



# 17RDSUSFOOD2ERA-NET4

## Sustainable Food Platforms: Enabling sustainable food practices through socio- technical innovation

### Final Report

## SUMMARY

The aim of the project was to produce in-depth knowledge regarding how food practices are affected by how food enters the home, with an overall objective to produce in-depth practical knowledge on how sustainable household food consumption can be enabled through socio-technical innovations in food-provisioning platforms. The findings suggest that the routes through which foods are acquired have implications for food waste generation and the level to which sustainable practices are embedded in the household. Motivations are central to this. However, while motivations to be more sustainable can lead consumers to try alternative food supply platforms or purchase more sustainable foods, the household may have to transition to new patterns of food behaviours to realise their sustainability goals. In many cases this requires, significant effort, additional resources and increased knowledge and skills. One solution will not fit all and consequently the role of the platform in enabling more sustainable practice can vary considerably. In some cases sustainable practices are a 'by-product' for the consumer; for example, timesaving through on-line food shopping is the primary motive. Overall, the research suggests that circular food consumption behaviour is quite limited, and much work is required to motivate and enable households to make their contribution. The research drew attention to the potential ways that the supply chain stakeholders can facilitate and support more sustainable practice through for example, adjustments to store choice architecture, reshaping special offers, creative communication and incentivisation of more circular food packaging behaviour. From a policy perspective attention needs to be given to facilitating, supporting, and motivating sustainable household practices through, for example, composting of all brown bin waste, reviewing promotional policies employed in perishable food categories and developing sustainability promotion initiatives which triggers emotional responses that directs households to function in more sustainable ways.

## KEYWORDS

Provisioning platforms, Waste, Sustainability

## ACRONYM

## PLATFORMS

## PROJECT COORDINATOR, INSTITUTION

Prof Mary McCarty,  
University College Cork

## EMAIL

m.mccarthy@ucc.ie

## COLLABORATORS, INSTITUTION

---

Dr Arne Dulsrud, Oslo and Akershus University College of Applied Sciences, Norway

---

Dr Christian Fuentes, University of Gothenburg, Sweden

---

Prof Francesca Forno, University of Trento, Italy

---

Prof Christine, Bauhardt, Humboldt-Universität zu Berlin, Germany

---

## PUBLICATION DATE

May, 2022

# Section 1 - Research Approach & Results

---

## Start Date

01 May 2018

## End Date

31 October 2021

## Research Programme

Food Institutional Research Measure

## TRL Scale

TRL1: Basic Principles Observed

## NRPE Priority area

Food for Health

## Total DAFM Award

€193,192.50

## Total Project Expenditure

€188,180.74

## Rationale for undertaking the Research

Transitioning towards circular food systems requires a significant input from households. Food consumption choices (e.g., product choices and curtailment) represent one important factor in shaping the sustainability of our food supply, however another is how foods are treated once they enter the home. According to the EPA (2020) Ireland generates approximately 1 million tonnes of food waste per year with over 25% of this attributed to the household. To address this and support more sustainable food behaviours there is need to understand how everyday food practices are situated within the broader lives of the household and how interaction with the marketplace supports or hinders sustainable practices. Within this context it is important to understand the role of food supply routes. Indeed, in recent years, we have seen an increase in the range of food provisioning platforms available to consumers. Each platform presents consumers with a unique choice architecture. These emerge from both e-commerce development and consumer-driven food provisioning. Little is known about the impact of these new platforms on how food is organised and used in the household or to what degree they represent new opportunities to promote sustainable food practices. This research seeks to fill this knowledge gap.

## Methodology

The research involved 3 key work packages. The first examined online food provisioning platforms. Desk research was undertaken to contextualise the food provisioning structures in Ireland. Following this an audit of Online Food Provisioning Services (OFPS) was undertaken. Analysis of the OFPS websites followed a two-stage process. Stage one involved the development of a standard codebook for categorising information extracted from the OFPS websites. The second stage of analysis involved coding and verifying these data. The results of this audit considered the structure and value propositions communicated by these provisioning services.

The second work-package employed an ethnographic-style framework based on social practice theory (SPT). This 'practice-centred' framework focuses on the 'doings' of consumption to highlight the nature of household routines and everyday engagements with food. A sample of 42 households divided between four cases (Alternative physical, Alternative digital, Mainstream physical and Mainstream digital) was used to explore household food consumption practices from acquisition to disposal. A photo 'food diary' was recorded by participants and was followed by an in-depth interview regarding their food consumption practices from acquisition to disposal, this was supplemented with kitchen 'walk-about'. Thematic analysis was undertaken with reliability and trustworthiness of the analysis assured through verification of codes and discussions among the research team. The analysis provided a nuanced account of the sustainability-related consumption routines; and meanings, competencies, and material infrastructure that intersect and interconnect.

The final work package explored consumer preferences for online food platforms value propositions and the effect of covid-19 on the platform's customer base. An online survey was undertaken which drew on the findings from WP2 to understand the role of these platforms in supporting sustainability goals. Quantitative analysis, using SPSS, was employed to profile respondents based on platform choices, level of use and motivations.

## Project Results

It was evident, across the three studies, that household's and individual's food related motivations and practices vary considerably. Furthermore, while there is an awareness of food sustainability, the extent to which households are moving toward more circular consumption behaviours was somewhat limited. Solutions that require changes to the ebbs and flow of the household's everyday life meet with some resistance due to the perceived time, effort, and increased knowledge and skill required to make changes. Evidence from the qualitative and quantitative surveys suggest that some households continue to treat food as a form of linear consumption behaviour, expecting the market to take full responsibility for addressing sustainability challenges. They act as purchasers who can either use or waste food at their discretion. Notwithstanding this, there appears to be a willingness to engage, at least to some degree, in environmentally friendly behaviours by most. Engaging in product related sustainability activities through food consumption behaviours (choices and curtailment) was evident among some. The sustainability challenge has been more fully embraced by some, both in their product consumption choices and household practices, these tend to engage strongly with alternative food networks and consciously select these networks as a means of expressing a sustainable food lifestyle. In these cases, households engaged in creative cooking and preservation practices. The higher value placed on food acquired from these AFNs safeguarded it from the waste stream. Social learning and an appreciation of what others were doing within these networks further supported these sustainable practices.

Choice architecture in the retail space had a considerable impact on household sustainability; fore-fronting of products and the use of promotional cues in the retail store can result in over purchasing and waste. The choice architecture of alternatives networks and on-line services appeared to result in purchasing more based on need and less on impulse. Designing interventions that enable households to better address sustainable food consumption practices offers value at both an individual and societal level. Insights from this research strongly support the approach of targeting household routines to promote sustainable food consumption in the home. Based on our findings, households' sustainable consumption practices cannot be reduced to consumers alone; rather, enabling

sustainable consumption practices is achievable through reinforcing collective action among all stakeholders in the food supply chain. Recommendations to guide practical actions are identified, such as, promoting consumption of seasonal foods, promoting social connection (C2C, B2C and C2B), improving cooking knowledge and skills, preservation techniques and skills, and addressing packaging challenges. Food manufacturers, retailers and policymakers need to continue to support product and process developments within the sustainability domain (including packaging and waste minimisation), incentivise more consumption of seasonal foods, promote social connections and knowledge exchange, and additionally consider the sustainability consequences of promotions that are designed around healthy eating and value for money. Equally developing sustainability promotion initiatives which trigger emotional responses that directs household to function in more sustainable ways.

## Section 2 - Research Outputs

### Summary of Project Findings

The research gives voice to the immediacy of enabling citizens to practice more sustainable food behaviours. It provides insights to supply chain stakeholders, activist and community groups on how they might co-create solutions and policymakers on the actions they can take. Tempting purchase environments, lack of accessibility to sustainable products, resource deficits (knowledge and skills) along with perceived affordability all present as everyday barriers to embedding sustainable practices. The work adds to the body of evidence supporting a multipronged approach to integrating the household into a circular food system and a need for further research on targeted groups to understand the systems changes necessary to enable household change. Additionally, the work builds on the knowledge base on the most significant barriers to households reimagining food through a sustainability lens and how triggering emotional responses around 'wasting' food can lead to pro-environment behaviours. Consequently, the research also presents a strong argument to build a stronger evidence base around the role and impact of emotion-based motives on openness to change. This work confirms the need for a 'Sustainable Eating' Ireland initiative to ensure that appropriate scaffolding is in place to aid households make more sustainable choices and undertake 'food work' in a more sustainable manner.

This research created a record of on-line pre-covid-19 food selling activities that allowed for comparison across countries and over time. An examination of seller value propositions provided an indicator of the degree of emphasis on sustainability attributes in the on-line food selling space. The database can provide a reference point for comparison in exploring the evolution of this selling space post Covid-19. Additionally, sustainability motivations of on-line food shoppers were explored. This work illustrated the value of on-line shopping in providing consumer sustainability benefits, but this was not the main driver of use for most.

### Summary of Staff Outputs

Research Output	Male	Female	Total Number
Post Doctorates	1	0	1
Other / Temporary	0	1	1

### Summary of Academic Outputs

Research Outputs	Total Number	Details
Peer Reviewed Conference Papers	3	The work has been presented and discussed at 3 conferences. Peer reviewed abstracts were submitted and accepted. Presentation at these conferences has supported further consideration of the work. In addition, 3 further abstracts from the findings of this work are currently under review (The European Marketing Academy Conference and Irish Academy of Management).
Other	4	A number of national reports were produced to rapidly disseminate key findings of the research. A report was produced for each of the primary pieces of work plus a context setting. The context report and national report on online food provisioning platforms formed part of the data used by our Italian partners in finalising the cross-country report associated with WP1. These were disseminated at the 2 organised workshop and were made available online.
Publications in Peer Reviewed Scientific Journals	1	Currently one peer-reviewed paper on this research is published, a second is under review and a third is in final draft format. A fourth paper has also been sketched out.

### Summary of other Project Outputs

This project falls into the category of desk research and consequently the outputs produced are report based. A number of reports were produced and disseminated. These provide insights that substantiate the argument for policy and stakeholder interventions. Importantly these also highlight the need for further cohort-based work as interventions are developed and implemented to aid household's transition away from linear food consumption behavior.

## Potential Impact related to Policy, Practice and Other Impacts

Impact	Details
Environmental Sustainability	The work provides direction on ways to enable households to experiment with and embed sustainable consumption practices as part of their everyday food routines, through the provisioning of new supporting materials and redesigning the places and spaces (brick and mortar and online) where households interact with food suppliers. Integrating household experiences to include more pro-environmental food disposition practices needs to involve the codesigning of solutions where external stakeholder support in the design and delivery of products and services that afford the household to easily transition from linear to more circular food consumption practices. This should support the reduction of household generated waste and increase attention on the consumption of foods with more sustainable credentials.
Industry	The work has provided important insights into the mechanisms by which people can embed more sustainable food practices and, in particular, how this can be supported by supply chain stakeholders. It highlights ways that retailers can adjust their selling spaces to support customer's desire to be more sustainable. The use of store atmospherics can positively influence the reduction or elimination of some unsustainable household food practices through neutralizing the context cues that automatically trigger the practice and replacing these with pro-environment cues. Stores could reduce salience of cues of less pro-environmental/sustainable choices while concurrently increase salience of pro-environmental/sustainable choices by, for example, focusing special offers on loose rather than pre-packaged fruit and vegetable category or fore-fronting local in in-store displays. These focus primarily on harnessing automatic processes of consumers, but information touchpoints and product ranges can also support consumers in order to enhance their sustainable practices knowledge and abilities/capabilities.
Other	From a public policy regulation perspective, the evidence draws attention to ways policy instruments can make sustainable food responses salient by ensuring that appropriate scaffolding in food environs is in place. Furthermore, incentivising repeated pro-environment responses in stable contexts, such as discounts for effective household food waste reduction and separation, aid in the transitioning towards and the embedding of more sustainable habits. Equally consideration of the context of various population cohorts is highlighted. Designing targeted initiatives that recognise the impact of everyday life on ability to be sustainable is essential, in particular taking into account, the impacts of stage in life, geographic location, food availability and accessibility and living arrangements on food habits.

## Dissemination Activities

Activity	Details
Workshops at which results were presented	<p>Two Stakeholder workshops were organised where the findings of the work were explored and considered within the context of current activities of these stakeholders:</p> <p>The first of these was "The Emerging Role of Online Food Retail Systems for Sustainability" (October 2020). In this workshop the emerging role of online food retail systems for sustainability in the Irish market was considered. An overview of the online food providers in Ireland was given by the research team followed by a panel discussion with 2 food retailers, who shared their experiences in providing two very different online food supply service to consumers. Niamh O'Mahony, provided an account of the Musgrave experience in mainstream food retailing while Jack Crotty, Neighbourfood, spoke to the experiences of this alternative food network. The research team provided insight on consumer perspectives based on the findings of the research undertaken. Areas of innovation and the potential value of these online supply routes in enhancing the sustainability of food practices within households were explored. 123 registered for this event and 63 participated on the day.</p> <p>The second was "Exploring the Potential for Enabling Sustainable Practices by Food Consumers" (September 2021). The aim was to gain insight from industry experts and researchers on food-related sustainability initiatives to support consumers and current sustainable household practices, and debate and discuss the potential facilitators and barriers in achieving sustainability across the supply chain. Contributions from Daniel Kelly, CSR Manager at Lidl Ireland, Emma Walls, Commercial Director at Glenisk and Dr Oliver Moore, on behalf of Cloughjordan Farm were presented. Following industry presentations, the research team gave an overview of the overall research findings. The key discussion points that emerged from the workshop were the role of policy when it comes to sustainable food practice, the risk of losing market share in efforts to be more sustainable and the shift in mindset needed to live more sustainably. This workshop informed final recommendations for the PLATEFORMS research project. Fifty registered for the workshop and 36 attended.</p>
Media Events	<p>A number of interactions with the press occurred. These were triggered via press releases and led to a number of radio interviews along with some press articles.</p> <p>The most recent of these which shared key findings "What Irish households can do to waste less food by Thompson, S (Nov 27, 2021) <a href="https://www.irishtimes.com/life-and-style/food-and-drink/what-irish-households-can-do-to-waste-less-food-1.4737454">https://www.irishtimes.com/life-and-style/food-and-drink/what-irish-households-can-do-to-waste-less-food-1.4737454</a></p> <p>Additionally, an RTE brainstorm article was submitted. These are available to view at: <a href="https://www.ucc.ie/en/eri/projects/plateforms---sustainable-food-platformsenabling-food-practices-through-socio-technical-innovation.html">https://www.ucc.ie/en/eri/projects/plateforms---sustainable-food-platformsenabling-food-practices-through-socio-technical-innovation.html</a></p>

Seminars at which results were presented	<p>The results were presented at seminars and workshops, national and international where members of the project team were invited speakers. Presentations were made to the Cork Food Policy Council and Caretakers of the Environment International.</p> <p>Additionally, presentations were made to Dairy sector representatives (via Executive Education programmes), the Department of Agriculture, Food and the Marine and to Stakeholders attending the SUSFOOD organised dissemination event in October 2021.</p>
Other	<p>The insights of the projects have been disseminated through a number of invited speaker seminars in CUBS programmes of study. The goal was to support reflective thinking by a range of citizens at a personal and professional level. These sessions supported broader dissemination of the research findings and also fits with the Business School's mission and vision of creating leaders for a sustainable future. These were:</p> <ul style="list-style-type: none"> <li>• Dr Claire O'Neill. "Questioning Growth: Consumption and Sustainability" March 2021 UCC's university wide module UW0005 Sustainability. Open to students of all levels and disciplines, university staff, and the wider public. Number of attendees 168.</li> <li>• Dr Claire O'Neill October 2020 "Enabling sustainability a practice perspective" UCC MBA cohort (32 student).</li> <li>• Moran Chris (November 2020) "Sustainable Practices." MSc 'Co-operatives, Agri-food and Sustainable Development' (18 students)</li> </ul>
Seminars at which results were presented	<p>A number of short videos were produced that drew attention to aspects of sustainability and outputs of the work. These were made available on the project webpages (Irish and partners websites).</p> <ul style="list-style-type: none"> <li>• O'Neill, C. Sustainable Food in Ireland: <a href="https://www.youtube.com/watch?v=-k0_4BRGYPU">https://www.youtube.com/watch?v=-k0_4BRGYPU</a></li> <li>• O'Neill C. Sustainable Household Consumption in Ireland: <a href="https://www.youtube.com/watch?v=ZYNuzUm-ISQ">https://www.youtube.com/watch?v=ZYNuzUm-ISQ</a></li> <li>• O'Neill, C. Sustainable behaviours in UCC: <a href="https://www.youtube.com/watch?v=3xyMTZoCkKo">https://www.youtube.com/watch?v=3xyMTZoCkKo</a></li> <li>• Moran C. "The case of a Community Supported Agriculture (CSA) in Ireland." <a href="https://www.ucc.ie/en/eri/projects/horizon-2020-era-net-susfood2-plateformssustainable-food-platforms-enabling-food-practices-through-socio-technical-innovation.html">https://www.ucc.ie/en/eri/projects/horizon-2020-era-net-susfood2-plateformssustainable-food-platforms-enabling-food-practices-through-socio-technical-innovation.html</a></li> </ul>
Other	<p>Five infographics were also developed to communicate topline information on the project. These are available to view at: <a href="https://www.ucc.ie/en/eri/projects/plateforms---sustainable-food-platforms-enabling-food-practices-through-socio-technical-innovation.html">https://www.ucc.ie/en/eri/projects/plateforms---sustainable-food-platforms-enabling-food-practices-through-socio-technical-innovation.html</a></p>

## Knowledge Transfer Activities

<b>Identify knowledge outputs generated during this project.</b>	<p>The knowledge generated from this work provides further evidence to support targeted strategies that enable more sustainable practices at the individual and household level. The value of on-line shopping in managing impulsivity was highlighted along with the challenges faced based on life stage. Additionally, the evidence suggests consumers place increased value on products with trusted sustainability credentials. Alternative Food Networks benefit from this with their products commanding premium prices. Foods purchased through these networks tend not to be wasted and value, from a consumer perspective, is achieved by purchasing less and consuming all.</p> <p>This quality quantity trade-off has a double sustainability benefit:</p> <ol style="list-style-type: none"> <li>1) reduced waste</li> <li>2) selection of products with higher sustainability standards</li> </ol> <p>The reimagining of value around paying more per kg for products with credible verifiable sustainability credentials while consuming less and eliminating waste offers interesting opportunities for other food business. However, central to this is identifying the product relevant credible verifiable sustainability credentials that will gain traction on the marketplace and the provision of supporting enabling communications.</p>
<b>Identify any knowledge transfer activities executed within the project.</b>	<p>Conversations occurred throughout the research with others involved in sustainable supply chains. The workshops provided the bases for engaging with stakeholders on key elements of the work. In particular, knowledge on the alternative networks was shared and discussed with these stakeholders.</p>
<b>List any impacts resulting from the knowledge transferred during the project.</b>	<p>We are now commencing working with a research institute, two industry stakeholders and a state agency that will seek to identify credible verifiable sustainable production practices that support more sustainable choices within a specified product category. The impact of this should be observed in the coming few years.</p>

## Section 3 – Leveraging, Future Strategies & Reference

### Leveraging Metrics

Type of Funding Resource	Funding €	Summary
Other	€101,000.00	<p>A successful application to the Department of Management and Marketing's (M&amp;M) research fund provided additional resources to support data collection on this project. A research assistant was recruited into this role and completed his MSc Dissertation on the project. Following this, we were successful in securing funding from the competitive Department (M&amp;M) PhD scholarship fund to further this work. This work is exploring the role of cognitive dissonance in supporting pro-environment food behaviours and in phase 1 draws on the data generated during this research project. This work should provide clearer direction on the emotional dimensions of sustainable food practices communication that could trigger more sustainable household food practices.</p>
Exchequer National Funding	€139,990.00	<p>The work in SUSFood considered how people engage with sustainable practices based on the food supply channels they use and explored the impact of fluid and complex life practices on food practices. Insights on real context, as it applies to sustainable food practice, questions the extent to which food-based dietary guidelines for healthy and sustainable lifestyle would be implemented with households, given the diverse barriers to behaviour change. Consequently, as part of the DAFM funded project "Food based dietary guidelines for sustainable and healthy lifestyles" attention is given to consumer attitudes and awareness of food and climate change as well as willingness to modify food lifestyles. This builds on the findings of the project and leverages the data sets generated in informing the research design.</p>

### Future Strategies

The work associated with this research continues. The qualitative data is being re-interrogated to scrutinise 1) emotional responses to less-than-ideal food sustainability practices and 2) the potential to prompt avoidance motivated sustainability strategies. Building on this, we plan to undertake research to probe the role of cognitive dissonance in motivating sustainable behaviour. The effectiveness of approach/avoidance motivated emotions in triggering product category decisions and improved household sustainable practices across different segments will be explored. Additionally in parallel, as a next stage, we seek to unpick the impact of healthy-sustainable diets information on thoughts, feelings and actions to understand the barriers, perceived and real, within households and for individuals. This will seek to determine and profile factors influencing acceptability of a range of dietary and lifestyle modifications to support a healthier diet and environment. This insight should provide a strong foundation for framing sustainability related practice communications based on segment characteristics. Building further on the initial cognitive dissonance evidence, and in partnership with supply-chain stakeholders, consumer risk benefit trade-offs and the potential value of food products offering a range of production-related-credence quality attributes will be explored. Funding has been sought and secured for most of this work.

### Project Publications

#### Peer Reviewed papers

1. O'Neill, C; Hashem, S, Moran, C and McCarthy, M. (2021). Thou shalt not waste: Unpacking consumption of local food, Sustainable Production and Consumption.

#### Paper(s) Under review:

1. O'Neill, C., Hashem, S., McCarthy, M. and Moran, C. (under review). Infrastructure, Impulsivity and Waste: Exploring the (un)sustainable routines of mainstream food shoppers in Provisioning Platforms: How Social and Technological Innovations Shape Consumption Practices.

#### Paper(s) in final preparation:

1. O'Neill, C., McCarthy, M., O'Reilly, S., and Alfnes, F. (in-preparation) Food interests, preferences and behaviours: A profile of the sustainable food consumer.

#### National reports:

Can download reports from: <https://www.ucc.ie/en/eri/projects/horizon-2020-era-net-susfood2-plateforms-sustainable-food-platforms-enabling-food-practices-through-socio-technical-innovation.html>

1. McCarthy, M., O'Neill, C., and Hashem, S. (2019). Ireland's food distribution and consumption – the current state. [.ie/en/media/research/environmentalresearchinstitute/eriprojectstwo/FoodDistributionandConsumptionReport2019.pdf](https://www.ucc.ie/en/media/research/environmentalresearchinstitute/eriprojectstwo/FoodDistributionandConsumptionReport2019.pdf)
2. Hashem, S., O'Neill, C., McCarthy, M., and Moran, C. (2020). Mapping of the Online Food Supply Channels in Ireland. [https://www.ucc.ie/en/media/research/environmentalresearchinstitute/eriprojectstwo/PLATEFORMSMappingofOnlineFoodSupplyChannelsReport2020\(1\).pdf](https://www.ucc.ie/en/media/research/environmentalresearchinstitute/eriprojectstwo/PLATEFORMSMappingofOnlineFoodSupplyChannelsReport2020(1).pdf)
3. McCarthy, M., O'Neill, C., and Hashem, S. and Moran, C. (2021). An exploration of the dynamics between household food sustainability practices and food acquisition routes. <https://www.ucc.ie/en/media/research/environmentalresearchinstitute/eriprojectstwo/SummaryReportDynamicsbetweenacquisitionandconsumption.pdf>

4. McCarthy, M, O'Neill, C, O'Reilly S. and Alfnes, F (2021). Online Food Shoppers. An exploration of the relationship between frequency of use and sustainable household food practices.  
<https://www.ucc.ie/en/media/research/environmentalresearchinstitute/eriprojectstwo/OnlineFoodShoppersAnexplorationoftherelationshipbetweenfrequencyofuseandsustainablehouseholdfoodpracticesSummaryreportfinalrevised.pdf>

Published Abstracts:

1. O'Neill, Claire; Hashem, Shadi; McCarthy, Mary, (2019). Food Provision Transitions: An Audit of the Digital Landscape in Ireland 14th Conference of the European Sociological Association ESA Conference (Manchester).  
[https://www.europeansociology.org/sites/default/files/public/Coordinator/ESA\\_2019\\_Manchester\\_Abstract\\_Book.pdf](https://www.europeansociology.org/sites/default/files/public/Coordinator/ESA_2019_Manchester_Abstract_Book.pdf)
2. Moran, C., McCarthy, M., O'Neill, C., Hashem, S. and Moore, O. (2020) 'Can food provisioning systems promote sustainable dietary practices for individuals and regions: an Irish case study', '1st interdisciplinary research day on Dietary Practices, Health and Regions'. University of Western Brittany, 04 June.  
[https://www.univ-brest.fr/digitalAssets/89/89472\\_Session-2\\_4.pdf](https://www.univ-brest.fr/digitalAssets/89/89472_Session-2_4.pdf)
3. Moran, C., McCarthy, M., O'Neill, C., Hashem, S. and Moore, O. (2021) 'Necessity Breeds Ingenuity: Exploring the Sustainable Food Practices of Members of a Community Supported Agriculture (CSA)', 'Academy of Marketing Science World Marketing Congress (Virtual)'. Louisiana Tech University, 01 June. (Web link for abstract to be confirmed).

Conference Presentation with published abstract (accepted):

1. Moran, C, McCarthy M and O'Neill C. 'What do food and sustainability mean to you? An exploration of environmental food behaviours in the home'. The European Marketing Academy Conference (May 24-27 in Budapest, Hungary).

MSc Dissertation:

1. Moran, C (2020). 'Understanding how different alternative food provisioning systems impact food consumption practices of conscious consumers in the south of Ireland'.