ, [Love Food Hate Waste](#).

