

6



Action 6

Cut food waste

*This Action is one of eight in the report, “**Together We Can: 8 Habit changes for below 2°C**”, where all references and the disclaimer can be found. We recommend you read the full report to see how you can make a bigger impact.*

SAY NO TO CARS

FLY LESS

WATCH ELECTRICITY BILLS

CHANGE ONLINE HABITS

RETHINK DIETS

CUT FOOD WASTE

TWEAK ONLINE SHOPPING

SLOW DOWN FAST FASHION

Action 6: Cut food waste

Why we chose this...

- About a quarter of all food produced for human consumption is wasted worldwide, a third of which is lost when we don't finish our food.¹⁶¹ This is bad as food production accounts for a large share of GHG emissions (see 'Action 5' above). Individuals can help cut food waste.
- Savings can be huge. As the chart below shows, if food waste were a country, it would be the third largest GHG emitter behind the US and China.

 **CWR** THE CLIMATE IMPACT OF OUR FOOD WASTE



Source: CWR, UNFAO Report "Food wastage footprint & Climate Change" (2015), World Resources Institute report "Creating a Sustainable Future" (2018), IEA
 *Food wasted data also includes loss (there is no breakdown so this is the best available data)
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- What's more, global food waste is set to rise by a third by 2030, highlighting the need to transition food systems and how we consume food to circular models to help tackle waste.¹⁶²
- Cutting food waste can also help save money (see box below).

Cutting food waste = saving money

When we throw edible food into the bin, we are also wasting our money. For instance, the average UK household (with children) spends about GBP60 (USD78) a month on food that is thrown away – that's more than GBP700 (USD913) a year.

Elsewhere in Canada, according to a 2019 study on London, Ontario, wasting food has become a way of life for many who are tossing an average of CAD600 (USD447) into the trash every year. Extrapolated to all of households in London, Ontario, that could translate to a savings of more than CAD75mn (USD56mn).

The study also asked households what motivated them most to change this wastage - the environmental effect, the social impact or the cash they saved - and respondents said the money motivation consistently fed their enthusiasm. Now you know the cost, can you try and reduce your food waste?

Source: BBC article "How to cut food waste and save cash", van der Werf (2019) "Reduce Food Waste, Save Money: Testing a Novel Intervention to Reduce Household Food Waste" *Environment & Behaviour*

New habits to get rid of food waste ...

1. Cut food waste by 10% for a year

The World Resources Institute recommends a 10% reduction in food waste as a realistic 'coordinated effort' to cut emissions. This could save 86 kg of carbon dioxide equivalent (kgCO₂e) in North America and Oceania, 81 kgCO₂e in industrialised Asia and 68 kgCO₂e in Europe every year.

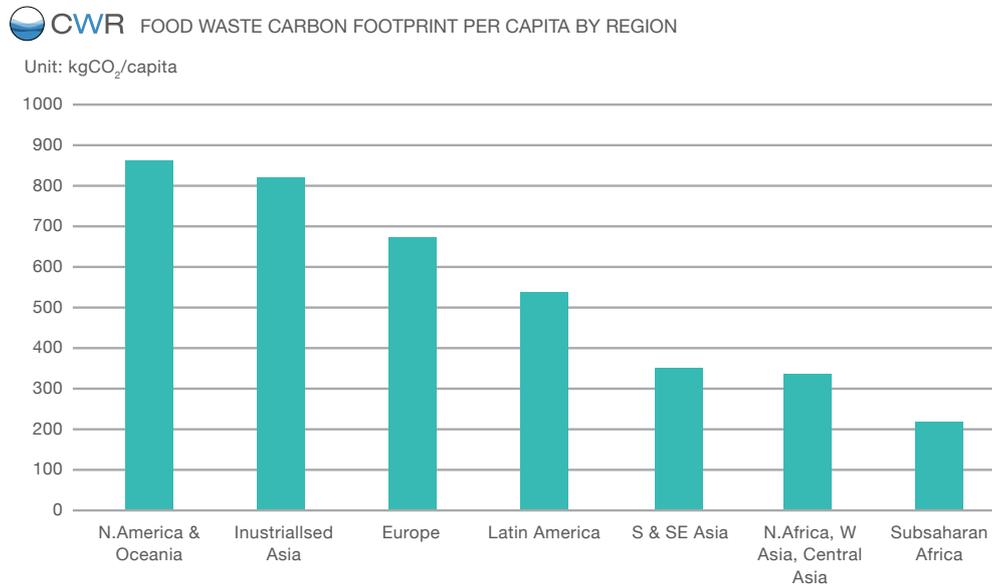
Don't know how to get there? We have set out 5 practical tips below:

- i. **Lick your plate clean** – This is straightforward. The simplest way to not waste food is to finish all the food on our plates. However, if you really have to throw food away try to make sure it's not foods like beef, lamb or chocolate. This is because these types of food are the most carbon intensive to produce. To find out just how much carbon is needed to make them check out 'Action 5 on Rethink diets'.
- ii. **Why not save it for another time?** – We have all been there. Too much food cooked or ordered but everybody is stuffed. Why not store the leftovers or take it away in a box for later? This is becoming a more common practice but remember to actually finish the food and not just leave it in the fridge. And when you are out, make sure to bring your own takeaway box as many restaurants still give out single-use plastic or even polystyrene food containers and cutlery to consumers to pack leftovers – see box in following pages on the negative impacts of single-use plastics.
- iii. **Shop in your fridge first** – Before you go on your next grocery trip, how about a quick 'shop' of your fridge first?¹⁶³ After all, it makes sense to cook or eat what you already have at home before buying more. For example, why not slice leftover roast meat into thin strips and throw it into a stir-fry? There are many such recipes out there waiting to be googled but remember to be mindful about endless browsing, as we show in Action 4, our online habits matter for the climate.
- iv. **Don't throw it away yet: 'Best before' does not mean 'use by'** – Food past its 'best before' date is often still acceptable to eat although it may have lost some of its quality, whereas food past its 'use by' date is unsafe to eat. A study by Johns Hopkins Bloomberg School of Public Health in 2019 found that 84% of those surveyed discarded food on or near the date 'at least occasionally' regardless of the words around the date while 37% 'always' or 'usually' did so.¹⁶⁴
- iv. **Buy only what you need** – Supermarkets and grocery stores often have ploys like discounts or limited offers to entice consumers to buy more products including food. But how much ends up being thrown away? If you get 10 items for \$10 and only eat five before they spoil, that's \$5 wasted. This also applies to ordering food at restaurants – if you are not particularly hungry, why not order a smaller portion? It might even be cheaper.

The above tips are by no means exhaustive and there are other ways to tackle food waste which go beyond average daily consumption routines – from composting to embracing ugly foods – more on this later in '3 ways you can cut food waste'.

Together we can... cut up to 77 Mt of GHG emissions...

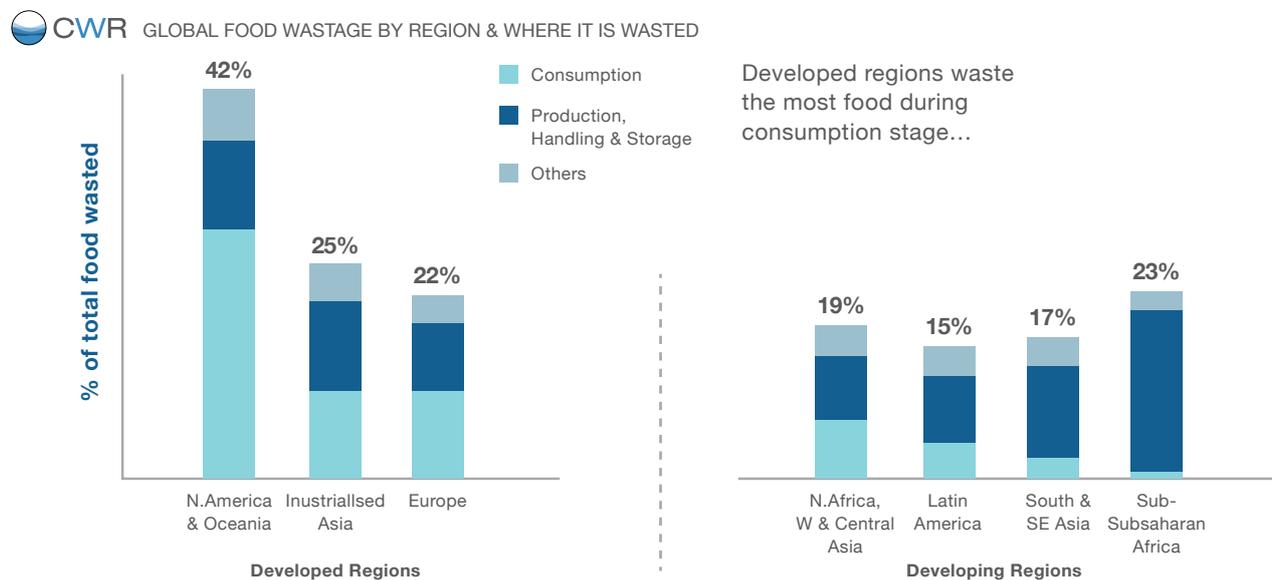
According to the Food and Agricultural Organization of the United Nations (FAO), North America and Oceania have the highest carbon footprint from food waste of 860 kgCO₂e per person every year. Industrialised Asian countries – including Japan, South Korea, Hong Kong and Singapore – come a close second at 810 kgCO₂ followed by Europeans at 680 kgCO₂e (see chart below).



Clearly, people from North America and Oceania along with industrialised Asia and Europe can do more to cut food waste. Yet, aiming for zero food waste is problematic as some parts of food chains – like production, handling and storage – are outside the control of consumers (see charts below).

Indeed, most food losses in South Asia, Southeast Asia and sub-Saharan Africa are in production, handling and storage. On the other hand, North American and Oceania along with industrialised Asia and Europe waste a significant share of food at the consumption stage.

North America and Oceania are by far the most careless, wasting 42% of all food. Industrialised Asia is a distant second at 25% followed closely by Europe at 22%. Compared with the developing world, the three developed countries can clearly do more to cut food waste at the consumer level.

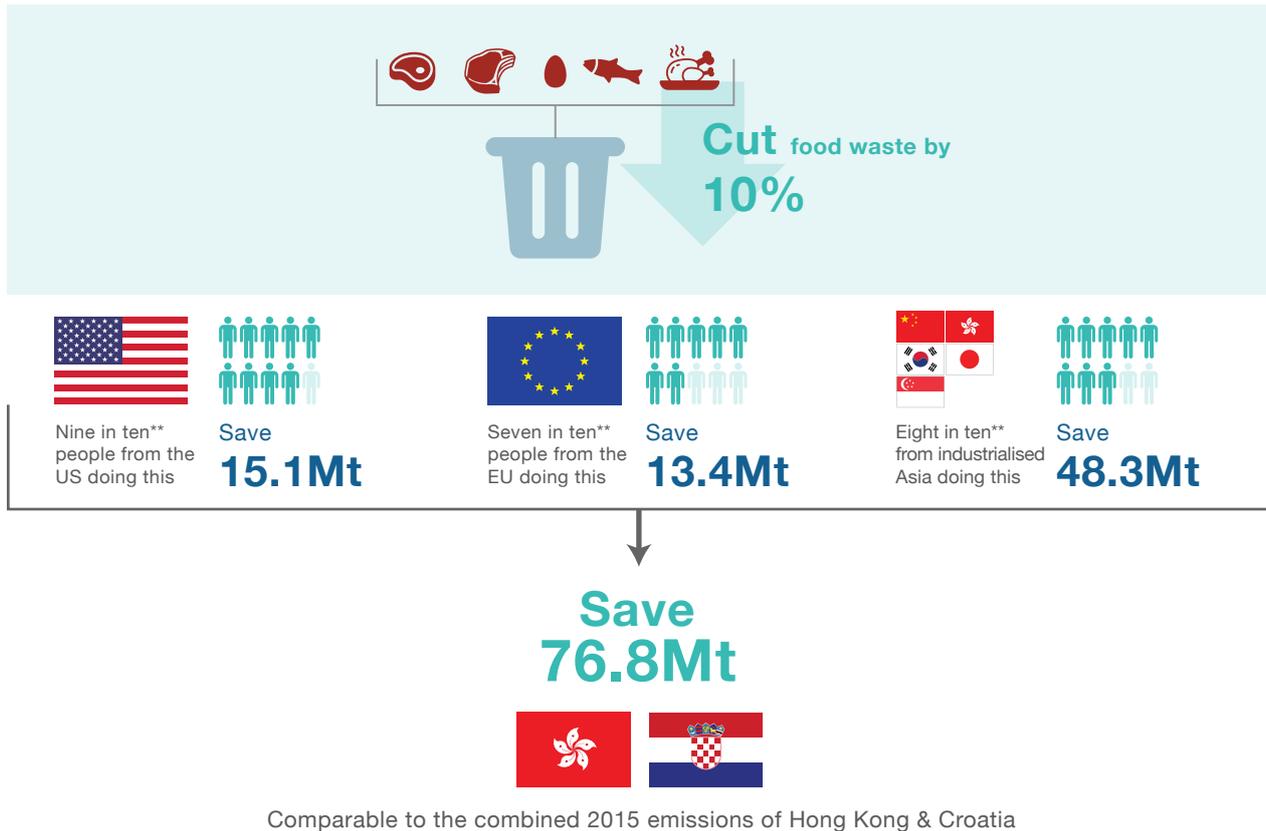


Source: CWR, UNFCCC, WRI report "Creating a Sustainable Food Future" (2018)
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1. Cut food waste by 10% for a year

Based on several region-specific surveys on the willingness to reduce household food waste, we estimated nine in ten Americans could save 15 MtCO₂e and that seven in ten Europeans people could save more than 13 MtCO₂e. We also estimated that about eight in ten people from China, Hong Kong, South Korea, Japan and Singapore could save a further 48 MtCO₂e.^{165, 166, 167} Together, consumers in the US, the EU and industrialised Asia could save almost 77 MtCO₂e if they cut food waste by 10% for a year, equivalent to the combined GHG emissions of Hong Kong and Croatia in 2015.¹⁵

 CONSUMERS FROM US, EUROPE & INDUSTRIALISED ASIA CAN SAVE GHG EMISSIONS FROM HONG KONG & CROATIA BY CUTTING FOOD WASTE BY 10%



Source: CWR, FAO "Climate Change & Food wastage report". Worldometer population statistics, EDGAR emissions database, WRI report "Creating a Sustainable Food Future" (2018), Michigan State University (MSU) Food Literacy and Engagement Poll, Grundig Food Waste Survey (2017), Singapore NEA 2019 Consumer Survey on Food Wastage

* Suggested by the World Resources Institute as a realistic "coordinated effort" to cut

** 88% of surveyed in the US took action to reduce food waste in their homes; 74% of surveyed in 6 European countries trying to reduce food waste; 80% of Singaporeans bothered when throwing away uneaten food (used for Industrialized Asia as this is the best data available)

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Ramping up to almost 2 billion tonnes if everyone cuts food waste by 25%

With sharper cuts in food loss and waste of 25% instead of 10% by 2050, savings would be in the order of 1.6 GtCO₂e, equivalent to the combined GHG emissions of Canada and Germany in 2015.^{14,15}

 **CWR** REDUCING FOOD WASTE GLOBALLY CAN CUT THE COMBINED GHG EMISSIONS OF CANADA & GERMANY



Source: CWR, EDGAR emissions database, WRI report "Creating a Sustainable Food Future" (2018)
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COVID times and the rise of takeaways

COVID-19 stalled or even put into reverse a big global push away from single-use plastics (see box below). Starbucks, for example, stopped letting customers use reusable mugs. And as food takeaways and deliveries soared during the pandemic, so did plastic and other packaging waste. In Singapore, a typical household generated an additional 1,334 tonnes of plastic waste during the country's strictest lockdown period – equivalent in weight to 92 double-decker buses. The pandemic highlighted the need to find new and less wasteful ways to package items.

Source: CNBC article, "Plastic waste surges as coronavirus prompts restaurants to use more disposable packaging" (Jun 28 2020), Today article, "Singapore households generated additional 1,334 tonnes of plastic waste during circuit breaker: Study" (June 5 2020)

Avoid single-use plastic food containers

Takeaway culture plus the popularity of Deliveroo & UberEats has meant that an estimated 2 billion takeaway containers per year are used in the EU alone – if half of these were recycled, we could help reduce as much GHG emissions as 55,000 light-duty vehicles annually. So next time, try to recycle or re-use the containers or bring your own takeaway box to help reduce single-use plastic waste on top of cutting down on food waste!

 **CWR** DON'T FORGET THE PLASTIC BEHIND TACKLING FOOD WASTE



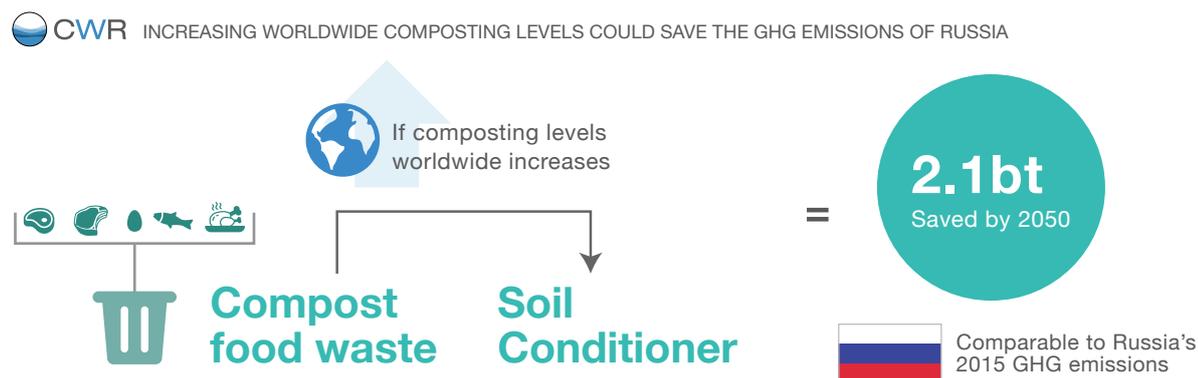
Source: CWR, Science Daily "Takeaway containers -- the environmental cost of packing our favorite fast-foods" (2018)
NOTE: cars in this case also include light-duty vehicles
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3 ways you can do more...

1. Turn food waste into fertiliser by composting

Composting is a recycling process that decomposes organic food waste into a soil conditioner (the compost). Processes range from industrial-scale windrow composting to mounds of green waste decomposing in household gardens.

Project Drawdown, a research group that identifies potential solutions to climate change, estimates that increasing composting worldwide could reduce GHG emissions by 2.1 billion tonnes by 2050.¹⁶⁸ That's comparable to emissions from the whole of Russia in 2015.¹⁵



Source: CWR, BBC "How cutting your food waste can help the climate" (2020), EDGAR emissions database
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2. Buy ugly foods

Up to 20% of most fruit and vegetables are too large, too small or otherwise too 'cosmetically compromised' to meet retail standards, according to one study, which said some growers were reporting losses of 30%.¹⁶⁹ A separate study in North Carolina found 42% of crops were left unharvested, mainly to meet appearance quality standards set by buyers.¹⁷⁰

Refusing to reject produce based on how it looks goes beyond cutting food waste at the consumption stage by helping distributors reduce waste in supply chains as well. Denmark already has stores for 'ugly' produce. France has meanwhile emerged as the first country to ban supermarkets from throwing such foods away.¹⁷¹ If ugly foods are not available, social media campaigns may have the potential to cut waste at the supply chain level.

3. Take advantage of food waste apps for bargains

As food waste becomes more of a problem, the tech world is offering some solutions. An app called Too Good to Go connects restaurants and supermarkets with consumers, allowing the former to sell leftover food at lower prices instead of throwing it away.¹⁷² Another app known as Karma takes a similar approach. These two apps serve more than 2.7 million consumers.¹⁷³