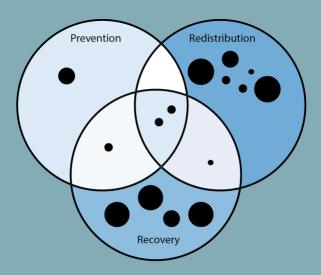


The Food Waste Environment of Newcastle upon Tyne

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Bind Food Waste Innovation CIC & The Food Newcastle Partnership

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www.projectbind.com



1. INTRODUCTION

This document has been produced by Bind¹ in collaboration with the Food Newcastle Partnership² for Newcastle City Council (NCC) and its wider stakeholders. The document will map out the existing work on food waste in the city, and make recommendations for how this can be improved going forward. It is a skeleton document to be built on as the amount of work increases, and is based on the authors' knowledge and communication with the relevant stakeholders at the time of writing.

1.1 AUTHOR

Bind is Newcastle's food waste innovation hub. We believe in positive, creative approaches to reduce food waste and drive behavior change. We deliver several projects that enable individuals and private, public and third sector organisations to prevent food waste. Bind also consults with local governing bodies to ensure effective food waste prevention messages are integrated into policy, and actioned.

Food Newcastle is a partnership of businesses, organisations and individuals with a passion, interest or remit around various aspects of good food. We are an independent non-profit food movement that, through our expanding partnership, provides awareness encouraging others to share information and take action to create a healthier food culture in Newcastle.

1.2 BACKGROUND

One third of the world's food supply is wasted.³ This has devastating consequences on the environment and the economy through the natural resources, fuel and money required for its production. When we send food to landfill it is broken down anaerobically to release methane - a greenhouse gas twenty-one times more potent than CO_2^4 . In the UK alone, we waste an estimated 13m tonnes of food per year from farm to fork to bin, with an associated price tag of over £20 billion⁵.

Food Newcastle is a member of the Sustainable Food Cities (SFC) Network⁶ and has developed a city food plan based on the six key issues of the Sustainable Food Cities Framework. The Newcastle Good Food Plan⁷ was launched in March 2018, which highlights reducing food waste as one of its six key themes. Bind is leading the food waste sub-group which has formed as a result of this. In order to achieve the SFC bronze award, Newcastle needs to show evidence of:

¹ Bind Food Waste Innovation CIC; www.projectbind.com

² The Food Newcastle Partnership; http://www.foodnewcastle.org

³ Food and Agriculture Organisation of the UN; http://www.fao.org/save-food/resources/keyfindings/en/

⁴ Vision 2020; https://www.vision2020.info/about/

⁵ Our Waste, Our Resources: A Strategy for England;

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf

⁶ Sustainable Food Cities Network; http://sustainablefoodcities.org/

⁷ Newcastle Good Food Plan 2018; http://www.foodnewcastle.org/wp-content/uploads/2018/02/plan.pdf



- Citywide campaigns to raise the public awareness of food waste and how to reduce it.
- The Food Waste Hierarchy is being incorporated into relevant policies, strategies and services.
- Local charities and social enterprises are collecting consumable surplus food and redistributing it to organisations feeding people in need, while working to raise the nutritional standards of food aid being offered.

NCC formed the Waste Commission in 2017, who carried out several stakeholder and public consultations which led to the publication of the No Time to Waste⁸ report in February 2018. This outlined how to make Newcastle a 'world leader' in waste management, including several recommendations on food waste prevention, and will form the basis of NCC's waste strategy, due to be released in the coming months.

This document also incorporates the key messages from Our Waste, Our Resources: A Strategy for England⁹ released 18th December 2018, which calls for urgent action to meet the UN Sustainable Development Goal (SDG) 12.3: to halve food waste per capita by 2030¹⁰.

1.3 PURPOSE

The purpose of this document is to provide an overview of the current food waste environment in Newcastle: the work that is currently being done to prevent, redistribute or recycle food waste, in order to prevent it going to landfill. It is intended to help inform an effective city-wide strategy to eliminate avoidable food waste.

We have mapped the various organisations currently working on food waste reduction in Newcastle and their estimated impact, to identify which areas could be developed as part of the Newcastle Good Food Plan and upcoming Waste Strategy. This report covers awareness raising and education; prevention; redistribution and re-use; and recycling of food waste.

⁸ No Time to Waste Report 2018; https://www.wiseonwaste.co.uk/

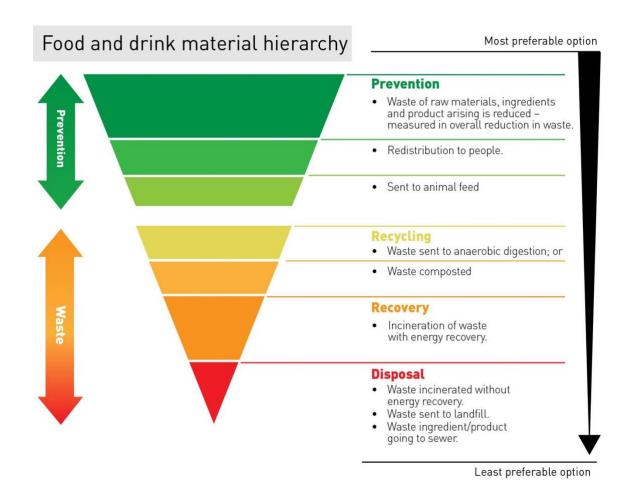
⁹ Our Waste, Our Resources: A Strategy for England;

 $[\]underline{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/reso} \underline{\text{urces-waste-strategy-dec-2018.pdf}}$

¹⁰ UN Sustainable Development Goals; https://www.un.org/sustainabledevelopment/sustainable-consumption-production/



1.4 FOOD WASTE HIERARCHY



Source: http://www.wrap.org.uk/content/why-take-action-legalpolicy-case

We have used the Food Waste Hierarchy¹¹ to demonstrate which areas need prioritisation for the upcoming strategy to be most effective. The Food Waste Hierarchy outlines priority actions for reducing food waste, based on the efficiency and environmental and economic benefit of each option. The waste hierarchy has been incorporated into UK law through The Waste (England and Wales) Regulations 2011¹², and is the basis of both the recent National Waste and Resources Strategy¹³ and SFC targets. It is therefore vital that the hierarchy is also integral to Newcastle's food waste strategy. The most preferred option in the hierarchy is prevention of food waste - work to eliminate food waste before it occurs should be prioritised over dealing with it once it already exists.

¹¹ WRAP; http://www.wrap.org.uk/content/why-take-action-legalpolicy-case

¹² UK Government; http://www.legislation.gov.uk/uksi/2011/988/contents/made

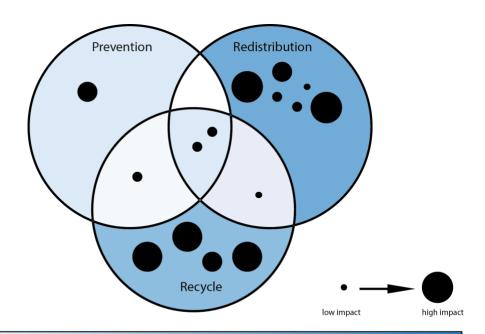
¹³ Our Waste, Our Resources: A Strategy for England;

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf



2. EXISTING FOOD WASTE WORK IN NEWCASTLE

2.1 THE CURRENT PICTURE: EXISTING FOOD WASTE ACTIVITY GROUPED INTO PREVENTION, REDISTRIBUTION AND RECYCLING.



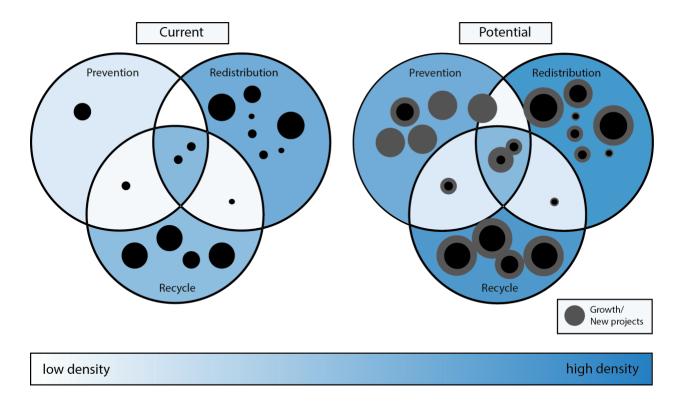
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Organisation -	Area of food waste			
	Prevention	Redistribution/Re-use	Recycling	Impact
Bind	Х	Х	Х	S
Magic Hat Cafe	Х	х	х	S
Fareshare		х		L
Fareshare Go		X		M
Healthworks	Х	X		M
Olio		X		S
Suez			х	L
Biffa			х	L
Warrens Group			х	L
Ugly Duckling		X	х	XS
Food Cycle		X		XS
Neighbourly		X		L
Too Good to Go		X		S
Newcastle University	Х		х	S
NCC Waste Services			х	M
Vinnies Cafe		X		XS



The aim of the infographic is to snapshot the current food waste work being done in Newcastle. It categorises organisations by the three key areas of the food waste hierarchy, and quantifies their associated impact. Each dot represents one organisation or project and the size of the dot represents its respective impact (see Appendix 1). By looking at the density of work being done in each area, shown by a sliding colour scale, we can begin to see opportunities to expand and develop strategy which focuses on certain parts of the waste chain.

2.2 THE FUTURE PICTURE: POTENTIAL FOOD WASTE ACTIVITY, GROUPED INTO PREVENTION, REDISTRIBUTION AND RECYCLING.



The potential infographic sees both the expansion of existing projects/organisations and the addition of new initiatives which focus on preventive food waste action, these are shown in grey. Implementation of the below recommendations we hope will allow existing and new food waste work in our city to prosper.



3. RECOMMENDATIONS

3.1 MEASUREMENT

Measuring the food waste generated by both households and organisations in Newcastle is vital for any strategy to be effective.

If we are to differentiate ourselves as world leaders in waste management, we can not rely on disseminating national data for our evaluation. Instead we need to accurately gauge the total amount of food wasted in Newcastle at baseline, and throughout the implementation of the strategy, in the following ways. The results of which will also help shape the strategy in the future:

- Build on Bind's links with world-leading researchers at Newcastle University to design, implement and interpret a city-wide investigation.
- Conduct compositional waste analyses of domestic refuse collections across the varied populations in the city, until separate food waste collections are implemented.
- Obtain accurate, specific data from commercial refuse collection agencies including NCC, Biffa, Suez and Warrens Group.
- Encourage and facilitate organisations of all sizes and sectors to produce annual food waste reports, which is recommended to become mandatory in UN SDG 12.3¹⁴ and the National Waste and Resources Strategy 2018¹⁵.

3.2 AWARENESS RAISING CAMPAIGN

All food waste reduction work should be linked by a Newcastle-specific, city-wide campaign which engages both individuals and businesses.

• Nationwide campaigns such as 'Chill the Fridge Out'¹⁶ and 'Make Toast not Waste'¹⁷ as well as successes from 'TRiFOCAL'¹⁸ to be adapted by Bind and Wrap so that they are effective in

¹⁴ UN Sustainable Development Goals; https://www.un.org/sustainabledevelopment/sustainable-consumption-production/

¹⁵ Our Waste, Our Resources: A Strategy for England;

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf

¹⁶ Chill The Fridge Out (WRAP); https://www.lovefoodhatewaste.com/article/chill-fridge-out

¹⁷ Make Toast Not Waste (WRAP); https://www.lovefoodhatewaste.com/toast

¹⁸ TRiFOCAL (Resource for London); http://trifocal.eu.com/



Newcastle, as recommended in the National Waste and Resources Strategy¹⁹. Different demographics of residents engaged through specific media channels.

- Bind deliver series of public space interventions such as 'Feed the 5,000'²⁰, collaborating with campaign organisation Feedback and redistribution networks such as FareShare and Neighbourly.
- Newcastle to be used as a pilot city for interventions developed by WRAP and others, and to be active in scaling-up those pilots which prove most successful¹⁸.

3.3 FOOD WASTE PREVENTION

Every Newcastle food handler and resident should have access to food waste prevention advice and resources.

This should be integrated into the public awareness campaign. For example:

- Public sector hospitality
 - Bind's Eat Smart project (see Appendix 2.1) to be delivered in every Newcastle school, reducing waste directly on site and engaging pupils, staff and parents to do the same at home.
 - Programme to be developed to engage NCC and NHS food providers in measuring and preventing food waste, utilising technology such as LeanPath and Winnow systems (see Appendix 2.4) and linked to public campaign.
- Private sector hospitality Bind's NE Leftovers project (see Appendix 2.2) to be piloted in 50 Newcastle food SME's, with a view to roll-out further.
- Food waste prevention targets for large businesses will soon become mandatory as part of the National Waste Strategy. Newcastle can set the precedent by introducing voluntary targets for food businesses of all sizes. Food waste measurement, reporting and prevention to be integrated into ongoing work by Food Newcastle with local businesses.
- Individuals/Households Healthworks' Love Food, Hate Waste programme (see Appendix 2.3) to be rolled out and adapted to different settings and demographics.

¹⁹ Our Waste, Our Resources: A Strategy for England;

²⁰ Feeding the 5000 (Feedback); https://feedbackglobal.org/campaigns/feeding-the-5000/



3.4 REDISTRIBUTION OF SURPLUS FOOD TO PEOPLE

This is the area Newcastle is strongest on at present (see infographic), mainly through national redistribution channels aimed at redirecting food to charities and community groups (Appendix 2.5).

Every food handler and household should be able to easily redistribute any surplus food that does arise.

There is an opportunity to build on existing distribution networks and include avenues for surplus food from small businesses and households which are currently unavailable or under-utilised. This would dramatically increase the amount of food diverted from waste by these channels.

- Newcastle Redistribution Network Database of organisations that accept donations of surplus food, including types of food accepted, and organisation details made publicly available, and promoted to Newcastle food handlers so they can easily redistribute their surplus.
- Olio (See Appendix 1) Whilst it works well in other localities, uptake in Newcastle is limited. Requires local promotion and facilitation, and to be linked in to the public awareness campaign.
- Restaurants Increase use of systems that notify people of end of day reductions/giveaways, such as 'Too Good To Go' (See table Appendix 1). Bind's NE Leftovers programme (Appendix 2.2) also encourages customers to take food home. Encouraging restaurants to make use of these systems should be integrated into prevention work described above.
- Schools Bind's Eat Smart programme has identified the opportunity for unserved portions of school meals to be frozen, and made available for families to take home. In some cases this could help alleviate 'Holiday Hunger'.

3.5 FOOD WASTE RECYCLING

No one in Newcastle should have to send food waste to landfill

Households - Separated domestic food waste collections should be implemented across the city
as recommended in the No Time to Waste²¹ report. As well as diverting more food waste from
landfill than the current collections, this also engages individuals in food waste prevention by
making them more aware of the food they are currently wasting, and facilitates easier
measurement of household food waste.

²¹ No Time to Waste Report 2018; https://www.wiseonwaste.co.uk/



 Businesses - Food handlers engaged in any of the above prevention or redistribution programmes should be encouraged and facilitated to have their food waste sent to AD, for example by using local company Warrens Group.

4. WHAT IS NEEDED NEXT

The recommendations laid out by the previously published international, national, and local strategies, as well as those in this report, are undeniably ambitious. This is necessary to achieve the respective targets set, and to avoid catastrophic climate change.

4.1 RESOURCES

In order for them to be actioned appropriately and for Newcastle to truly become a world leader on waste, significant financial resources need to be acquired. The Secretary of State for Environment, Food and Rural Affairs recently announced a £15m fund to tackle food waste²² which may be appropriate. There is also opportunity for large businesses operating in Newcastle to offer corporate sponsorship for this work as part of their CSR. The work carried out through the Waste Commission has engaged several commercial partners who should be approached to contribute to this. Ultimately, preventing food waste effectively will have significant financial benefits to the individuals and organisations that do so successfully, but also to NCC through reduced costs of disposal

4.2 COORDINATION

Delivery of this work requires a designated team to ensure its success and consistency across the different settings that it will operate in. Bind and the Food Newcastle Partnership are well placed to take on this role, through their extensive links to local organisations in the private, public and third sectors, and the multi-disciplinary experience that the partnership can offer. This would be a full-time programme delivery role, and would involve liaising with relevant stakeholders to achieve the following:

- Designing and implementing a city-wide food waste measurement project, in conjunction with Newcastle University, and drawing on the knowledge and experience from WRAP.
- Working with WRAP to design and deliver a city-wide food waste awareness campaign, which is also integrated into all other food waste work carried out in the city. This would form part of the food movement recommended by waste commission in the No Time to Waste report.²³
- Recruit and facilitate a working group to develop food waste prevention programmes that can be delivered to:

²² UK Government Food Waste Reduction Fund; https://www.gov.uk/government/news/action-to-reduce-food-waste-announced

²³ No Time to Waste Report 2018; https://www.wiseonwaste.co.uk/



- Private and public sector food organisations utilising existing links within the local food industry, public sector food providers and the expertise of LeanPath/Winnow,
 Zero Waste Scotland and WRAP. Ensuring data from this work is fed back into the measurement project.
- o Individuals/households working group formed between Bind, HealthWorks, WRAP and representatives from public health to adapt existing projects for a variety of settings
- Recruit and facilitate a working group to improve local redistribution of surplus food, both to community groups and the general public, through a new local redistribution database, and increasing uptake of existing systems. Building on links/technology with FareShare, Neighbourly, local community groups, OLIO and Too Good to Go.
- Developing a programme of redistribution of surplus school meals to families.
- Recruit and facilitate a working group to increase food waste recycling by Newcastle households and organisations
- Champion and facilitate expansion of existing projects currently working on food waste in the city



APPENDIX 1

Organisation	Info & Figures	Details	
Bind Figures		Since 2016 directly engaged 1066 individuals, 2 schools (7 more signed up for 2019) and 2 food businesses.	
	Info	Raises awareness on food waste issues, upcycles surplus food into meals, and provides a supermarket stocked with fresh surplus produce. Some food waste is composted in hotbins.	
The Magic Hat Cafe	Figures	Since 2015, Over 11,000 kg food waste intercepted and served over 5,000 meals. Looking to increase this capacity going forward.	
	Info	Collects surplus food from local food handlers and makes it available to the general public through its 'pay-as-you-feel' policy. Currently based at Byker Community Centre, with an additional city centre site coming soon.	
Fareshare Figure		Figures due Jan 2019	
	Info	FareShare is a charity aimed at relieving food poverty and reducing food waste in the UK. It does this by rescuing good quality surplus food that would otherwise have gone to waste and sending it to charity and community groups.	
Fareshare Figures		285 clients in North East. 86 Donors in North East	
	Info	A platform for redistributing food from supermarkets directly to community groups through a text message notification service.	
Healthworks	Figures	Ran 220 courses since 2014, engaging 1655 individuals directly	
	Info	Delivers Love Food Hate Waste training to local community. Enables people to cut their food waste at home, whilst engaging them in the environmental and financial benefits of doing so.	
Olio	Figures	Figures due Jan 2019	
	Info	App for redistributing surplus food among individuals and SMEs.	
Suez	Figures	No figures available due to lack of response	
	Info	Collects food waste from businesses for AD.	
Biffa	Figures	No figures available due to lack of response	
	Info	Collects food waste from businesses for AD.	
Warrens Figures		No figures available due to lack of response	
Group	Info	Collects food waste from businesses for AD.	
Ugly Duckling	Figures	Sells at markets and SME's. Foodie, millennial customer base at monthly markets. Workshop programme delivered in the East (over 1000 participants)	
	Info	Makes products sold to the general public and small cafes/restaurants out of predominantly surplus including pickles and ferments. Any additional surplus donated to Ouseburn farm for animal feed.	
Food Cycle	Figures	2568kg food saved since June 2018. Between 5-40 diners per week at Walker and Byker CC.	
	Info	FoodCycle is a UK charity that combines surplus food, spare kitchen spaces and volunteers to create three-course meals for people at risk of food poverty and social isolation	
Neighbourly	Figures	Figures due Jan 2019	
	Info	Neighbourly connects local stores that have surplus food with charities, community groups and schools that can put it to good use in the	



		community.	
Too Good	Figures	Figures due Jan 2019	
to Go	Info	An app that helps restaurants, bakeries, supermarkets reduce their daily food waste by users buying discounted meals at end of day.	
Newcastle University	Figures	Small group of research students and academics.	
	Info	Conducts research in several areas of food waste reduction	
NCC Waste	Figures	No specific food waste data available	
Services	Info	Food waste is collected in general rubbish collections and separated at a specially designed facility.	

APPENDIX 2

- 2.1 Eat Smart (Bind): Reduces food waste on school sites through audits and preventative interventions. The pupils, teachers, catering staff and parents are all engaged in the project and has achieved a 40% reduction in food waste in pilot schools.
- 2.2 NE Leftovers (Bind); Food waste prevention programme for restaurants and cafes that includes food waste audits, and implementation of interventions such as offering a range of portion sizes, and a takeaway box scheme that reduces the stigma around 'doggy bags'. Engages customers and staff as well as directly reducing food waste on site.
- 2.3 Love Food, Hate Waste (HealthWorks Newcastle): Adaptation of WRAP's Love Food, Hate Waste programme to prevent food waste specifically in low income households in the West End of Newcastle. Incorporates practical cooking sessions and shopping tips. Has been very well received in the local community
- 2.4 Leanpath/Winnow: Technology systems for conducting food waste audits in large food service establishments and is combined with advice from food waste consultants.
- 2.5 Redistribution: Mainly through the FareShare/FoodCloud and Neighbourly networks which are redistributing surplus food from supermarkets and large businesses to community groups. Several projects turn this surplus food into meals, such as The Magic Hat Cafe, Vinnie's Cafe and FoodCycle.