



Food & Food Waste Guidance

December 2023

Contents

Introduction	3
Food and food waste in NZCE	3
A word from the chair	4
Meet the food & food waste task force	5
Task force's mission & vision	6
What to expect from this guide	7
Why now?	8
The complexity and challenges of food systems	9
A pragmatic approach towards transformation	10
Sustainable sourcing and purchasing	11
Consume seasonal and local food	12
Opt for more plant-based food	13

Choose organic and fairtrade options Pick sustainable food packaging Responsible procurement

Sustainable food strategies & waste management

management	
Food waste strategy	19
Preparation and menu/buffet design	20
Food donation	2
Food diversion	22
Communication	23
Food and food waste through the event lifecycle	24

Checklist for venues, organisers, and agencies What organisers and agencies can do	25 26
What venues can do	28
Appendix A: Additional resources	29
General training and education	30
Certifications & industry initiatives	32
Potential partners	33
Appendix B: Glossary	34
Food waste & recycling terminology	35
Defining material types & boundary dimensions	36
Defining destinations	37

Introduction

After the NZCE Pledge and the NZCE Roadmap were created and published in Phase 1 and 2 respectively, Phase 3 has been focused on the creation of practical guidance documents for the decarbonisation of the meetings and events industry.

Five workstreams were created to discuss and ultimately provide guidance on the decarbonisation of the specific action areas defined in the NZCE Roadmap:



energy

Venue

Food and food waste





Logistics

Smart production and waste management

Travel and accommodation In addition, three transversal workstreams were created to support the initiative and provide guidance on the issues that touch on all action areas:



This document provides the first version of the guidance document for the Action Area "Food and Food Waste". To read the documents that the other workstreams have produced, please visit the NZCE initiative's resources page.

A word from the chair

We pridefully present the first version of the food and food waste document as part of the Net Zero Carbon Events Pledge.

It has been an exciting and valuable learning experience for all group members, primarily since we have worked from different parts of the world in the past year.

Combining all our experiences and using other organisations to check the developments on the subject, we have created a basic setup that everyone within the events industry can use. There are many ways to look at food and food waste concerning net zero, and through this document, we hope to help you with the basics. If we join forces, we can truly make an impact - and this field has considerable opportunities: for venues, organisers, as well as service providers. Everyone has responsibilities and can contribute to getting to the net zero as soon as possible. This document outlines these responsibilities and opportunities while using the entire food lifecycle.

We hope it will be of great use to everyone reading it.

On behalf of the working group,

Marloes van den Berg Chair working group

Meet the food & food waste task force



Marloes Van Den Berg Jaarbeurs Chair Working Group

After 15+ years of experience in the events industry, Marloes took on the role of leading Jaarbeurs toward its sustainability goals. Under her leadership, the company won the UFI Sustainability Award in 2022.



Erica Fawer mci group

Erica has been championing sustainability at mci group for more than 15 years and is a certified Sustainable Event Professional.



Julia Widmann Javits Center

As Sustainability Operations Manager at the Javits Center, Julia focuses on managing sustainable food and beverage operations and zero-waste initiatives across the sixblock campus.



Mélanie Delaplanche Sustainability Addict

Sustainability expert and founder of Sustainability Addict, Mélanie has been supporting organisations in the events and tourism industries build their sustainability strategies and action plans for 8 years.



Elizabeth Fretheim Freeman

Vice President of Sustainability at the Freeman Company, Elizabeth is responsible for overseeing the strategy to integrate sustainability into the business and achieve net zero carbon emissions by 2050.



Karen Young Freeman

Karen joined Freeman as Senior Sustainability Manager after a decade of sustainable event production, formally with Informa Markets.

Task force's mission & vision

Our mission

Our vision

We aim to provide practical resources for venues, caterers and organisers to create awareness and facilitate the adoption of sustainability practices to decarbonise and reduce food waste along the entire lifecycle.

We believe that innovation and novel solutions (smart agriculture, circular economy, etc.), a change in diet and consumer expectations, as well as regulations, will transform the food system landscape in the coming years, thus helping our industry reduce the carbon footprint of events. As we go along, more resources and guidance will be added to this document when available.

What to expect from this guide

The Net Zero Carbon Events initiative gathers the necessary resources to educate, encourage, and empower events industry professionals in our global mission to build more sustainable practices across venues, organisers, suppliers, and other industry stakeholders.

This document focuses on Food and Food Waste, providing the necessary knowledge and tools to reduce the global events industry's carbon footprint. This guide covers some of the most recommended initiatives to reduce the carbon footprint of food and food waste, such as:

- · Switching to plant-based menus and reusable tableware
- Getting the data right
- Communicating, educating, and actively engaging your clients, audience and suppliers by asking the right questions
- Collaborating with the other event stakeholders involved with catering and waste
- · Focusing on your supply chain and procurement

Why now?

The global impact of food production

The global food system covers all food production and consumption activities from "farm to fork." With the world's population set to increase to about ten billion by 2050, a shift in food production and consumption toward a more sustainable system is crucial.



of global GHG emissions result from food production



of total global emissions stem from food wastage along the whole supply chain, from harvesting to consumer waste.



of the total carbon emissions of an event can be attributed to Food & Beverage, without accounting for waste.

Sources:

Our World in Data (2020) Food waste is responsible for 6% of global greenhouse gas emissions

Isla (2023) Temperature Check 2022-2023

The complexity and challenges of food systems

From soil pollution to biodiversity loss to health and food security, the food and food waste management systems hold many ecological and social challenges worldwide involving numerous stakeholders:



To add further complexity to the subject, evolving technology and the changing biophysical environment (climate change, for example) also affect those food systems.

Understanding the complex food systems and how sustainability fits our industry and its stakeholders can be challenging, especially taking into account diverse perspectives.

Based on national and local contexts, we know that not all suggestions in this document will apply to everyone but can be used as a starting point for all.

A pragmatic approach towards transformation

This initiative isn't about grand gestures; it's about pragmatic change. We're committed to eliminating food waste, promoting eco-conscious sourcing, and championing ethical culinary practices. Our goal is simple: pioneer a future where events have a positive, lasting environmental impact. The 5Rs approach is at the core of our system.



Sustainable sourcing and purchasing



Consume seasonal and local food

Sourcing food that is in season and locally harvested reduces food miles and CO2e emissions.

Fruits and vegetables with the lowest greenhouse gas (GHG) emissions are those grown outdoors during their natural season, requiring minimal additional energy. When consumed in the same country or region, these options offer environmental benefits as they use less energy for artificial heating, lighting, refrigeration, and storage. This approach also decreases losses during storage, leading to fewer GHG emissions. In contrast, fruits and vegetables grown under protection or imported often involve environmentally unfriendly transportation methods.

Additionally, choosing in-season produce guarantees it is fully mature and packed with flavour and nutrients, making it a healthier and tastier option. Supporting local producers also strengthens the community and deepens our understanding of local food culture.



CO² emissions of outdoor and heated greenhouse cultivation (in kg per kg of produce)

Produce	Outdoor cultivation	Heated greenhouse cultivation
leek	0,19	5,4
lettuce	0,14	4,5
cucumber	0,17	2,3
paprika	0,21	1,1
tomatoes	0,11	0,9



- Find out about local producers and their products, and create your local network (through direct collaboration or through regional food cooperatives)
- 2. Where possible, substitute imported goods with local products
- 3. Use a seasonal calendar and develop seasonal menus
- 4. Replace frozen food with fresh, seasonal alternatives
- 5. Understand the carbon footprint of the products you source
- Lead by example. Champion sustainable ingredients and producers through your menus and F&B offer.



Futouris Sustainable Food Toolkit

More info on fruit and vegetable seasonality:

Seasonal Food Guide (USA)

Explore Seasonal Fruit and Vegetables in Europe

<u>Seasonal Food Guide</u> (Australia)

Opt for more plant-based food

Animal-based foods, especially red meat, dairy, and farmed shrimp, are generally associated with the highest greenhouse gas emissions. This is because:

- Meat production often requires extensive grasslands, which is created by cutting down trees, releasing carbon dioxide stored in forests.
- Cows and sheep emit methane as they digest grass and other food.
- The cattle's waste on pastures and chemical fertilisers used on crops for cattle feed emit nitrous oxide, another powerful greenhouse gas.
- Shrimp farms often occupy coastal lands formerly covered in mangrove forests which absorb huge amounts of carbon. The large carbon footprint of shrimp or prawns is mainly due to the stored carbon that is released into the atmosphere when mangroves are cut down to create shrimp farms.

Plant-based foods - such as fruits and

vegetables, whole grains, beans, peas, nuts, and lentils – generally use less energy, land, and water, and have lower greenhouse gas intensities than animal-based foods.



Marine species are endangered

30% of fish populations in the world's ocean are overfished and 57% are facing extinction. 40% of the catch, including sharks, sea birds, turtles, dolphins, and whales, end up as socalled by-catch in the nets. Aquaculture supports overfishing as well, since the feed often consists of fish meal or fish oil, extracted from wild fisheries. Furthermore, through open aquaculture, drugs, chemicals, and excrement end up in the environment.

The foods with the highest carbon footprint

Worldwide there are approximately 13.7 billion metric tons of carbon dioxide equivalents (CO2e) emitted through the food supply chain per year.

Across a database extending through 119 countries and 38,000 commercial farms, the study found that beef and other animal products have an outsize effect on emissions.

For example, one kilogram (kg) of beef results in 60 kg of GHG emissions – nearly 2.5x the closest food type, lamb and mutton. In contrast, the same weight of apples produce less than one kilogram of GHG emissions.

Food type	GHG emissions per 1kg produced
Beef (beef herd)	60 kgCO2e
Lamb & mutton	24 kgCO2e
Cheese	21 kgCO2e
Beef (dairy herd)	21 kgCO2e
Chocolate	19 kgCO2e
Coffee	17 kgCO2e
Prawns (farmed)	12 kgCO2e
Palm oil	8 kgCO2e
Pig meat	7 kgCO2e
Poultry meat	6 kgCO2e

Visual Capitalist (2020) The Carbon Footprint of the Food Supply Chain (based on Poore and Nemecek (2018) Reducing food's environmental impacts through producers and consumers)



Aboveground changes in biomass from deforestation, and below ground changes in soil carbon Data source: Poore and Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Science images sourced from the Noun Project OurWorldInData.org – Research and data to make progress against the world's largest problems.

Visual Capitalist (2020) The Carbon Footprint of the Food Supply Chain (based on Poore and Nemecek (2018) Reducing food's environmental impacts through producers and consumers)

Choose organic and fairtrade options

Organic labels refer to the way farmers grow and process agricultural products. Practices vary worldwide; however, organic foods are generally grown without synthetic pesticides, genetically modified organisms (GMO), fertilisers, or routine use of antibiotics or growth hormones.

The organic food production system strives for minimal disruption of the natural equilibrium while ensuring the production of high-quality food.

Organic farming often includes regenerative agriculture technique, which not only reduces greenhouse gas emissions but also lowers the risk of pollution in soils and waterways and enhances biodiversity.





1. Find out about local organic producers and their products.

- Focus on changing to organic ingredients and food where it will have the highest positive impact (primarily eliminating the ones with most pesticides).
- 3. Where possible give preference to fair trade products, which take into account social sustainability (especially on coffee, sugar, etc.)
- 4. Look for seafood products that carry either the MSC or ASC eco-labels.
- Look at options to create your own organic fruits and vegetables garden on site or start small with an herb garden.

Futouris Sustainable Food Toolkit

Dirty Dozen - EWG's 2023 Shopper's Guide to Pesticides in Produce

Fairtrade International

Demeter Products

WWF Seafood Guides per Country

Pick sustainable food packaging

Packaging plays an important part in food protection and preservation. However, it is also a source of material waste as it requires disposal after use, often after a single use, and in some cases can also contain food waste residues.

In addition to packaging, single use tableware and cutlery also create significant amounts of waste.



According to the organization Upsteam, approximately 530 billion disposable cups are used globally each year. Stacked end to end, these cups would span the distance to the moon and back 85 times.



- Talk to your suppliers and where possible encourage greater use of returnable/ reusable/recyclable packaging,
- Use reusable and durable crockery, cutlery, and food containers where service is in-house and suitable dishwashers are available.
- Avoid single-use items and give preference to bulk sauces, jams, etc. decanted into ramekins where resources allow. Buying in bulk is also more cost-effective.
- Encourage your staff to provide feedback when food seems to be over-packaged or packaging is bigger than necessary.



Futouris Sustainable Food Toolkit

Reduce vs. Single-Use: Environment

Responsible procurement

The GHG emissions linked to value chain emissions (scope 3) are, in most cases, responsible for more than 70% of the total carbon emissions of an organisation.

Accordingly, reducing the GHG emissions from the value chain is critical and has the potential to make a significant difference in overall emissions. For event stakeholders, food and food waste emissions generally fall outside of an organisation's direct control and into their scope 3.

Therefore, in addition to reducing the procurement of emission intensive food groups and improving waste management practices inside their own control, all event actors need to collaborate with their food and food waste supply chain partners is critical to reduce emissions as much as possible and find collective and systemic solutions.



- 1. Identify and map suppliers by category
- Start discussions about reducing GHG emissions and other negative impacts
- 3. Build a supplier engagement plan
- 4. Train internal teams on responsible procurement



Sustainability in Business Events Industry



This document includes concrete examples of wording to include in RFPs and contracts depending on the type of supplier contracted.

Responsible Food Purchasing: Four steps towards sustainability for the hospitality sector



This document includes guidelines and practical check lists to implement a sustainable food system within your organisation with a focus on food purchasing.

Sustainable food strategies and waste management



Food waste strategy

Reducing food waste is a major challenge but also presents a significant opportunity to combat climate change. When food gets thrown away and ends up in landfills, it emits potent greenhouse gases, contributing to our climate problem. Indeed, 40% of all food produced globally is lost or wasted, and wasted food is responsible for approximately 6% of global greenhouse gas emissions, almost three times more than what the global airline industry emits. Additionally, it is considered the primary cause of deforestation, grassland loss, wildlife habitat destruction, and freshwater depletion.

With this in mind, we suggest to apply the EPA food waste scale.

The Wasted Food Scale prioritizes actions that prevent and divert wasted food from disposal. Tiers of the scale highlight different pathways for preventing or managing wasted food, arranged in order from most preferred on the top left to least preferred on the top right. Within a given tier, pathways are ranked equally.



Wasted Food Scale

How to reduce the environmental impacts of wasted food





- Measure: it is key to understand how much food is wasted and at which stage: purchasing, receiving, storing, preparing, serving, and disposing of food.
- 2. Ask your fruit, vegetable, and protein supplier(s) about their own food waste reduction efforts? How do they work to repurpose stems, leverage imperfect fruits and vegetables, and produce from second farmharvests?
- 3. Make food waste prevention and food recovery part of your offer.



EPA Waste Food Scale Life Foster Further With Food

The most preferred pathways – prevent wasted food, donate and upcycle food – offer the most benefits to the environment and to a circular economy. These "top" pathways prioritise using food for its intended purpose: to nourish people. The least preferred pathways – landfilling, incineration, and sending food down the drain – have the largest environmental impacts and have limited potential for circularity.

Preparation and menu/ buffet design

When it comes to sustainable menu planning, you must think about the ingredients you use, the water and energy usage during food preparation, and the food waste you produce.

In fact, no other single decision in the professional kitchen is as essential as the preparation and the composition of menus.

It is where one decides what will be cooked, when, and for whom.

Effective food planning and preparation are critical factors in reducing food waste. Planning properly, buying only what is needed, storing food efficiently, and using leftovers creatively can save money, energy, and resources.



Reasons for food waste in event catering:

- Primary stage of loss: surplus production (food never served)
- Primary product groups: Starch accompaniments, vegetables/ fruits, sweet dishes



- Collaborate: identify and engage all the partners involved with food and food waste (venue, caterer, organiser, participants, food recovery associations). Discuss and allocate clear roles and responsibilities well in advance.
- Request data on the guests (e. g., age, proportion of female/male, number of vegetarians/vegan, where they are coming from, how many meals are hosted) and if possible, get data from previous events with similar audience.
- 3. Reduce the common extra amount of food from 30 % to 10 20 %.
- 4. Use up supplies to the max. Plan a use for each edible part of the ingredients you source and think of creative ways to use what is traditionally considered inedible. Refer to the HotelKitchen's produce yield ranking tool.
- 5. Creatively repurpose leftovers to save waste (and money)
- 6. Use smaller plates or containers.
- 7. Reduce portions (specifically for desserts) especially when serving lunches
- 8. Implement a <u>waste reducing strategy</u> for buffets
- 9. Include a menu of the day (using left over ingredients) or low-waste menu options in event menu portfolio.



Change the Flow of Food

Prevention of food waste in the catering sector guidelines

Change of principles for healthy and sustainable menus

Food donation

Once you have looked at all the options for limiting the waste in the planning and preparation stage, look at opportunities to donate leftovers before discarding them.

Donating edible surplus food can help support the local community, preserve the resources that go into making the food, and reduce the amount of edible nutrients sent to compost, landfill, or other end-of-life solutions.



Discuss particularly common types and areas of wastage, the costs of the wastage, and the potential reasons for it with the client. This can be a real 'eye-opener' for the client, opening the door to greater care in ordering and greater flexibility in the service offer. What I can do

1. Understand what can be donated

and how to safely prepare the

the cold chain. handle food

3. Develop standard operating

 Track type and quantity of donations (to help you understand your overproduction

safely).

partner.

for donation

drivers).

food for donation (i.e., maintain

2. Find a reliable local food recovery

procedures for handling food set



Change the Flow of Food Food Donation Connection WRAP - No food goes to waste European Food Banks Federation Find Your Local Food Bank Waste No Food

Food diversion

If food can't be repurposed inhouse or recovered for donation, you should try to keep it out of the landfill.

If excess food can be repurposed as animal feed or composted back into the soil, we are creating a more circular and healthy system in which valuable nutrients go back into the food cycle. This helps produce more food, preserve resources, decrease emissions and waste, and feed more people.



While a donation to feed food insecure populations takes priority, further down the chain, there is also a significant benefit to re-routing food for animal feed over other diversion strategies. Unlike composting or onsite processing, feeding animals saves (1) disposal resources. (2) methane emissions resulting from landfill disposal, and (3) resources necessary to produce more animal feed. Animal feed programs can often complement traditional donation programs, as some food inedible for human consumption is still appropriate for animals.

 Determine the best end-of-life destination for your food waste and research local regulations.
 Depending on the region, infrastructure, policy, and capacity, the options for diverting could include:

What I

can do

- Food scrapping for animal feed
- Composting
- Finding an anaerobicdigestion facility to convert waste to methane to power electricity.
- Converting fats, oils, and greases (FOGs) to biofuel.
- 2. Track the type and quantity of food diverted (to help you identify continued problem areas).



Change the Flow of Food WRAP - No food goes to waste WRAP - Food waste atlas

Communication







According to the EIC's, State of Sustainability in the events industry (2018), in RFPs, 33.5% of planners expect to see sustainability credentials from suppliers without asking for them, and 49.2% of suppliers provide the information on request. It looks like there is a communication gap from the beginning!

Informing and engaging through meaningful communication is crucial to empower all stakeholders to make the right decisions towards less carbon-intensive options.

Small change, big difference. Surprising customers with the fact that they can have a meaningful positive impact on the environment without a significant sacrifice was a very effective nudging tool.

Joining a movement. Demonstrating that the choice they are making is one that many more people are making too was a very effective nudging tool.

Cool Food (2022) How to sell more climate-friendly food

- Calculate the carbon and/or water footprint of menus and communicate it to clients/customers
- Share data (preferred types of food, quantities of waste per stream, including donations)
- 3. Always propose a low carbon menu option



How to sell more climate-friendly food



<u>A Toolkit for</u> Communicating Food Waste to Guests

Food and food waste through the event lifecycle

Our workstream consists of both organisers and venue owners. Based on our knowledge, we have created an overview of issues that should be considered and actions that should be taken by each stakeholder throughout the lifecycle of an event.

BEFORE

- Clarify expectations by including environmental and social criteria in RFPs and supplier contracts
- Ask for advice from suppliers
- Understand local legal requirements
- Communicate food carbon reduction and food waste reduction objectives
- Know your eaters (attendee numbers, tastes, dietary preferences, etc...)
- Find food recovery associations
- Train teams about food waste and food carbon footprints
- Communicate low carbon and waste approach to client and propose low carbon menus by default
- Ensure kitchen equipment and processes allow for maximised food conservation
- Suggest food recovery associations

• Adjust changing attendee numbers as often as possible

DURING

- Engage participants to reduce food
 waste
- Display informational signage
- Ask supplier to measure food waste and audience preferences
- Ask final attendee numbers 2 hours before the event start to optimise cold chain continuity
- Adapt quantities if the event lasts several days
- Measure food waste quantities and type

- Debrief for improvements
- Analyse data and report on performance to all stakeholders

AFTER

- Tell your story as publicly as possible
- Collect data and share with client

Both Organiser Venue / Caterer

Checklists for venues, organisers and agencies



What organisers and agencies can do

Map out your current situation	Are you starting from scratch? Try to evaluate what the most feasible (and cost- effective) solutions are and focus on areas that will have the most impact in terms of carbon footprint reduction.		Integrate sustainable food sourcing, … cont.	Avoid single-use packaging, or if disposable packaging is unavoidable, look for FSC (Forest Stewardship Council) certified products and post-consumer plastic that can be recycled.	
	Consider your audience for which changes would fit the best with their demographic.			Request info on waste management from relevant stakeholders, including food diversion and donation.	
Integrate sustainable food sourcing, waste	Source local and in-season food. Where possible, use organic and fairtrade products.			Let the provider know that you will need data to calculate the carbon emissions on services provided.	
food recovery into	Reduce the amount of meat and dairy and				
your RFP process and evaluate	Implement smaller portions (focus on	_	Set expectations in your contract	Request to receive data on food served (% meat, % non-meat, % of leftover food, etc.)	
providers based on their adherence to the best sustainable practices criteria during the http://www.initer.politions (rocus off quality, not quantity) reduce the number food courses or options or offer various options. Have reusable tableware (dishes, cutler glassware, napkins, decorations) where	quality, not quantity) reduce the number of food courses or options or offer various size			as well as data on waste management (% diverted, % donated or % landfilled).	
	options.			If possible, get info on carbon emissions (of	
	Have reusable tableware (dishes, cutlery, glassware, napkins, decorations) whenever			food, production, waste, transportation, etc.).	
selection process.	possible.				

What organisers and agencies can do cont.

Communicate with attendees	Involve the attendees. Let them know about your strategy to reduce food waste pre- event and what they can do (choose an "Even bady can make a difference"	Collaborate	Be flexible and allow the Chef to make last- minute changes to source the most sustainable options.	
	approach).			
	Ask participants to sign up for meals in advance (including information about dietary requirements).			
	Implement sustainability story telling at the event.			
	Communicate post-event what was achieved and do a post-event survey to collect feedback.			

What venues can do

Even though it seems that most actions in this field are set in motion by organisers and caterers, there are definitely a few important thing that venues can do and provide for (especially in cooperation with the aforementioned groups).

Use of space	Can you use the space in and outside (or on top of) your venue for a farm to harvest herbs, vegetables, etc. ?	Are there food donation programs in place (in	If not in place through the caterer, it is important to check the possibilities in the surroundings of the venue: Local food banks, too good to go, community centres,	
Check your kitchen(s) facilities and	How is waste management organised in the kitchen? How many streams can be separated?	with caterer)?	etc.	
whether they stimulate preventing food waste	Is there a system in place that gives the caterer valuable data on waste (like winnow, waste watchers, or orbisk)	Improve your communication	In any case, communicate which facilities help prevent food waste, what the venue plans are, and where you will develop solutions in the upcoming years. Ask your	
	Is there room for farmshelfs?		caterer to work with you on making strategies as circular as possible. Ask the organisers to communicate on the amount of visitors they expect in order to know how	
Is there front-of house and back of house composting?	Does the venue have its own composting machine in place that can be used by everyone who uses the venue (it could also be made available to local residents, cafe's, etc.		to prepare.	

Appendix A: Additional resources



General training and education

To better understand the context and specific issues related the food and food waste, we have gathered a few useful academic resources, guidelines and toolkits to help you along the way and provide inspiration. Simply click on the visit button to access the relevant links.

Share Food Cut Waste (POK)



From words to action: surplus food management to tackle food poverty and food waste. This course is addressed to all those who are interested in reducing food waste and enhancing food security for people in need.

We love food and reduce waste. And you?



A European led initiative, focusing on the restaurant industry, training, education, prevention and communication.

Plant-rich dishes in food service



A comprehensive guide to understand which actions matter most when it comes to reducing the carbon footprint of menus

Food waste prevention!



A course that aims to raise awareness and build capacities for effective food waste prevention at different stages of the food chain, including processing and manufacturing, retail, restaurants and other food services, as well as households.

General training and education

Several organisations are focused on the issues of food waste and have built online knowledge bases that will guide users on how to lessen food waste, including potential solutions.



in support of national and

international goals.





This toolkit lays out strategies, best practices, and secrets to success for events to reduce food waste. The recommendations are diverse by design so you can pick and choose those aligning with your event's capacity, motivations, and core values.

Certifications & industry initiatives

Certifications and/or specific programmes can be a good option to get started as it provides a framework for action, guidance about identifying your main impacts, levers for action, and an unbiased assessment of your progress. We have gathered a non-exhaustive list of possible certifications to explore



Potential partners

Collective efforts and collaboration are key pillars of the net zero approach. Engaging with organisations, NGOs or start-ups that provide a vision and solutions to waste, specifically food waste, could be an excellent way to engage in a more sustainable and circular food system in the events industry.



Appendix B: Frequently used terms in food and food waste



Food waste & recycling terminology

Waste-to-Energy Facility:	a facility where recovered municipal solid waste is converted into a usable form of energy, usually via combustion
Composting Facility:	an off-site facility where the organic waste materials are biologically decomposed under controlled conditions
Anaerobic Digestion:	a process in which microorganisms break down organic materials such as food scraps, manure and sewage sludge, done in the absence of oxygen
End Destination Facility:	facilities such as mills, manufacturers and compost facilities that acquire recyclable materials for conversion into new products or raw materials

Biogas:	a renewable energy source that is produced throughout the anaerobic digestion process
Incineration:	a method for the destruction of waste by controlled burning at high temperatures
Decomposition:	the breakdown of matter by bacteria and fungi, changing the chemical makeup and physical appearance of materials
Rendering:	an industry that converts liquid fats and solid meat products into raw materials used in animal food, food cosmetics, soaps, etc.

Defining material types & boundary dimensions

"Material type" refers to the materials that are included in the inventory (food only, inedible parts only, or both).

Food:	Any substance—whether processed, semi- processed, or raw—that is intended for human consumption. "Food" includes drink, and any substance that has been used in the manufacture, preparation, or treatment of food. "Food" also includes material that has spoiled and is therefore no longer fit for human consumption. It does not include cosmetics, tobacco, or substances used only as drugs. It does not include processing agents used	Food Category:	The type(s) of food included in reported food loss and waste. Examples: All food, dairy products, fresh fruits and vegetables, chicken
 substance that has been used in the manufacture, preparation, or treatment of food. "Food" also includes material that has spoiled and is therefore no longer fit for human consumption. It does not include cosmetics, tobacco, or substances used only as drugs. It does not include processing agents used along the food supply chain, for example, water to clean or cook raw materials in factories or at home. Inedible Parts: Components associated with a food that, in a particular food supply chain, are not intended to be consumed by humans. Examples of inedible parts associated with food could include bones, rinds, and pits/stones. "Inedible parts" do not include packaging. What is considered inedible varies among users (e.g., chicken feet are consumed in some food supply chains but not others), changes over time, and is influenced by a range of variables including culture, socio-economic factors, availability, price, technological advances, international trade, and geography. 		Lifecycle Stage:	The stage(s) in the food supply chain or food lifecycle within which reported food loss and waste occurs. Examples: Entire food supply chain, two stages: manufacture of dairy products and retail of food and beverage, at home
	Geography:	Geographic borders within which reported food loss and waste occurs. Examples: World (all	
	Components associated with a food that, in a particular food supply chain, are not intended to be consumed by humans. Examples of inedible parts associated with food could include bones, rinds, and pits/stones. "Inedible parts" do not include packaging. What is considered inedible varies among users (e.g., chicken feet are consumed in some food supply chains but not others), changes over time, and is influenced by a range of variables including culture, socio- economic factors, availability, price, technological advances, international trade, and geography.		countries), Eastern Asia, Ghana, Nova Scotia (Canada), Lima (Peru)
		Organization:	Organisational unit(s) within which reported food loss and waste occurs. Examples: All sectors in country, entire company, two business units, all 1,000 stores, 100 households

Defining destinations

"Destination" refers to where food and/or the associated inedible parts go when removed from the food supply chain.

Animal Feed:	Diverting material from the food supply chain* (directly or after processing) to animals *Excludes crops intentionally grown for bioenergy, animal feed, seed, or industrial use	Codigestion/ anaerobic digestion:	Breaking down material via bacteria in the absence of oxygen. This process generates biogas and nutrient-rich matter. Codigestion refers to the simultaneous anaerobic digestion of food
Bio-based Materials / Biochemical Processing:Converting material into industrial products. Examples include creating fibres for packaging material, creating bioplastics (e.g., polylactic acid), making "traditional" materials such as leather or feathers (e.g., for pillows), and rendering fat, oil, or grease into a raw material to make products such as soaps or cosmetics. If the outputs from this destination are biofuel products (e.g., biodiesel, fuel pellets), or unknown, the material shall be included in the "Other" destination. "Biochemical processing" does not refer to anaerobic digestion or production of bioethanol through fermentation.		loss and waste and other organic material in one digester. This destination includes fermentation (converting carbohydrates—such as glucose, fructose, and sucrose—via microbes into alcohols in the absence of oxygen to create new products)	
	Composting/ aerobic processes:	Breaking down material via bacteria in oxygen- rich environments. Composting refers to the production of organic material (via aerobic processes) that can be used as a soil amendment	
	Controlled combustion:	Sending material to a facility that is specifically designed for combustion in a controlled manner, which may include some form of energy recovery (this may also be referred to as incineration)	

Defining destinations

Land Application:	Spreading, spraying, injecting, or incorporating organic material onto or below the surface of the land to enhance soil quality
Landfill:	Sending material to an area of land or an excavated site that is specifically designed and built to receive wastes
Not harvested/ plowed-in:	Leaving crops that were ready for harvest in the field or tilling them into the soil
Refuse/discards/ litter:	Abandoning material on land or disposing of it in the sea. This includes open dumps (i.e., uncovered, unlined), open burn (i.e., not in a controlled facility), the portion of harvested crops eaten by pests, and fish discards (the portion of total catch that is thrown away or slipped)

Sewer/	Sending material down the sewer (with or without
wastewater	prior treatment), including that which may go to a
treatment:	facility designed to treat wastewater
Other:	Sending material to a destination that is different from the 10 listed above, such as biodiesel or other biofuels. This destination should be described