

Beyond Neoliberalism: Values and Sustainable Consumption Behaviour 2017-2018

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ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

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- the contained use and controlled release of Genetically Modified Organisms (*GMOs*);
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- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

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The EPA Research Programme addresses the need for research in Ireland to inform policymakers and other stakeholders on a range of questions in relation to environmental protection. These reports are intended as contributions to the necessary debate on the protection of the environment.

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Contents

Acknowledgements	ii
Disclaimer	ii
Project Partners	iii
List of Figures, Tables and Boxes	vii
Executive Summary	ix
1 Introduction	1
1.1 Overview: Sustainability and Consumption	1
1.2 Research Framework and Themes	2
1.3 Aims and Objectives	3
2 Methods	4
2.1 Project Statement	4
2.2 Work Package and Project Framework Development	4
2.3 Research Questions	4
2.4 The Systematic Literature Review Approach	4
2.5 Research Approach	5
2.6 Operationalising the SLR Approach	5
2.7 Literature Database Screening and Eligibility	6
2.8 Data Extraction	7
2.9 Thematic Analysis: Interpretation and Synthesis	8
2.10 The Outputs of Thematic Analysis	9
3 Foundation Review	11
3.1 Context: Sustainability and Consumption Behaviour	11
3.2 Theme 1: The Utilitarian Approach and Consumer Responsibility	12
3.3 Theme 2: Social/Psychological Approaches – Nudging and Social Marketing	13
3.4 Theme 3: Socio-technical (Systems of Provision/Institutional) Approach	15
3.5 Conclusion: Pressures and Public Policy Solutions	17

4	Findings and Analysis	19
4.1	Introduction	19
4.2	Systematic Literature Review: Descriptive Summary of Outputs	19
4.3	The Systematic Literature Review Contribution	20
4.4	Thematic Analysis and Synthesis	20
4.5	Analysis, Framework Synthesis and Discussion	21
4.6	Governance and Sustainability Policy Development Framework	33
5	Conclusion	38
6	Dissemination	41
6.1	Introduction	41
6.2	Academic Journals and Conferences	41
6.3	Network Meetings	41
6.4	Digital Media	41
	References	43
	Abbreviations	50
Appendix 1	Selection Criteria Used to Implement the SLR	51
Appendix 2	Study Selection	53
Appendix 3	Summary of Articles Reviewed	55

List of Figures, Tables and Boxes

Figures

Figure 1.1.	Project overview	3
Figure 2.1.	The PRISMA flow diagram of the SLR approach	8
Figure 4.1.	Data selection and analysis flow chart	20
Figure 4.2.	Thematic map, showing the theoretical framework and main themes	22
Figure 4.3.	The dialectic of structure and agency	34
Figure 4.4.	The GSPD framework	36
Figure 4.5.	Sustainable consumption behaviour framework nested within societal subsystems	37
Figure 5.1.	The GSPD framework	39

Tables

Table 2.1.	The list of papers selected through the SLR process	7
Table 2.2.	Thematic analysis phases	9
Table 4.1.	Thematic characterisation of concepts mapped to data/findings in the core SLR papers	23
Table A1.1.	Inclusion criteria for the SLR	51
Table A1.2.	Exclusion criteria for the SLR	51
Table A2.1.	General screening criteria for the eligibility assessment template	53
Table A2.2.	Contribution to the sustainability paradigm using full-text evaluation	54

Boxes

Box 2.1.	Search terms for the project SLR	6
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Executive Summary

National and local policymakers have sought to encourage individuals to engage in a wide range of pro-environmental practices to address both discrete environmental problems and major global challenges such as climate change. This desktop research project explores ways to advance understanding of the values and motivations that influence sustainable consumption behaviour in Irish society. However, theoretically, the field of behavioural management in sustainable consumption is much contested

The modern industry discourse in sustainability is the idea of “green growth”, which is described as the paradox of the continuation of increased economic growth at the same time as increasing sustainability. Policymakers view the challenge as how to encourage and sustain appropriate levels of individual behavioural change to manage consumption in a changing environment. However, Hoffmann questions the “green economy” and posits that large-scale decarbonisation of the economy and society will be achieved only if current consumption patterns, methods and lifestyles are subject to change. Sustainable consumption, therefore, contains underlying assumptions about an individual’s capacity to act on or change consumption patterns. These assumptions relate to behaviour, values and governance. The state utilises a range of policy measures to achieve its policy goals, which are based on its working assumptions regarding individual and collective behaviour. Both intrinsic and extrinsic values motivate behavioural change in individuals. Psychological theory has traditionally been more concerned with intrinsic motivation, in attempts to explain self-driven behaviour such as exploration and seeking challenges, where there are no obvious external reinforcements. However, it is the extrinsic values, those that generally link an individual’s assessment of effort to some extrinsic end, that have been promoted in managing consumption in society.

This study is unique both in the Irish context and in the international context in moving beyond a simplistic approach that addresses discrete elements of human consumption behaviour and seeking to understand their embeddedness within the culture and institutions

of wider society. This desktop research addresses this challenge through four discrete work packages designed to examine, interrogate and integrate the wider literature in the area of human consumption behaviour. These work packages include and build on the phases of literature development in (1) individual consumer engagement and consumption behaviour, including the attitude–behaviour gap and the consumption cycle; (2) the consumer-citizen and motivation; (3) collaborative consumption within a wider societal and governance framework; and, finally, (4) recommendations and a framework based on a full analysis of the current state-of-the-art in the area of consumption behaviour and sustainability through the use of systematic literature review methodology. Thus, this desktop research explores ways to gain a better and wider understanding of the values and motivations that influence sustainable consumption behaviour. This is a unique endeavour addressing:

- a major global societal challenge through improved understanding and co-operation across sectors, disciplines and themes for mutual benefit;
- current government policy, which seeks to consider the appropriate mix of suitable policies and instruments in the context of encouraging behavioural change to advance sustainable consumption behaviour;
- the status and potential of policy approaches directed at addressing the United Nations (UN) Sustainable Development Goals (SDGs);
- the need for further interdisciplinary research and capacity building.

The challenge of sustainable consumption is multifaceted as we struggle as a society not only to come up with solutions but also to understand what the actual questions should be. This study presents the synthesis of a systematic literature review coupled with a new understanding of the challenges of consumption policy, social structures and the boundary arrangements of governance. What emerges is a focus on the institutional and governance (socio-technical) approach. When addressing core interlocking

pillars integral to the management of sustainable consumption, 27 principles of change are identified, including key findings that:

- governments must:
 - i accept their responsibility for ensuring social and environmental equity to truly strive for sustainability in society;
 - ii ensure greater transparency such that values and standards and their effectiveness are clearly demarcated;
 - iii act together with institutions in drawing on existing structures and systems to effect change towards a more sustainable state;
- the economic system must:
 - i avoid the narrow understanding of prosperity and the risk of uneconomic growth;
 - ii distinguish between “growth”, which is narrowly based, and “development”, which is broader, multifaceted, more robust and enduring;
 - iii recognise and incorporate the level of consumer liberty in a choice set;

- consumers-citizens must:
 - i understand and promote citizenship as a right, not just an obligation;
 - ii be encouraged and facilitated to engage, participate and trust;
 - iii engage in and demonstrate moral rational reasoning that defines belief systems.

Thus, this evidence-based review proposes a new framework, the Governance and Sustainable Policy Development (GSPD) framework, or “road map”, to guide decision making and aid understanding of what motivates individuals and institutions within a wider neoliberal societal system to manage their consumption from a more sustainable policy and governance perspective. Indeed, a startling revelation of this research is that the rhetoric that places the focus of responsibility for sustainable consumption at the door of the consumer is misplaced. This study suggests that governments and institutions are remiss in this emphasis and that a new model is required that recognises the responsibility of those empowered to govern in driving sustainability and that acknowledges their role in defining societal values.

1 Introduction

1.1 Overview: Sustainability and Consumption

National and local policymakers have sought to encourage individuals to engage in a wide range of pro-environmental practices to address both discrete environmental problems and major global challenges such as climate change (Barr *et al.* 2011). In the Irish context, much useful work has been carried out in encouraging individual consumers to manage their consumption behaviour (Davies *et al.*, 2014a,b; Carlin *et al.*, 2016; Carragher and McCormack, 2018). However, despite considerable work nationally and internationally, progress has been slow, and both theoretical and applied dimensions of behavioural management in environmental consumption are highly contested (Hall, 2013; Shove, 2014).

The context for this unique and well-timed piece of research is that human consumption behaviour is nested within wider society and its values, and is now increasingly under pressure to respond to a changing environmental system. Sustainable consumption behaviour in the context of climate change is a grand challenge that has been characterised as a “super wicked” problem because of the scale, scope and time horizon over which mitigation efforts must take place, without a central authority (George *et al.*, 2016). George *et al.* (2016) note that corporate responses to such challenges may be visionary and expansive initially, but become diluted over time because of the sheer contentiousness of the issues. The modern industry discourse on sustainability is the idea of “green growth”, which is a paradox of continued economic growth in the context of promoting increased sustainability (Hall, 2013). Policymakers view the challenge as encouraging and sustaining appropriate levels of individual behavioural change to manage consumption (DEFRA, 2005; 2008). Hoffmann (2011) questions the “green economy” and posits that large-scale decarbonisation of the economy and society will be achieved only if current consumption patterns, methods and lifestyles are subject to change. Koch (2012) suggests that nothing short of absolute decoupling of growth and resource consumption is

needed to achieve sustainability and stabilise the impacts of climate change.

There has been a shift over time in the relationship between governments and individuals, with an overarching societal paradigm of the role of individuals as agents of change (Seyfang, 2005). Barr *et al.* (2011) note that attention (policy and otherwise) in Western democracies on individuals as a means or focus to tackle environmental problems has continued to grow. The citizen-consumer perspective has been operationalised in a number of ways to explore how individuals can be encouraged to act as agents for positive environmental change (Spaargaren and Mol, 2008). Both intrinsic and extrinsic values motivate behavioural change in individuals. Psychological theory has traditionally been more concerned with intrinsic motivation to explain self-driven behaviour, such as exploration and seeking challenges, where there are no obvious external reinforcements (Amabile *et al.*, 1994). However, it is the extrinsic values, those that are judged good by reference to something else and include an individual's assessment of effort as a means to some extrinsic end (tangible benefit), that have been to the fore in managing consumption in society (Hall, 2013; Zimmerman, 2015). This project seeks to address a number of key concepts in human consumption behaviour, including both intrinsic and extrinsic values at the individual and community level and also the impact of wider societal values and pressures. This approach comes at a time when there are movements, nationally and internationally, to address the “grand challenges” that human consumption creates for our planet.

An approach is now needed that addresses the systematic, structural and institutional perspectives on how institutions, through public policy initiatives, can develop and sustain change in consumption behaviour towards future sustainability. The challenges to sustainability and sustainable development have been amplified by the continued growth of the global economy (McDonagh and Prothero, 2014). Therefore, the problems related to unsustainable consumption are growing and the approach to addressing them

must become more intentional, comprehensive and systematic (Prothero *et al.*, 2011). According to Dunlap and Van Liere (1978, 2008), a key challenge to green governance, sustainability and sustainable consumption has been the dominant social paradigm, which can be characterised by a belief in unlimited abundance and progress, materialism, faith in the power of technology, minimal government intervention and unlimited private property rights, which greatly defines our neoliberal discourse (see also Prothero *et al.*, 2011; Kilbourne *et al.*, 1997). In the wider European context, there is a call for improved governance across all sectors in order to manage sustainable consumption (EC, 2010; OECD, 2011; DECLG, 2012). The link between sustainability and health and well-being has been explicitly set out (Haines *et al.*, 2012; Department of Health, 2013). A clear need has been identified to create an environment in which every individual and sector of society can play their part in achieving a “good society”. This can only be done through society-wide involvement in, and engagement with, cross-sectoral sustainability linking environment, economy and human health.

1.2 Research Framework and Themes

This desktop research examines the extensive literature on managing positive consumption behaviour in order to seek a greater understanding of the state-of-the-art. Utilising Hall's (2013) model of behavioural dynamics, as influenced by the work of Sedlacko *et al.* (2014) and Fuchs (2017), as well as emerging themes from the literature, a framework of three dimensions was identified. The wider literature on consumption behaviour fits within these three themes based on the locus of responsibility: the utilitarian, the social/psychological and the socio-technical (systems of provision/institutional) approaches. The first, the utilitarian approach, underlies much contemporary neoliberal economic policy (Bone, 2010), focusing on the inconsistency of consumer attitudes and behaviours. The second approach, the social/psychological model, includes both behavioural economics and social marketing, and considers the role of the individual within society as a citizen-consumer and either seeking to configure choice architecture for citizens (Alemanno, 2012; Hall, 2013) or utilising social marketing to build public awareness

and behavioural change (Jones *et al.*, 2011). The third approach is the socio-technical (systems of provision/institutional) model, which considers individual psychological factors and values within the context of the systems, standards and norms under which individuals operate (Prothero *et al.*, 2011; Hall, 2013; Higham *et al.*, 2013). This final approach addresses the systematic, structural and organisational perspectives on how institutions, through public policy initiatives, can begin change towards sustainability and sustain change in the future (Moloney *et al.*, 2010). It considers the values of the individual, both intrinsic and extrinsic, nested within a context of the constraints and norms of governance, institutions and wider society.

This themed framework was also informed by the works of Sedlacko *et al.* (2014) and Fuchs (2017), which identify the agency inherent in approaches to sustainable consumption. This includes individual or consumer responsibility; individual or community consumption situated within wider social, economic and technological structures; and, then, more “systemic” conceptions of consumption as socio-technical systems, originating in sociology with the possibility of transition to greater “societal” responsibility and the involvement of wider institutional actors (Geels *et al.*, 2015, Shackley and Green, 2007).

Thus, this overarching project framework was used to develop and guide the literature search and define the three key areas of enquiry. These correspond to the project work packages (Figure 1.1) and include the:

1. utilitarian approach and consumer responsibility;
2. social/psychological approach and managing the consumer in social-economic-technological structures;
3. socio-technical (systems of provision/institutional) approach.

The report considers the relevant national (Irish), European Union (EU) and international sustainable policy landscape in the face of environmental pressure. This chapter introduces the context and state-of-the-art in relation to sustainability and consumption, along with the format and objectives of the study. Chapter 2 outlines the study methodology, including the approach to addressing the project work packages using the three themed schema presented above, built on a traditional literature review to provide

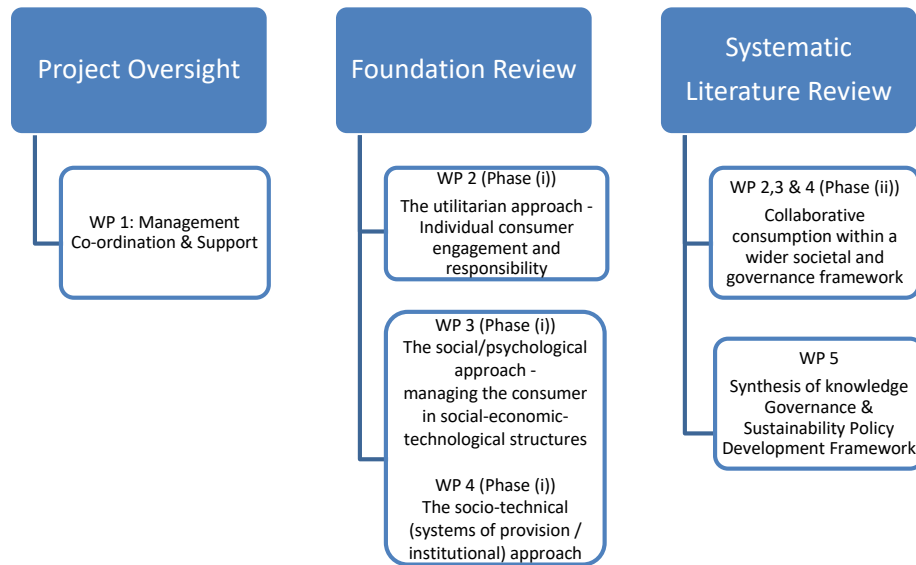


Figure 1.1. Project overview.

a framework for analysis for a full systematic literature review (SLR). This SLR links work packages 2, 3 and 4 to interrogate the wider literature and develop an evaluation of the findings using thematic analysis. Chapter 3 presents the foundation review of the literature on consumption behaviour and sustainability. It identifies the implications for society and presents a summary of the pressures identified, how policy can be informed and how solutions can be developed. Chapter 4 provides a mining of the wider literature through the findings and analysis of the SLR and grey literature outputs. It develops and explores these findings through a thematic mapping on consumption and sustainability literature nationally and internationally. It also discusses potential solutions in the contested space between consumption, society and the natural limits of environmental systems. Chapter 5 presents a synthesis of concepts and data and sets out the 27 principles of change central to the advancement of sustainable consumption for individuals, groups and communities within the wider societal fabric – the Governance and Sustainability Policy Development (GSPD) framework. Finally, Chapter 6 reviews the key dissemination activities and implementation of the project and outputs.

1.3 Aims and Objectives

This project sets out to explore value systems in society that in turn define behavioural patterns at the governmental, institutional, community and individual level. It seeks to assess the diverse literature on the

topic of environmental sustainability, consumption behaviour and sustainability. This assessment will be undertaken with regard to:

- individual consumer engagement and responsibility;
- managing the consumer-citizen and motivation;
- collaborative consumption within a wider societal and governance framework, exploring the societal framework within which individuals make decisions that define sustainability.

The purpose of this research is to:

- inform sustainable policy development and governance;
- establish the extent to which existing research through the use of SLR methodology has progressed towards generating approaches that facilitate the development of sustainable policy and identify relations, contradictions, gaps and inconsistencies in the literature on sustainable behaviour in Irish, European and Western societies;
- disaggregate and map the components and dynamics of sustainable governance and societal and individual sustainable behaviour to establish an overarching concept model for the development of policy that nurtures and advances behavioural dynamics at the institutional, community and individual levels towards a more environmentally sustainable state.

2 Methods

2.1 Project Statement

This project examines the seminal literature contributions that define the theory of sustainable governance and consumption in order to (1) disaggregate and interrogate the core ideas, (2) reconfigure and synthesise a new understanding of where current thinking rests and (3) offer a template to advance the sustainability agenda. It develops an innovative approach grounded in the literature and centred around sustainability-oriented behaviour to inform a new societal paradigm. This was addressed through a series of work packages that sought to explore ways to gain more understanding of the values and motivations that influence sustainable consumption behaviour. The approach adopted recognised the need to include the interaction of societal values with regard to their intrinsic as well as extrinsic dimensions, and sought to address the consequences of this in terms of a framework for citizen empowerment, governance and sustainable policy development in the drive for a new environmental paradigm.

2.2 Work Package and Project Framework Development

The themed project framework was developed from a review of the wider literature and closely aligned with the works of Hall (2013), Sedlacko *et al.* (2014) and Fuchs (2017). The structure that emerged was grouped under three key areas of enquiry (corresponding to work packages 2–4) (see Figure 1.1):

1. the utilitarian approach and consumer responsibility;
2. the social/psychological approach and managing the consumer in social-economic-technological structures;
3. the socio-technical (systems of provision/institutional) approach.

The data from the literature were evaluated and mapped back to the issues identified within each of the

work packages through the research questions and provided the framework for a deeper interrogation of the literature through a SLR methodology.

2.3 Research Questions

- What societal dynamics drive consumption behaviour and how is environmental sustainability integrated into the decision-making process at governance, institutional, community and individual levels?
- What intrinsic and extrinsic dimensions of society control sustainable behaviour and decision making at the individual, institutional, community and governance levels?
- What is the most effective approach (road map) to the design of strategies, policies, initiatives, programmes and plans that can advance individual and societal behaviour and institutional and governance models towards a more environmentally sustainable state?

2.4 The Systematic Literature Review Approach

Sustainability is a fundamental imperative for human society, yet the understanding of the topic of sustainability in society is rapidly evolving and shows complex and dynamic characteristics that present a special challenge from a control, policy development and governance standpoint. The true meaning of sustainability is not well defined or agreed and its effective implementation is contested. Thus, this study sought to utilise the SLR methodology to mine for, and target, key insights that update and widen our understanding of sustainable consumption as a value-based process. This re-focus on the reference frame of individual behaviour is a fundamental requirement to leverage real behavioural change and advance environmental sustainability and societal well-being.

Systematic literature reviews and meta-analyses are essential tools for summarising evidence accurately and reliably. The use of a SLR approach facilitates the interrogation of broader questions than a single empirical study can address (Baumeister

and Leary, 1997). Indeed, the SLR methodology has the potential to (1) provide insight to some of the most important contributions, (2) advance understanding and practice implementation and (3) provide a rigorous foundation for the advancement of knowledge. The approach is characterised by being objective, transparent and replicable. The SLR involves a systematic search process that collates empirical evidence that fits prespecified eligibility criteria to answer a specific research question or set of questions. This facilitates the systematic synthesis and presentation of characteristics and findings of the research. The criteria for inclusion and exclusion in the SLR approach are objective, explicitly stated and consistently implemented throughout the study. In this report we adopt the definitions used by the Cochrane Collaboration (Deeks *et al.*, 2011) in SLR implementation. The key characteristics of a systematic review are (1) a clearly stated set of objectives, (2) a systematic and rigorously documented search process designed to identify all relevant studies that meet the eligibility criteria, (3) an assessment of the validity of the findings of the included studies and (4) a structured appraisal, synthesis and presentation of the concepts, characteristics and findings of the included studies (Liberati *et al.*, 2009; Moher *et al.*, 2009).

2.5 Research Approach

Drawing from the work of Adams *et al.* (2016), three stages in the literature search process were distinguished:

1. The thematic schema was developed as the initial “architecture” for reviewing the wider literature (work packages 2–4) and its underlying assumptions and key dimensions (see section 2.1 and Figure 1.1). This foundation review provided the necessary context and conceptual development to enable a deeper interrogation of the topic and to address the research questions in a rigorous scientific manner for the advancement of knowledge. It also provided guidance on the key search terms to be used in the SLR and on the generation and selection of the grey literature.
2. This was followed by a full systematic review of the literature as per SLR protocols, which include five steps for producing a systematic review:
 - (1) formulating the question(s), (2) locating studies, (3) study selection and evaluation, (4) analysis and synthesis, and (5) reporting results (Deeks *et al.*, 2011; Denyer and Tranfield, 2009, Welch *et al.*, 2012).
3. The outputs of this process were then subjected to a conceptual analysis and framework synthesis utilising the thematic schema as it is shaped, reinforced and refined by findings from the included studies (Dixon-Woods, 2011; Thomas *et al.*, 2013). The objectives of this project’s SLR were defined as follows:
 - establish the extent to which existing research has progressed towards generating methodologies, tools and templates that facilitate the development of sustainable policy;
 - identify relations, contradictions, gaps and inconsistencies in the literature on sustainable behaviour in Irish, European and Western societies;
 - explore reasons for the diversity of perspectives presented in the literature on sustainability as a process and propose new conceptualisations or theories that may account for these inconsistencies;
 - disaggregate and map the components and dynamics of sustainable governance and societal and individual sustainable behaviour;
 - generate an overarching conceptual model for the development of policy that nurtures and advances behavioural dynamics at the institutional, community and individual levels towards a more environmentally sustainable state;
 - provide a road map for the advancement of future research.

This approach addresses the questions set out in section 2.3.

2.6 Operationalising the SLR Approach

The initial phase in the SLR methodology involved scoping the topic to ascertain the range and scale of published or publicly available research contributions on the subject of interest. The body of literature in this

field is vast and the scoping task provided a grounding and context for subsequent implementation of the SLR approach.

From the research questions, the keyword search terms were identified, with Boolean terms applied to control search dynamics. The search terms and associated Boolean operators included sustainable “or” sustainability; “and” environment “or” environmentally; “and” consumer behaviour “and” governance “and” policy “and” values “and” intrinsic “and” extrinsic (Box 2.1). As the characteristics and nature of a data source were deemed essential in determining the relevance and validity of a given paper or study within the SLR process, this was confirmed by reference to a range of inclusion and exclusion criteria. These criteria included the search time frame, the type of publication, the discipline type and the nature of the record to be sourced and displayed (e.g. full text) and the language of publication (e.g. English).

The nature of sustainability and the challenges of environmental change have generated a substantial number of contributions from a wide range of disciplines and fields of interest, particularly over the last two decades. In this regard it was important to ensure that the selected search terms and inclusion and exclusion criteria were designed with an appropriate level of specificity (see Appendix 1). This was required to generate higher precision in the

selection of studies and hence improve the quality and confidence that can be placed on the conclusions and outcomes of the analysis. The inclusion/exclusion criteria were designed to select full-text articles and all scholarly material, including peer-reviewed articles. The option to include results beyond the library collection was included but caused no change in the article list selected from the database system. It was decided to search from 2002 (Rio+10 Summit) to the present (17 January 2018) on the basis that this is the most relevant period for review, given the contemporary nature of the research topic, the rapid and dynamic changes in society and the shifting global perspective on the sustainability of the anthropic–environmental nexus.

Given the focus on novel theoretical developments in sustainability and society and the translation context to practice and implementation it was decided to exclude “grey” literature from the search term phase of the SLR. Grey literature, which is defined as literature produced by institutions and organisations outside the normal academic publication channels, was addressed through a separate protocol for selection and evaluation. Additionally, literature sourced at the same stage of the review process but from outside the structured SLR protocol is categorised as grey literature, even when it conforms to the criteria of a traditional academic publication. This keeps a clear distinction between SLR-generated material and material sourced contemporaneously through other channels.

Box 2.1. Search terms for the project SLR

Sustainable
Sustainability
Environment
Environmentally
Consumer behaviour
Governance
Policy
Value
Values
Intrinsic
Extrinsic

2.7 Literature Database Screening and Eligibility

In total, 89 databases were selected for consideration, including Scopus, JSTOR, Web of Science and the Social Sciences Citation Index. This approach generated a master list of 349 papers and studies (Table 2.1). These papers were then screened using criteria not readily identifiable through the facilities of the “Search Term” and “Inclusion/Exclusion” processes offered in the database interrogation systems (see Appendix 2, Table A2.1). Outcomes of this task underscored the need to limit this study in terms of its time frame of reference and with regard to definitions of what constitutes the most appropriate societal–environmental focus of sustainability. In order to advance the assessment of the SLR literature and grey literature lists and ensure quality and consistency,

Table 2.1. The list of papers selected through the SLR process

Search terms	Boolean operator	Number of articles identified (at 17 January 2018)
Sustainable	OR	
Sustainability	AND	1,175,290
Environment	OR	
Environmentally	AND	853,504
Consumer behaviour/consumer behavior	AND	88,052
Governance	AND	23,095
Policy	AND	21,492
Value	OR	
Values	AND	20,036
Intrinsic	AND	2370
Extrinsic		349

Database search engines: OneSearch – University College Dublin; Search All/Summon at DIT – Dublin Institute of Technology Library Catalogue.

the included papers were then evaluated using eligibility criteria (see Appendix 2, Table A2.2).

Grey literature comprises information that is not produced by commercial publishers and includes outputs such as research reports, working papers, conference proceedings, theses and White Papers, as well as reports produced by government departments and industry. The grey literature included relevant papers/reports and publications from within the databases of the Environmental Protection Agency (EPA) and Irish government/EU sources. Grey literature was incorporated into the data by means of a “handsearch” approach, using a referral basis from the reference sections of the final core papers identified in the formal SLR approach. This process has high specificity and was adopted only when the contribution of the referred paper or study was deemed as fundamental. This resulted in a grey literature master list of 87 papers, studies, publications and reports. The grey literature list was subjected to the same screening and eligibility assessment as the SLR literature. The SLR literature and the grey literature lists were kept as separate data categories for clarity and tracking purposes.

The flow of phases in assessing selected articles is mapped using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram scheme (Liberati *et al.*, 2009; Figure 2.1), which was adopted and tailored to the needs of this study. The PRISMA statement focuses on ensuring the

transparent and complete reporting of the systematic review process.

2.8 Data Extraction

An a priori data extraction and analysis template was developed as per Hall (2013), with reference to the thematic schema set out earlier (see section 2.2) and incorporating the focus of the research questions. The data extraction process also drew input from the Cochrane Consumers and Communication Review Group’s data extraction template (Deeks *et al.*, 2011) and the ENTREQ template (for enhancing transparency in reporting the synthesis of qualitative research) (Tong *et al.*, 2012). This resulting framework template was then contextualised and modified through an iterative and structured analysis of the content and themes presented in the 30 core papers of the study. It was also informed by Sedlako *et al.*’s (2014) framework incorporating actor identification and agency. The extraction of data from the studies and articles was undertaken using the independent double-blind review approach (by both authors) to enhance concept mining, insight development and selection reliability. Comparisons were made within and across studies based on an interrogation of the data fields, theoretical contributions and quality indicators of the data within the studies. This framework synthesis used is similar to framework analysis (Pope *et al.*, 2007), a matrix-based technique for data analysis in primary qualitative research involving construction of thematic

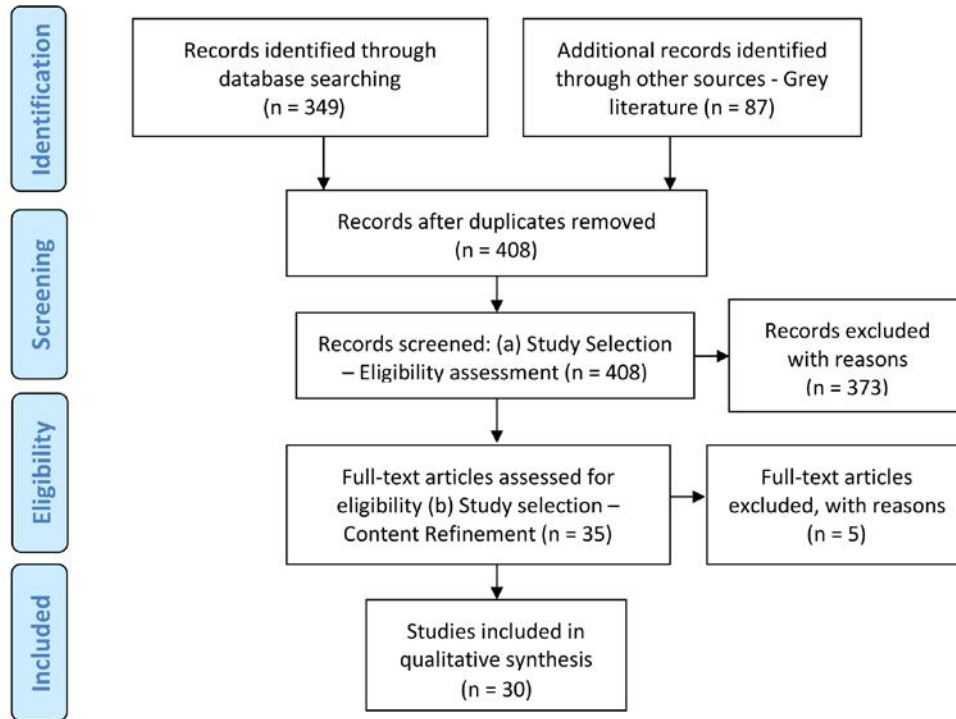


Figure 2.1. The PRISMA flow diagram of the SLR approach.

categories into which data can be coded (Ritchie and Spencer, 2002).

The bibliographic characteristics of the SLR papers were extracted using a specially designed spreadsheet. The selected studies were coded according to study design, research quality, type of evidence and discipline. Many of the papers identified were conceptual and theoretical in nature. Grey literature coding focused on innovation and implementation activities. Thus, the characterisation profile of the SLR papers and the systematic data extraction process provided a sequential, structured and robust assessment of the contribution of each paper in the defined thematic areas.

2.9 Thematic Analysis: Interpretation and Synthesis

The data interrogation model adopted in this desktop study used thematic analysis (Braun and Clarke, 2006) as a basis for the exploration of the concepts, theories, processes, actions and interactions reported in the core selected literature and informed by the project framework (see Chapter 3). The end point of this analysis is the development of the “building blocks” of a new theoretical model or construct that can provide a “road map” for the advancement

of sustainable consumption policy. In exploring the data, the rate of occurrence of a theme or concept was documented. However, the focus of the thematic analysis was to look for patterns of occurrence within the papers’ contexts, utilising the framework to aid analysis. The reporting of this content with its strategic conceptual outlook and the meaning of patterns in the data were developed and refined through an iterative and sequential process of identifying themes before, during and after analysis (Table 2.2). The validity of this approach is dependent on a careful analysis of the data with reference to the underlying assumptions (theoretical underpinnings) of the framework adopted.

2.9.1 *Decision: deductive or inductive thematic analysis*

Themes or patterns within the data were identified from a deductive or “top-down” perspective, in contrast to the inductive approach in which themes are shaped by the data in an unbounded manner (Boyatzis, 1998; Hayes, 1997). This deductive or “theoretical” thematic analysis approach is driven by the defined theoretical or analytical interest in the area of consumption behaviour, sustainability and values, as defined earlier (see sections 2.1 and 2.3).

Table 2.2. Thematic analysis phases

No.	Thematic analysis phases	Description of thematic analysis phase tasks
1	Familiarisation with data	Transcribing data (if necessary), reading and re-reading the data, noting initial ideas
2	Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4	Reviewing themes	Checking if the themes work in relation to the coded extracts (level 1) and the entire data set (level 2), generating a thematic “map” of the analysis
5	Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story that the analysis tells, generating clear definitions and names for each theme
6	Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating the analysis back to the research questions and literature, producing a scholarly report of the analysis

Source: adapted from Braun and Clarke (2006).

This form of thematic analysis tends to provide a more detailed analysis of key aspects within the data (the core literature review papers). This involves coding the data with reference to the specific research questions (which map onto the theoretical underpinnings) and links with the work packages and their associated objectives.

2.9.2 *Decision: semantic or latent themes*

Another aspect of the results concerns the “level” at which themes were identified: whether at a semantic or explicit level, or at a latent or interpretative level (Boyatzis, 1998). The semantic approach identifies themes within the explicit or surface meanings of the data. However, this work followed the latent approach, which goes beyond the semantic content of the data and starts to identify or examine the underlying ideas, assumptions, conceptualisations and ideologies that are theorised as shaping or informing the semantic content of the data. Thus, using latent thematic analysis, the development of the themes themselves involved interpretative work, and the analysis that is produced is not just description, but is already theorised. Analysis within this latter tradition tends to come from a constructionist paradigm (Burr, 2006). Thus, broader assumptions, structures and/or meanings are theorised as underpinning what is actually articulated in the data.

2.9.3 *Decision: epistemology – essentialist/realist versus constructionist thematic analysis*

Thematic analysis can be conducted from either a realist/essentialist perspective or a constructionist paradigm. In the essentialist/realist approach the data are interrogated and theorised in a largely unidirectional manner, linking meaning and experience. In contrast, the constructionist perspective interprets the data in the context of their social setting and seeks to theorise while recognising the socio-cultural contexts and structural conditions that define the data. This study adopted the constructionist model, which is consistent with the theoretical assumptions of the study (see section 1.2). It is also recognised that thematic analysis that focuses on “latent” themes tend to be more constructionist (Braun and Clarke, 2006).

2.10 The Outputs of Thematic Analysis

Thematic analysis has been presented as a method for identifying, analysing and reporting patterns (themes) within data. It organises and describes the data set in rich detail. Additionally, it typically goes further than this and provides the opportunity to interpret aspects of the research topic (Boyatzis, 1998). To this end, the literature review data were evaluated and analysed using the six phases of thematic analysis and with close reference to the original research questions (see section 2.3).

2.10.1 Familiarisation with the data

In phase 1, the master list of papers identified by the SLR process (including the selected grey literature papers) was reviewed and core data were extracted using the data extraction template. This is an iterative process that was repeated a number of times. Extracted data were tabulated and arranged using the SLR approach presented earlier (see section 2.8). The narrative content of the papers was analysed and the contribution to knowledge and understanding noted. This process recognises the core concepts, disciplines, theories and arguments presented in the relevant papers.

2.10.2 Generating initial codes

In phase 2 of the analysis, the data were evaluated, labelled and grouped into categories that defined features of interest or importance. This process was performed in an iterative systematic manner across the entire data set to build a body of contributions with demonstrable commonality and overlaps or links. These labelled ideas, which represent conceptual contributions, collectively form knowledge categories and these in turn transform to the embryonic themes.

2.10.3 Searching for and reviewing themes

Patton's (1990) approach for dual criteria judging categories with respect to internal homogeneity and external heterogeneity was used in the analysis of themes. The general approach sought to ensure that data within themes cohered together meaningfully, with a clear and identifiable distinction between themes.

In phase 3, themes were codified and grouped along the axes of the theoretical schema. In phase 4, these initial themes were reviewed, re-evaluated and revised

further, first at the level of the coded data extracts and then at the level of the themes, to assess how strongly they formed a coherent pattern. They were then evaluated at the level of the entire data set. At this level, the assessment considers the validity of individual themes in relation to the data set and whether or not the thematic map (see Figure 4.2) "accurately" reflects the meanings evident in the data set as a whole.

2.10.4 Defining and naming themes and outputs

In phase 5, the themes were subjected to further analysis and refinement through a re-evaluation of the embedded data and a formal definition of themes was developed. Care was taken to avoid any paraphrasing of the content of the data extracts. The objective of this analysis was to clearly identify what was of interest about the data and why. A detailed account was presented for each individual theme triangulated from the literature review data (see Table 4.1). This phase also evaluated the links between the themes themselves. Themes were finally defined by a clear short definition including discipline, scope and content. In phase 6, the themes were collated into a cohesive assessment that addressed the research problem and provided insight to the arguments surrounding the research questions. This provided a framework for policy analysis and an assessment of current thinking in sustainable practice and research. In the analytical narrative, extracts were analysed and embedded to illustrate the essence of the points being demonstrated and link back to work package objectives.

The themes and models generated from the SLR are reported and analysed in Chapter 4, including the thematic map, which is presented in Figure 4.2.

3 Foundation Review

3.1 Context: Sustainability and Consumption Behaviour

This desktop research project set out to explore the values and motivations that influence human consumption behaviour with a specific focus on intrinsic versus extrinsic values, within the context of the current dominant neoliberal philosophy that places more emphasis on extrinsic values. A key backdrop to this report is a growing realisation globally that policies for and approaches to managing sustainable consumption have to move beyond the focus on individual citizen or consumer responsibility to acknowledgement of the responsibility of wider society (Dyllick and Muff, 2016; George *et al.*, 2016).

Some people think that securing current industries and their jobs is more urgent than transforming our economies to meet the challenge of global change ... but we must find a transition to a low-carbon economy. What is the meaning of our life, really, if we work and live destroying the planet, while sacrificing the future of our children? (President of France, E. Macron's, address to the American Congress, 25 April 2018; De Young, 2018)

Considerable debate continues regarding behavioural change and policy learning at both an individual and a societal level, and where the balance of responsibility between these two levels should rest. According to Spaargaren (2011), the ways in which ordinary people deal with environmental matters requires detailed examination: how do they perceive, understand, evaluate and manage the connections between their personal lifestyle and routine consumption practices and the challenges of global environmental change? Policymakers may seek to gain a better understanding of the everyday consumption practices of consumers or citizens in order to reduce the burden on natural systems and recognise the need to promote and embed sustainable patterns of behaviour in society (Dietz *et al.*, 2009). However, advancing this process necessitates developing a greater understanding of the context in which decisions are made, whether by individuals or by organisations, and acknowledging

the twin dimensions of societal dynamics and the complexity of the interaction process with the concept of sustainability. However, influenced by neoliberalism, contemporary economic thought typically views humans as individuals who want to maximise their utility in the marketplace (Sandel, 2013). This suggests that individuals should be viewed as operating in a narrow economic paradigm where normative arguments for implementing greater sustainability fail because they are insufficient to counteract the conditions affecting decision making that are focused on maximising profit as the primary operational value. According to Morgan (2017), this leads to consideration of individuals in a very limited context, external to the environment, which in turn encourages governance and control systems to frame the environment as "other" and existing merely as a resource for exploitation. This chapter seeks to frame the current debates in consumption behaviour from the wider literature as per the project review schema developed earlier (see Figure 1.1 and section 2.2):

1. the utilitarian approach and consumer responsibility;
2. the social/psychological approach and managing the consumer in social-economic-technological structures;
3. the socio-technical (systems of provision/institutional) approach.

The wider literature on consumption behaviour fits within these three themes based on the identified locus of responsibility and focus on agency. The first theme, the utilitarian approach, underlies much contemporary neoliberal economic policy (Bone, 2010). It is based on the belief that individuals consume goods and services in free markets with perfect competition and information to decide a course of action that delivers the greatest personal utility. This affords an opportunity to micro-focus on the inconsistency of consumer attitudes and behaviours. The second theme, the social/psychological model, includes both behavioural economics and social marketing and has emerged as a critique of the first approach. This approach considers the role of the individual within

society as a consumer-citizen. Behavioural economics stems from the belief that individuals “satisfice” by choosing options that satisfy most needs but are not individually optimal (Simon, 1965). This has resulted in the growth of “nudging”, which seeks to configure a choice array in a policy instrument for citizens so that they are steered towards making positive decisions for society while preserving individual choice (Alemanno, 2012; Hall, 2013). The main focus of behavioural change from a consumption studies perspective is through the tool of social marketing, which can be defined as the adaptation of commercial marketing technologies to programmes designed to influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part (Andreasen, 1994). As such, social marketing utilises softer powers to build public awareness and change behaviour through the gradual establishment of new, and collectively held, behavioural norms (Jones *et al.*, 2011). Again, this approach is not without its critics, of being paternalistic and without regard to the individual’s context (Shove, 2010, 2014). The third theme is the socio-technical (systems of provision/institutional) approach, which considers individual psychological factors and values within the context of the systems, standards and norms under which individuals operate (Prothero *et al.*, 2011; Hall, 2013; Higham *et al.*, 2013). According to Moloney *et al.* (2010), this is fundamental to the development of successful strategies and policies to shift towards sustainable consumption. This approach addresses the systematic, structural and institutional perspectives on how institutions, through public policy initiatives, can begin change towards sustainability and sustain change in the future. It considers the values of the individual, both intrinsic and extrinsic, within a context of the constraints and norms of institutions, governance and wider society.

3.2 Theme 1: The Utilitarian Approach and Consumer Responsibility

The utilitarian approach to behavioural change utilises a conventional neoclassical microeconomic view of consumption by individuals as rational utility maximisers (Hall, 2013). Varman and Vikas (2007) describe the neoliberal belief as one in which markets, without institutional intervention in the main, and operating in an unfettered global order, are theorised

to lead to the most efficient distribution of resources and to optimise societal welfare. However, several macro-marketing scholars have questioned the efficacy of markets controlled by private enterprise in ensuring consumer well-being (Varman and Vikas, 2007; Prothero *et al.*, 2011; McDonagh and Prothero, 2014). According to Hall (2013), the neoliberal belief is that promotion of sustainable consumption relies on the intervention of government to correct market failures and to ensure that individuals, both private citizens and corporate entities, have access to greater information to inform their decisions. Thus, the argument is that educating and equipping consumers with information to overcome information deficits will ensure that actors will behave in a rational way. However, the evidence is to the contrary, as access to information and education regarding climate change and sustainable consumption has not led to significant changes in sustainable consumption behaviour (Gadenne *et al.*, 2011).

Bone (2010) eloquently describes how long-term rational planning and organisation at a national and global level has receded in favour of a “fatalistic reliance” on market mechanisms to control economic and wider public affairs in a manner that exposes everyday lives to the unpredictability of unfettered market fundamentalism. Globally and at national government level, strategic planning practices are increasingly guided by neoliberal political agendas (Gadenne *et al.*, 2011). Governments typically view growth as a priority as it is perceived as preventing or mitigating economic crises. This is true even in the face of imminent environmental crises, when growth usually takes priority over stewardship of the environment. Morgan (2017) notes that, in the Irish context, the government has pursued an aggressive growth policy enshrined in the intensification of domestic agricultural policy, the prioritisation of multinational corporations with investment supports and a deference in relation to foreign direct investment, which is seen as a policy holy grail. Morgan (2017) describes Ireland as an example of a state that leans heavily towards neoliberalism in the context of its status as a small, late-developing and geographically peripheral actor in the EU. In that regard, Ireland has followed a strategy of loose regulation, adherence to market influences and control of the public sector. This has been marked by an extension of managerialist control within the public

sphere, which has intensified systems of bureaucratic organisation, particularly focused on achieving narrowly defined goals over short time scales (Olesen, 2014). Many neoliberal reforms in the public sector have been driven by a new public management (NPM) ideology and, as such, their implementation has often been problematic, as the ambiguity of the ends they seek are often problematic in themselves (Rein, 2006). These NPM-driven reforms often function as legitimating devices, thus appearing egalitarian and in the best public interest (Lapsley, 2001).

However, recent global crises (e.g. the banking crises, economic failures, austerity and health inequality, climate change, environmental degradation, immigration flows) have led to questioning of the neoliberal agenda, as belief in the markets has led to outcomes such as growing political unrest and reduced trust in government. Despite these developments, there has been an increasing normalisation of neoliberal practices and concepts in the socio-political system that continues to hold sway (Harvey, 2005; Olesen, 2014). The anonymity of neoliberalism is both a symptom and a cause of its power. It has played a major role in a remarkable variety of crises: the financial meltdown of 2007–2008; the offshoring of wealth and power, of which the Panama Papers offer merely a glimpse; the slow collapse of public health and education; resurgent child poverty; the epidemic of loneliness; and the collapse of ecosystems (Monbiot, 2016). Bone (2010) avers that this neoliberal hegemony must be vigorously challenged in favour of something better, something more sustainable.

Khan (2015, p. 59) quotes a speech by the Irish President Michael Higgins in 2013, reflecting on the devastating effects of neoliberalism on Europe, in which he observes that:

The current state of the European economy, with ... increasing inequality, is a source of concern, ... and that the problem might not lie so much in a lack of the right answers to this most recent crisis of capitalism, as in an absence of the right questions.

He notes that it is important that we recalibrate our focus from that of the economy to that of society and ensure that neither “growth” nor “development” take centre stage, but rather the formation of what can be considered “good societies”. Such a model

for society is nurtured and thrives on values of equity, empathy, social justice and environmental sustainability and should constitute the end goal of all public action (Khan, 2015, p. 55). To that end, the neoliberal agenda casts a long shadow on “green growth” as the transformations required for sustainable consumption and environmental sustainability go well beyond innovation and “light touch” structural changes to include the need for true democratisation of the economy and a far deeper cultural change in the paradigm of governance. Indeed, Hoffman (2011) calls into question the very market structures expounded by the populist political agenda as actually complicating the “green” transformation of economies.

3.3 Theme 2: Social/Psychological Approaches – Nudging and Social Marketing

In response to the failure of neoclassical economic models to significantly influence sustainable consumption behaviour, there has been a growing recognition that the availability of better quality information does not change behaviour (Whitmarsh, 2009). This critique has come from two social/psychological sources: behavioural economics and consumption studies (Hall, 2013).

The basis of rational decision making is that, when individuals are faced with a decision, they seek complete knowledge of the situation, identify all relevant options in an unbiased manner and then seek the highest utility for their choice. Behavioural economics and the influence of behavioural science recognises that individuals do not act in this manner; instead, they revert to familiar heuristics to process information more easily in decision making. This can be because of limited attention, in that they do not always access the relevant details. The process can be affected by individuals’ cognitive inertia and a “present” bias, in that the consequences of a decision for their future state are not considered, such as chronic illness if exercise is not taken or a reduced pension if payments to a plan are deferred. Behavioural economics also recognises that decision making is influenced or constrained by the role of social norms and routines, including notions of community and fairness in economic outcomes (Folmer and Johansson-Stenman, 2011). Thus, individuals limit their information search, as information

overload can lead to subsequent difficulties in decision making, although they recognise the importance of their decisions or actions for wider society (Seyfang, 2011). As a result, the concept of bounded rationality underpins behavioural economics, in that individuals engage in satisficing behaviour in which they choose an option that satisfies the most needs, using a limited information search, but one that is not necessarily the optimal solution (Simon, 1965). This research focus is nothing new, and satisficing has long had explanatory influence in the areas of public administration and policy. However, it has now assumed renewed significance with respect to sustainability and the challenges of climate change as consumers are faced with new consequences of their decisions (Thynne, 2008). It has also become an underlying dimension of the increasing interest of behavioural economics in “nudging” towards sustainability (Thaler and Sunstein, 2008).

Jones *et al.* (2011) describe nudging as a collection of techniques of government-sponsored behaviour modification, which they collectively refer to as “soft” or “libertarian paternalism”. These approaches are beginning to be used to replace traditional modes of state action and open up new registers of legitimate governmental activity in promoting behavioural change. The focus of nudging is on reconfiguring the choice architecture of consumers or individuals to encourage beneficial decision making in areas such as food consumption (obesity), energy conservation or reduction in emissions. The goal is to steer individuals towards making positive sustainable decisions for themselves and society whilst still retaining individual or personal choice. Policymakers can thus organise the architecture of choice through managing the context, process and environment for individual consumers to influence their decision making (Alemanno, 2012). A policy qualifies as a “nudge” if it strategically uses cognitive biases in order to make a change in the choice architecture or environment for individual decision making. However, it must not restrict individual choice and is used in the interest of the individual (Hall, 2013). According to Sunstein (2014, 2017), nudging may take on 10 different forms:

1. default rules, e.g. automatic enrolment in programmes on education, health, savings and the environment;

2. simplification, e.g. reducing complexity to avoid confusion in form filling, website navigation, information access;
3. information/disclosure, e.g. information regarding ecological or environmental costs associated with consumption, energy use;
4. warnings, e.g. graphic warnings in relation to smoking, waste management, resource consumption;
5. reminders, e.g. for delinquent tax payers, environmental obligations to conserve energy (timing is key to this strategy);
6. increases in ease and convenience, e.g. shelving healthy foods at eye level;
7. use of social norms: emphasising what most of the population does, e.g. nine out of ten hotel guests reuse their towels;
8. non-monetary rewards: recognition in kind, donations to social and environmental causes and campaigns;
9. active choosing/prompted choice, to steer towards a desired end option that is optimal;
10. pre-commitment strategies, e.g. people commit to a certain course of action, such as recycling targets.

Across the globe, governments are incorporating behavioural economics into the design of more effective policy solutions (Madrian, 2014). In the UK, nudging has become core to the policy work of the Conservative government. Former UK Prime Minister David Cameron was an advocate of Thaler and Sunstein’s (2008) publication, *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Cass Sunstein himself was head of the Office of Regulatory Affairs in the Obama Administration (2009–2012). A well-known UK initiative that has developed this social-psychological model is the Behavioural Insights Team, referred to as the Nudge Unit. It describes its mission as using insights from behavioural science to encourage people to make better choices for themselves and society. Initially set up by the UK government, it now describes itself as a “social purpose” company partly owned by the Cabinet Office, employees and Nesta (a charity). Its success has been in devising, implementing and testing or

trialling new approaches to achieving policy goals in domains ranging from health behaviours to sustainable consumption and energy conservation (Behavioural Insights Team, 2010; Hallsworth and Sanders, 2016). Several countries, including Ireland, are using their model to inform their own efforts to implement more behaviourally informed approaches to policy design, such as encouraging farmers to meet nitrate emission regulations or tackling climate change emissions and the energy agenda with regard to Ireland's associated targets (Purcell, 2016). More recently, with the support of academics and private consultants, the Irish Behavioural Science and Policy Network (IBSPN) has been set up. Its aim is to bring together the thinkers and doers of behavioural science in Ireland, in order to share, discuss and debate how behavioural insights can, and should, be applied in the business, academic and public policy arena. Agencies of the state are using "nudging" to improve use of public services, such as the Irish Commission on Taxation, which has examined and employed a number of ways to improve the tax system, simplifying tax communication and collection mechanisms.

Sunstein (2014) describes nudges as a form of "soft paternalism", as they steer people in a certain direction. However, he argues that they are specifically designed to preserve full freedom of choice. He uses the analogy of a GPS (geographical positioning system) that guides people in a certain direction, yet they remain free to select or adjust the route. He emphasises that some kind of social environment (choice architecture) influencing people's decisions is always in place. His argument is that libertarian paternalism is paternalistic only to the extent that it tries to influence people's behaviour in order to achieve an optimal state (Thaler and Sunstein, 2008). He argues that choices are not limited or blocked, as putting fruit at eye level is a nudge, but banning junk food is not.

However, there are a number of criticisms of nudging. The first is that it assumes that the individual is somewhat incapable or limited in capacity and is essentially excluded from the behavioural change process, rather than having the ability to reflect on a wide range of public policy choices (van der Linden, 2012). Public activists have seen "nudging" as being manipulative and a form of mind control. In addition, researchers have argued that the effects of "nudges" are marginal, are relatively short-lived and do not

really address core issues such as the complexity of consumption and health behaviours and impacts on the environmental or climate change, because of their simplicity. However, a number of proponents of nudging are now writing about moving beyond the "nudge" (John, 2018). John (2016) advocates that nudges do have the power to create innovations in public policies, but they need to be skilfully used, the implication being that agency as well as choice structure plays an important role in the adoption of ideas from the behavioural sciences. These tools of government are now being used by private industry to manipulate consumer behaviour and, as such, are not always oriented towards people's well-being and development. A balance between individual responsibility and the responsibility of government to society needs to be attained.

3.4 Theme 3: Socio-technical (Systems of Provision/ Institutional) Approach

It is the extrinsic values, those that generally include an individual's cognitive assessment of effort as a means to some extrinsic end, that have been to the fore in managing consumption in society (Hall, 2013). McMeekin and Southerton (2012) note that the focus on changing consumer behaviour has offered a much less expensive route for governments to attain sustainable societies than investment in governance, infrastructural and technological change. However, a sustainable future cannot be achieved by relying solely on initiating "bottom-up" changes in individual consumer behaviour, as macro-institutional approaches to sustainability in research and policy are vital (Prothero *et al.*, 2011). Moloney *et al.* (2010) note that appealing to an individual's more "intrinsic values", such as personal growth and community involvement, lead to more successful outcomes. Thus, this introduces social norms into the equation, recognising that behaviour is socially constructed and therefore needs to be considered at the collective or societal level. This perspective is identified in the work of new institutional theorists who link the macro environment and its varying norms or logics to the micro practices of individuals or groups as they manage conflicting societal logics (Micelotta *et al.*, 2017). It also acknowledges the relevance of social values as a step forward in the behaviour change and sustainable society endeavour.

Adding to the debate, Shove (2014) argues that efforts to promote more sustainable patterns of consumer behaviour draw on a remarkably narrow range of conceptual resources. She proposes the need to examine the potential and relevance of alternative paradigms, especially those in the area of practice theory, that lie outside the dominant discourses and traditions of economics and psychology. She notes that, currently, social science that is considered policy relevant is consistent with a dominant paradigm organised around theories of individual attitude, behaviour and choice. In practical terms, the priorities that matter when the aim is to promote pro-environmental behaviour and sustainable consumption are quite different from those that pertain when the goal is to reconfigure the practices that people reproduce. Both Phipps and Ozanne (2017) and Gram-Hanssen (2011) advocate practice theory as a promising approach, in that it shifts focus from the individual consumer towards the collective aspects of consumption, and from conspicuous dimensions of consumption towards routine taken-for-granted practices and mundane aspects of consumption that form part of everyday life, making people feel secure. Phipps *et al.* (2013) advocate the perspective of social-cognitive theory to examine how behaviour can influence both personal and environmental factors and, in turn, affect future behaviours and optimise environmental sustainability.

In examining the influence of the macro environment, socio-technical theory takes into account the interaction and intertwining between systems and individual practice (Geels *et al.*, 2015). A significant amount of research has accumulated over the last decade that indicates the importance of understanding the role of context and technology system in shaping behaviour relating to energy consumption and, vice versa, the role of behaviour and routine in shaping the use of energy-related technologies (Moloney *et al.*, 2010; Shove, 2010; Phipps *et al.*, 2013). A socio-technical framework situates technology and technological innovation in the social contexts in which they emerge. It explores how and why a particular society or context shapes or generates the technologies that are produced. In this framework, the analysis is not on the rational consumer and it does not take social standards and expectations as a given; rather, it is iterative in that it seeks to interrogate

the construction of the interaction of technology and the consumer and its ongoing reconstruction. Thus, it seeks to examine the implications for the social practices of consumption. For example, in the context of energy-related consumption, there is a dynamic relationship between agents in the “utility sectors” who provide energy, water and waste services and the consumers of those services. Thus, according to Strijbos (2006, p. 367), “actions and ways of using technology are conditioned by the context and steered by common ‘practices’ that take on a definite form in social interaction”.

The concept of “practices” in socio-technical analysis is used, as opposed to that of behaviours, reflecting a rejection of the focus on individual-based behavioural change for a focus on the importance of the collective or social context shaping, framing and often constraining daily actions. Practices are embedded in a range of socio-technical systems that constitute a diversity of institutions, regulations, infrastructures and technologies (Moloney *et al.*, 2010). McMeekin and Southerton (2012) stratify the approach into three levels: the social relations of consumption; co-dependent changes in production and consumption; and technologies, practices and consumption. Moloney *et al.* (2010) reviewed changes in behaviour and practice and the socio-technical approach to understand energy consumption. They identified five core themes for mobilisation:

1. framing behaviour and social practices – the importance of intrinsic and extrinsic values, in that an activity that upholds intrinsic values, such as personal growth or community involvement, is more likely to lead to a higher level of engagement than those that appeal to extrinsic values;
2. beyond barriers and constraints – factors identified as barriers and constraints relate to an enabling routine or habit formation, which is set in the social contexts in which individuals live and their sense of control or agency;
3. approaches to empowerment – important psychological factors motivating behaviour and that are derived from both internal and external variables, such as a person’s education, income and social status;

4. the need for systemic change – the wider view: individual behaviour change strategies are inappropriate if macro conditions exist that contribute to the problem;
5. the path forward through learning and integration – the impact of social learning in communities can be significant in changing people's behaviour and motivating them into action.

According to Geels *et al.* (2015), the socio-technical approach recognises the importance of a multilevel viewpoint, in that consumer practices are part of wider systems. These systems are reproduced by many actors (governments, organisations, policymakers, universities, consumers, wider publics, etc.), whose actions and beliefs are shaped by existing institutional regimes (regulative, cognitive, and normative rules). These socio-technical systems can be hard to change because of taken-for-granted rules, policies and institutions, as well as resistance by actors using power and politics to stabilise existing systems (Scott *et al.*, 2000). According to Hall (2013), the socio-technical approach, compared with the other two approaches outlined in this project, provides a profound critique of contemporary approaches to sustainability for a number of reasons. First, positioning the problem of sustainable consumption as a problem of personal choice fails to appreciate the socially situated and structured nature of consumption. Second, a focus on the end consumer obscures important questions about the design of choice options and their relationship to demand and use. Finally, the socio-technical approach suggests that governance, institutions and structures are not neutral, in that their formation and constitution are likely to influence behaviours and practices in one direction more than others. As Geels *et al.* (2015, p. 4) note, contemporary environmental problems can be seen as symptoms of a deeper (socio-cultural and politico-economic) problem in modern capitalist societies, particularly the preoccupation with economic growth and overconsumption.

3.5 Conclusion: Pressures and Public Policy Solutions

The aim of this chapter was to seek an approach and outcome that integrates core societal paradigms in the synthesis of a new understanding that can develop

and sustain change in consumption behaviour towards future sustainability. The challenges to sustainability and sustainable development have been amplified by the continued growth of the global economy (McDonagh and Prothero, 2014). A clear need has been identified to create an environment in which every individual and sector of society can play its part in achieving a “good society”. This can only be done through society-wide involvement in, and engagement with, cross-sectoral sustainability linking environment, economy and human health.

This section has presented a summary of a “triangulated review” using Hall’s (2013) framework of the utilitarian, the social/psychological and the socio-technical (systems of provision/institutional) approaches to managing consumption behaviour (Seyfang, 2011). This is a step towards developing a novel systems-based new ecological paradigm (NEP) approach. It draws from an understanding of the intrinsic dimensions and motivations of consumer behaviour, as in Kollmus and Agyeman’s (2002) concept of “pro-environmental consciousness”, seen as an amalgam of environmental knowledge, values and attitudes, together with emotional involvement. This, in turn, is embedded in personal values and personality traits shaped by internal as well as external factors. This behaviour is also constrained by the dominant social paradigm, in which economic growth and scientific and technological progress are seen as capable of solving all problems. Fuchs (2017) notes that a key requirement for a NEP approach (as per Dunlap, 2002, 2008) is citizen-driven governance, in which the dimensions of sustainability are understood as nested within wider society, the economy, culture and nature.

However, this chapter review also brings into question what progress is actually being made, given the evidence of continued excessive consumption. Ireland is one of the few EU countries that will fail to meet its commitment to reduce greenhouse gas emissions by 20% of the 2005 value by 2020 and it is not on target to meet the 2030 requirements (FitzGerald, 2017). The Irish plastic bag levy introduced in 2002, though highly successful in behavioural terms in reducing the use of plastic carrier bags, has not impacted on our use of plastics. The average Irish citizen creates 61 kg of plastic waste per year, the highest in the EU, compared with 31 kg for the average EU citizen (Eurostat, 2018).

This chapter outlined that there is a lack of commonality in defining sustainable consumption and the manner in which to achieve it, as well as a lack of consideration of the wider social dimension in current management approaches, coupled with poor recognition of the social complexity of sustainable behaviour as an iterative process. The question remains: whether or not there is literature

and evidence available across an even wider range of disciplines that brings these values into play and seeks to establish greater participatory consumer citizenship in the formulation of environmental policy to deliver a more tractable process for sustainable policy implementation (Menegat, 2002). In order to attempt this endeavour, the results of the SLR are outlined in the next chapter.

4 Findings and Analysis

4.1 Introduction

The true meaning of sustainability is not well defined or agreed and its effective implementation is contested. Thus, this study utilised the SLR methodology to mine for, and target, key insights that update and widen our understanding of sustainable consumption as a value-based process. This evidence-based re-focus on the reference frame of individual behaviour is a fundamental requirement to leverage real behavioural change and advance environmental sustainability and societal well-being.

Drawing from the work of Adams *et al.* (2016), three stages in the literature search process were distinguished. First, the thematic schema was developed as the initial “architecture” for reviewing the wider literature (work packages 2–4), its underlying assumptions and its key dimensions (see Figure 1.1). This was outlined in the foundation review (see Chapter 3). This foundation review provided the necessary context and conceptual development to both facilitate, and highlight the need for, a deeper interrogation of the topic and to address the research questions in a rigorous manner. The full systematic review of the literature as per SLR protocols was completed and is summarised in Figure 2.1 (as per Green *et al.*, 2009; Denyer and Tranfield, 2009; Welch *et al.*, 2012). Figure 4.1 presents a flow chart of the process and this chapter now reports on the outputs and their conceptual analysis to inform the framework synthesis and build on the thematic schema as it is shaped, reinforced and refined by findings from the included SLR studies (Dixon-Woods, 2011; Thomas *et al.*, 2013). A descriptive summary of outputs, the SLR contribution and a thematic analysis and synthesis are provided in the following sections.

4.2 Systematic Literature Review: Descriptive Summary of Outputs

As per Adams *et al.* (2016), the scholarly literature was found to be widely distributed across different disciplinary journals of variable quality. The search

of the academic literature revealed a core list of 30 articles published in 29 separate journals, with one open-access journal providing two articles. The journals/papers included the disciplines of consumer studies, geography, business, political science, economics, environmental management, environmental psychology, sociology, ecological economics, sustainability science, marketing, energy policy, education, communication and ethics; in addition, some journals were cross-disciplinary, such as *Emergence: Complexity and Organization*. This eclectic grouping was influenced by the research questions, which by their very nature attempted to draw on publications addressing wider societal issues with regard to consumption, sustainability and values. Although data were extracted from the literature over the period 2002–2018, the majority of the selected papers were published in the period since 2010. Seven papers were published between 2002 and 2009, compared with 23 papers published between 2010 and 2017. In total, there were three SLRs and one scoping literature review. An analysis of the content of all 30 publications indicated a wide breadth of themes, with the top 10 being (in order of most frequent to less frequent) social concepts, behaviour, sustainability, values, policy, change, economics, consumption, knowledge and information. The concepts of society and responsibility, although the focus of some of the papers, featured less frequently than the more common arguments for consumer or citizen responsibility. This aspect was revealing in itself, but needs to be explored and set in a more nuanced and contextualised analytical framework.

The papers were analysed and categorised using thematic analysis set in a conceptual framework developed for data extraction and outlined in the previous section (see also section 2.9). Concepts embedded in the core papers were analysed, categorised and aligned through the stages of thematic analysis based on the conceptual framework of the utilitarian approach, the social/psychological approach or the socio-technical (systems of provision/institutional) approach.

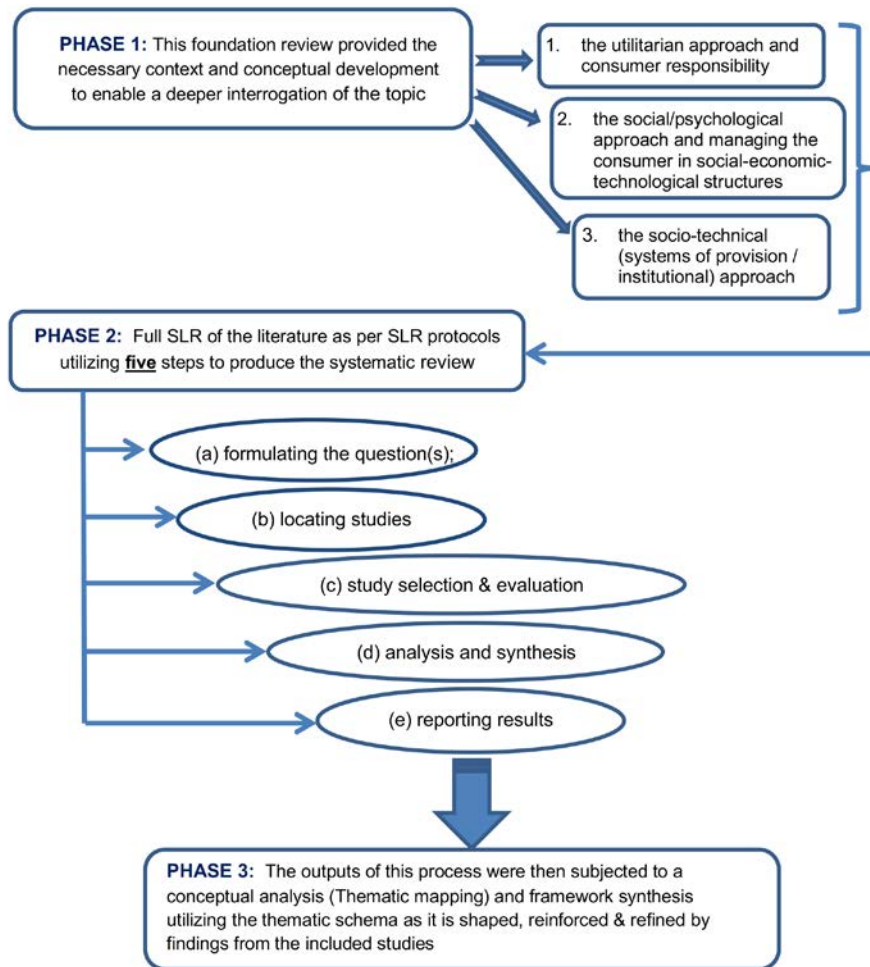


Figure 4.1. Data selection and analysis flow chart.

4.3 The Systematic Literature Review Contribution

Undertaking a SLR, as espoused by Tranfield *et al.* (2003), can be considered a means by which critical literature central to and underpinning the research questions can be rigorously and systematically mapped out (Armitage and Keeble-Allen, 2008). This underscores the need to ensure that the scholarly and practitioner communities develop processes and methodologies for bringing research evidence together systematically and applying it in practice (Tranfield *et al.*, 2003). It is argued that, because of the diversity of sources of literature encompassed by the consumption- and sustainability-related disciplines, a clear imperative exists for the codification of a systematic methodology to map the territory of consumption and sustainability theory (Armitage and Keeble-Allen, 2008). Petticrew (2001) and Petticrew and Roberts (2006) have argued for a structured approach when reviewing literature and

have emphasised the important differences between the SLR approach and that of the “traditional” type of literature review. This study, with its policy focus, is particularly suited to the SLR concept. Indeed, Boaz *et al.* (1999) have strongly advocated the use of SLRs concerning wider policy-based practice research. Hammersley (2002) notes that “It is important that the practical use of research takes in the whole range of findings on a topic, not just the results from one or two studies. For this reason, reviews play a crucial role as a bridge between research and related areas of policymaking and practice.”

4.4 Thematic Analysis and Synthesis

Utilising Hall’s (2013) framework, as well as emerging themes from the literature, three framework concepts were identified and refined (see sections 1.2 and 2.2). These concepts provided the theoretical context for the thematic analysis adopted to explore the data emerging from the selected literature (see section

2.9). This approach was also informed by the work of Sedlacko *et al.* (2014), which identifies the agency inherent in approaches to sustainability; individualistic or consumer responsibility; and individual, household or community consumption situated within wider social, economic and technological frameworks (Shackley and Green, 2007; Geels *et al.*, 2015). These theoretical considerations inform the thematic analysis and guide the development of the classification approach used to interrogate the data and build the analytical framework (Hall, 2013; Sedlacko *et al.*, 2014; Fuchs, 2017).

Thus, the SLR data (including the selected grey literature) were explored using (1) the utilitarian individual consumer theme, with its focus on the consumer responsibility perspective; (2) the social/psychological perspective, representing individual, household or community consumption situated within wider economic and technological frameworks of society, and often with a more marketing-oriented focus; and (3) the socio-technical approach, with its governance and institutional perspective. The last approach is based on a more “systemic” view of consumption as a socio-technical system, originating from within a sociological outlook and with the possibilities of transformation to a more “societally” focused model with the involvement of wider governance and institutional actors (Geels *et al.*, 2015; Fuchs, 2017).

During the thematic analysis (see sections 2.9 and 2.10), themes were codified and grouped along the three axes of the theoretical framework (see Chapter 3). The number of core SLR papers aligned to each of the three thematic axes (foci) were as follows: 16 for the utilitarian approach, reflecting individual consumer-citizen behaviour values and motives; 9 for the social/psychological approach, exploring the individual within the wider social/institutional context; and 5 for the socio-technical (systems of provision/institutional) approach, reflecting the societal imperative, a more systemic approach including external actors and wider global systems.

Initial themes were reviewed, re-evaluated and revised further, first at the level of the coded data extracts and then at the level of the themes, to assess how strongly they formed a coherent pattern. They were then evaluated to ascertain the validity of individual themes in relation to the data set and whether or not

the thematic map (Figure 4.2) “accurately” reflects the meanings evident in the data set as a whole.

The outputs of this work suggest that it is possible to advance sustainable governance models and policy only when the inevitability of limits to growth as a concept are acknowledged. This underscores the concept of finite resources expounded by Meadows *et al.* (1972) and requires the recognition of the scale of the sustainability challenge and the nature of behavioural systems within society and their consumption dynamics and values. This research tackles this problem against a socio-political system dominated by a neoliberal philosophy, which typically places greater emphasis on extrinsic values, and by behavioural dynamics, which often expound positive attitudes toward sustainability but which exhibit mostly unsustainable consumption patterns (Prothero *et al.*, 2011).

The identified themes and topics were subjected to further analysis and refinement. The objective of this process was to clearly identify what was of interest about the data and why and to demarcate driving concepts within the data. A detailed account is presented in Table 4.1 for each individual theme triangulated from the literature review data.

In the final phase of the analysis, the themes were collated into a cohesive assessment that addressed the research problem and provided insight to the arguments surrounding the research questions. This provides a framework for policy analysis and an assessment of current thinking in sustainable practice and research. In the analytical narrative, extracts and references were analysed and embedded to illustrate the essence of the points being demonstrated and link back to work package objectives. These are outlined in the next section.

4.5 Analysis, Framework Synthesis and Discussion

4.5.1 Contextualising the research challenge

This research project sought to address the paradigm context of governance and policy approaches, which recognise the importance of preserving the balance of nature and which acknowledge the inevitability of limits to growth. This was undertaken through a full search of peer-reviewed published academic publications

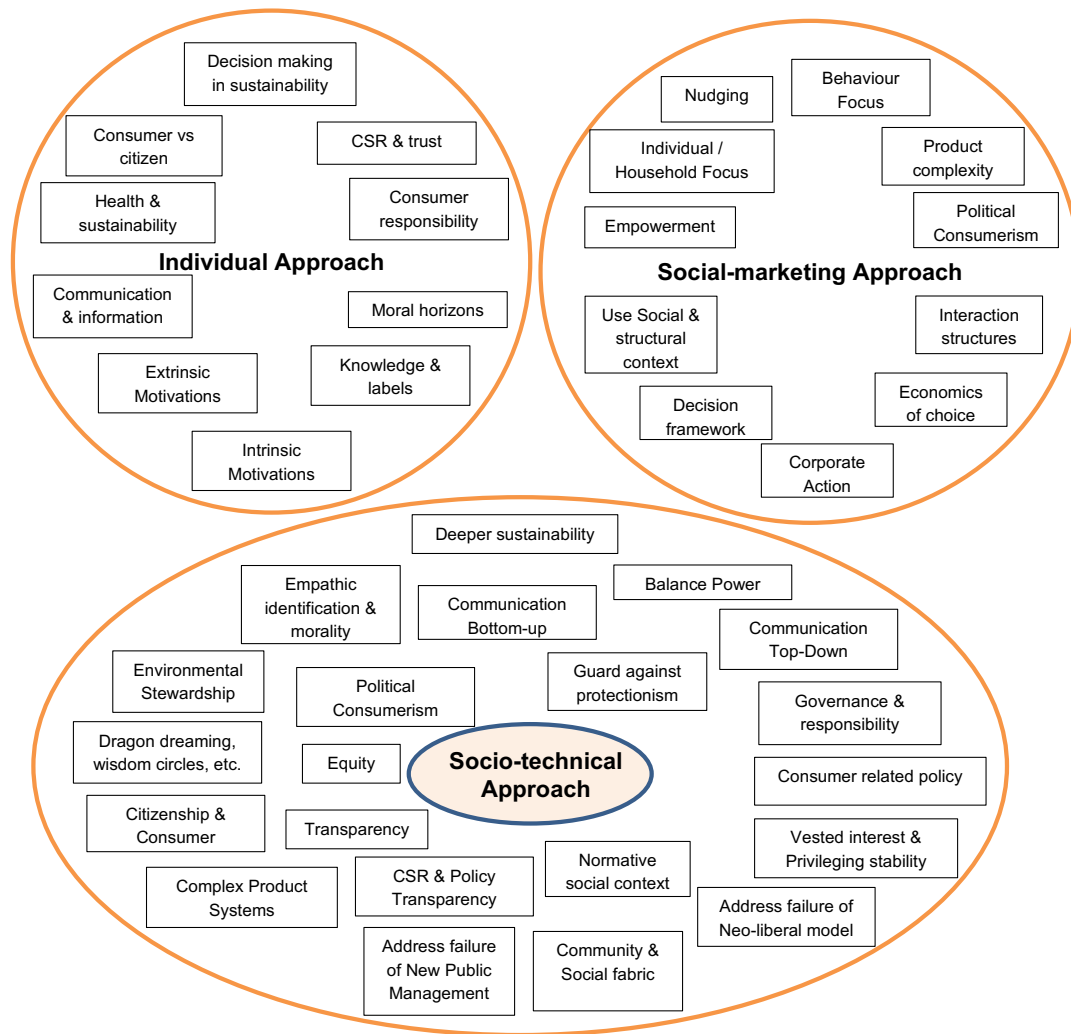


Figure 4.2. Thematic map, showing the theoretical framework and main themes. CSR, corporate social responsibility.

and relevant grey literature in order to reveal the state of existing knowledge and understanding and to synthesise novel contributions linking current thinking, ideas and concepts in a new model – the building blocks of a road map to a new environmental paradigm. This is a “grand challenge” as it strikes at the very heart of the sustainability argument; it recognises the heightened tensions in global and local economic and socio-cultural rhetoric and proposes a new framework in a way that has not been done before and which uses an evidence-based approach to cut across much of the established ideology driven by the neoliberal agenda.

In the following subsections the core themes identified are discussed under the following headings:

- the individual as responsible consumer (utilitarian approach), including the following subthemes: the consumer citizen and the intrinsic resource; environmentally significant behaviours (ESBs); empathic identification and morality; and communication and information;
- the individual within the social/institutional context (social-marketing approach), including the following subthemes: consumer choice paradigm; the intrinsic versus extrinsic values of political consumerism; behavioural economics; and consumption studies;
- socio-technical (systems of provision/institutional) approach – the societal imperative, including the following subthemes: decision making in the face of sustainability; political consumerism and the sustainability context; power and sustainability; the neoliberal model and social fabric; NPM; and sustainability translation.

Table 4.1. Thematic characterisation of concepts mapped to data/findings in the core SLR papers

Theoretical focus/schema	Findings (studies) and data labels	Themes/disciplines
Individual approach – individual consumer-citizen focus	• Dominant framings in consumer theory regarding organic food labelling and impact on consumers remain contested • Political support to enhance citizen-oriented food choices is required • Lack of research on sustainable retailing • Factors informing senior managements' decision making are largely focused on local context and pressures, with a narrow base • Basic typology to understand stakeholder needs and involvement • Poor efficacy and validity of climate education, which needs to improve • Addresses the motivational side of sustainable behaviour through intrinsic empowerment • Psychological perspective should inform efforts to avoid misunderstandings about human behaviour and motivations that can lead to ineffective or misguided policies • Theory to examine re-orienting self-interest for the common good • How different motives affect behaviour and how the causal chain of values and beliefs forms our understanding of, and motives for, the private sphere – ESBs • Linking models of firm-level environmental stewardship with trust to create value for consumers (and firms)	• Consumer and retail theory • Decision making in business and preparedness regarding climate change mitigation • Stakeholder involvement in sustainability • Stakeholder education • Psychological theory • Political science – behaviour focus • Corporate sustainability and trust • Environmental stewardship • Environmental management and individual motivations
Social-marketing approach – individual within social/institutional context; integrated (strategic and market orientation)	• Climate change necessitates technological evolution to support ecological, cultural and regulatory responses • Communication approaches that advocate individual voluntary action ignore social and structural impediments to behaviour change • Conceptual model linking consumption with population–environment literature • Institutional change theory identifies taxonomy of power and how institutions can determine individual choice and interaction structures • Cases of collective action identified as examples of corporate action in relation to environmental issues	• Social policy • Environmental scanning • Top-down and bottom-up approach to communication • Transition studies examination of power • Population–environment literature and household focus • Institutional theory • Energy use and policy • Complexity theory • Global governance • Communications • Trust • Political consumerism • Economics measures of progress • Growth and development • Sociology • Power and disempowerment • Equity • Business – citizenship theory • Responsibility vs obligations • Environmental stewardship and policy framework • Neoliberal philosophy • Public management
Socio-technical (systems of provision/institutional) approach – societal imperative; systemic (external actors and wider systems)	• Communities as a context for behavioural change • Environmental stewardship definition and framework to guide interventions at a local level • Conceptual framework to analyse power and (dis)empowerment in transformative social change • Policy and regulatory frameworks need to be interconnected to handle conflicting objectives of economics, environment and social justice • People do not adopt sustainable consumption lifestyles for societal reasons, including cultural norms, institutional inertia and powerful actors, as well as for individual reasons. Communication is not enough for consumer awareness and behaviour change • The presumption of competitive markets as necessary for organising economic activity is challenged. There is a clear need for a shift in thinking to recognise where markets can subvert democracy • Recognition of the need for social policies to redistribute resources in the context of a no-growth scenario • Concept change needed for a culture of sustainability examined at the level of individual practices and in social institutions and the need to develop a sustainable global society is advocated • Conceptual build for an ethical society – linking an individual's worldview and planned societal or citizenship activities to ensure that society continuously improves its ethical behaviour. Examines the meaning of citizenship and the state	• Complexity theory • Global governance • Communications • Trust • Political consumerism • Economics measures of progress • Growth and development • Sociology • Power and disempowerment • Equity • Business – citizenship theory • Responsibility vs obligations • Environmental stewardship and policy framework • Neoliberal philosophy • Public management

In section 4.6, the findings are then collated in the framework/road map.

4.5.2 *The individual as responsible consumer (utilitarian approach)*

Although the search terms and inclusion/exclusion criteria employed by the study sought to identify the interplay of concepts that include individual, society and governance, the largest tranche of papers categorised by the process focused on individuals and their responsibilities in the full consumption cycle. Behavioural economics recognises that decision making is influenced or constrained by the role of social norms and routines, including notions of community and fairness in economic outcomes (Folmer and Johansson-Stenman, 2011). Thus, as noted earlier (see section 3.2), individuals limit their information search, as information overload can lead to subsequent difficulties in decision making, although they recognise the importance of their decisions and actions for wider society (Seyfang, 2011).

The consumer-citizen and the intrinsic resource

In terms of sustainability transitions, a contrast was noted in the literature, which focuses either on political action or on individual sustainable consumption (Grunwald, 2010, 2011; Bilharz *et al.*, 2011). This debate concentrates on the separation between individuals as consumers and individuals as citizens, who share responsibility for sustainability (Heiskanen *et al.*, 2010). Bilharz and Schmitt (2011) raise a fundamental question about individual motivation in terms of sustainability: if you remove economic and regulatory factors, why should individuals behave sustainably in terms of their consumption? This strikes at the core intrinsic motivations of individuals to show an active concern for sustainability (in some defined form) and for future generations. This intrinsic motivation is fundamental to sustainable development, as defined by the Brundtland Commission (WCED, 1987) and encompassed in the United Nations (UN) Sustainable Development Goals (SDGs) (UNEP, 2015). While extrinsic motivation for sustainable behaviour is more easily linked to legal obligations, economic benefits, etc., the basis for intrinsic motivation is far less certain but holds far greater potential to drive sustainability in the long term.

Perhaps this is why much of the emphasis to date has been on the extrinsic motivation of behaviour, as it is simply easier for governments to target this aspect. In contrast, it has been noted that actions stimulated by intrinsic motivation are an essential element of human self-actualisation, and it has been shown that behaviour is more stable when driven by intrinsic rather than extrinsic motivation (Kasser, 2009). This provides policymakers with a challenge and an opportunity – the challenge rests in the intractability of the intrinsic characteristics that control behaviour, while the opportunity is derived from the power to influence real changes in behaviour that endure and transform society (Jagers *et al.*, 2017). Thus, it is noted that sustainability that is built on intrinsic motivation is likely to have a far more enduring and impactful outcome, although the implementation metrics may be more elusive. Despite these considerations, most policy approaches may appeal to the intrinsic dimensions but focus implementation on the extrinsic characteristics. This pushes responsibility to the consumer and reflects a narrow definition of consumer–sustainability interaction.

Environmentally significant behaviours

Environmentally significant behaviours are described as behaviours with a positive sustainability dividend and over which a consumer-citizen has a choice or control. Jagers *et al.* (2017) suggest that it is not appropriate to expect a one-to-one correspondence between motives and ESBs. Indeed, they suggest that seemingly inconsistent patterns of behaviour may be caused by an actor not perceiving the relevant links between their norms and the behavioural outcomes. Similarly, an ESB may not be primarily driven by sustainability motives, but rather because it is perceived as economically sound or healthy or simply happens to be the most practical alternative. Thus, it is necessary to recognise that a range of motivations may drive outcomes and that individuals perceive a specific behavioural situation differently, and therefore activate different motivations when faced with the same behavioural choice. Jagers *et al.* (2017) acknowledge the importance of the value–belief–norm (VBN) theory of environmentalism, which asserts that ESBs are closely related to collective interests and that moral and normative concerns play a significant role in guiding behavioural choice. They suggest the

use of the VBN theory in framing consumer choice action but also suggest that it is more powerful at explaining behaviour when the “cost” to the consumer is low and the behaviour has an overt sustainable character. Jagers *et al.* (2017) point out that value priorities are considered the key driver for choice behaviour – how the consumer perceives and makes sense of the issue, whether it is a course of action or a governmental policy – and that this perception will determine which values will be activated to guide the behavioural response. Thus, it is important to recognise that perception varies across contexts and between individuals and that this is highly significant for long-term consistency of both behaviour and policy design.

Empathic identification and morality

Intrinsic motivations for sustainable development often rely on our ability to identify with people distant to us in space and time. The current deficit in sustainable practices suggests a disconnect in this identification process. The question then becomes: what is needed in order to advance our psychological development beyond our present capacity for identification? To answer this question, it is important to understand some of the characteristics that link sustainable development at the level of an individual’s personal motivations. At a fundamental level of reasoning, this would suggest that sustainable policies recognise the moral irrelevance of differences between peoples and places and can extend to the intergenerational dimension. Barth and Michelsen (2013) suggest that sustainable policy development should reflect a participatory setting, supported by a focus on individual empowerment, competence, social learning, values, self-reflection and emotions, alongside cognitive development issues and wider societal changes. However, the intergenerational aspect of sustainability presents a special challenge. Approaches that have been suggested include the use of methods such as systemic constellations, dragon dreaming and wisdom circles (Omann *et al.*, 2011). This process strives to reach an individual’s inner context related to intrinsic motivations (e.g. values, emotions, needs, belief systems, preferences) and to integrate this into the social process. However, it is acknowledged that widening people’s moral horizons in temporal and cultural dimensions is not possible without changes in worldviews, culture, values and economic and

political systems (Adobor and McMullen, 2013). Thus, if the goal is to seek a truly broader cultural and temporal perspective, and as such advance and reinforce intrinsic motivations in relation to sustainable development, it will be necessary to implement deeper changes in governance and values. To date, there has been little evidence of a willingness or appetite for institutions and governments to widely engage with these ideas.

Communication and information

The principle often expounded by the market model is that choices of sustainability can be left to the individual and can be largely addressed by the use of voluntary measures such as certificates, standards, product labelling or other types of information (Micheletti *et al.*, 2004). By having access to this product information, it is suggested that individual consumers and professional purchasers will become empowered and will acquire the knowledge needed to make informed, “political” decisions through reasoning (Curran and de Sherbinin, 2004). Product labelling as a “soft” tool is claimed to be particularly useful as a back-up to hard regulation (Jordan *et al.*, 2004). Furthermore, labelling and other information tools are often said to be flexible, so that they can be modified as markets change and new knowledge emerges (Sabel *et al.*, 2000). In addition, many economic arguments are presented in favour of communication, information and labelling rather than hard regulation in the drive for a more sustainable state. A closely held view is that, once widely recognised standards of products and processes have been developed, political (and green) consumerism can start to work with little friction (Klintman, 2006). However, Klintman (2006) notes that the use of information and communication alongside other “political–consumer tools” is far from straightforward. Deciding on what criteria should be used for product standards or what information should be communicated to consumers requires rigorous translation of complex and uncertain knowledge about the consequences for the environment, human health, etc. (Klintman and Boström, 2004). Brazil and Caulfield (2017) report wide disparity in terms of the engagement of consumers with the various component elements of environmentally based labels. Indeed, it is this very complexity, that has created so much consumer uncertainty, and this is a feature much exploited by institutions and organisations that

seek to advance their own often narrow and distinctly self-interested perspective. Thus, the communication of complex information and its role in advancing sustainable consumption requires strong, adaptable and participatory political strategies, grounded in robust scientific reasoning, that stand apart from the voices of select vested economic interests. Such approaches must strive to encompass the diversity of ideas and opinions within various interest groups concerning what should be emphasised and given priority (environmental, economic, health related, etc.) in a context that places deeper sustainability at its core. Thus, the use of simplified communication tools and labels to advance sustainability in products and service consumption needs to be carefully grounded and contextualised and rarely presents a quick fix. Governments have been slow to engage with this challenge and their focus of interest has become blurred on occasions. Relying on the consumer to choose when the information landscape is so uncertain is a derogation of responsibility – this moral and strategic perspective on sustainability and consumption must be regained by governments.

4.5.3 *The individual within the social/institutional context (social-marketing approach)*

The second grouping of papers categorised by the review process focused on the individual and the social-marketing approach. This perspective suggests that sustainability will be advanced if society is given options in a decision framework that favours the sustainable choice (see section 3.3)

The consumer choice paradigm

The social/psychological theoretical perspective on sustainable behaviour and its development in the face of a rapidly changing environment sees consumers and society as controllable at a decision-making level through various contextualised circumstances. It suggests that if consumers and society are guided towards a decision deemed optimal for sustainability then they will choose this option. In this respect, the approach can be characterised as somewhat paternalistic in that it attempts to control the decision set. However, as noted above (see sections 3.3 and 4.5.2), this is far from simple when considering the true or full complexity of the product or decision or when

information is incomplete or when the capacity of the decision maker is limited (Gjerris *et al.*, 2016). This as a process then becomes dependent on perceptions, whether they are perceptions of individuals, communities or institutions and whether they include such notions as mimicry, referral, endorsement, etc. From this theoretical perspective, the literature identifies a number of important principles.

The intrinsic versus extrinsic values of political consumerism

Moral and political philosophy has often used the distinction between “intrinsic” and “extrinsic” value as a way of exploring the motivations of consumption behaviour. Something that holds “intrinsic” value is often seen as good in, and for, itself. In contrast, extrinsic value refers to something that may be held as good in that it provides a means to other good things – it is a derivative good (Zimmerman, 2015). However, among philosophers, there is little agreement as to which type of value democracy, liberty, public participation and decisions of consumption possess (Zimmerman, 2015). Commentary in the literature questions what framings surround the intrinsic and extrinsic values of consumerism among actors (Klintman, 2006). On one level these framings may stress the fundamental, democratic value of having consumers make “political” choices on the market. These choice paradigms suggest consumer liberty, and judgement on a policy or choice set. However, these framings can be contrasted with those that present political consumer choice as a dependent outcome in which the policy drives the choice set and the decisions that consumers make (Gjerris *et al.*, 2016). As such, the policy framing shifts between intrinsic and extrinsic paradigms and a clear distinction is blurred.

Various conceptions of the role of political consumerism have been advanced in the literature (Safarzyńska and van den Bergh, 2010). Föllesdal (2004) identifies five roles of political consumerism. The first two of these roles are (1) “clean hands”, which seeks to avoid complicity by seeking non-cooperation (boycott) with institutions and systems that exhibit unsustainable practices, and (2) “expressing self”, such as the demonstration of post-materialist values where individuals make choices to align with ideas that support sustainability (e.g. organic foods).

These choices are distinctly individualistic and do not seek a collective or community response. A third role, (3) “expression of mutual respect”, arises where institutions and systems are perceived as violating fundamental normative constraints – consumer actions may still be seen as self-expression but carry a wider collective component in seeking to change outcomes. Thus, market-based political consumerism may be seen as a natural response to institutions that exhibit unsustainable behaviours. These three roles may all be conceived as examples of intrinsic consumerism, as they emphasise the principle of consumer empowerment rather than its consequences. The last two roles concern (4) “re-socialising wrong-doers”, which seeks to demonstrate a corporation’s non-compliance with sustainable ideals and in so doing impress on the institution concerned the need to change, and (5) “changing business practices”, which seeks through the collective to change how business is done and how products are produced and consumed so that more sustainable options are prioritised. Such changes may be at a national or global regulatory level or may be changes in industry practice and standards of business. These last two roles can be more appropriately described as exhibiting extrinsic political consumerism, as they reflect an interest in the outcomes of political consumerism. However, political consumerism in these cases is driven by the balance of interaction between individual consumer responses and controlling actors and is highly context dependent. Thus, how much freedom the consumer really has can vary widely. Once again, this form of sustainability, with its focus on the choice actions of the consumer, is incomplete and piecemeal. Additionally, the outcomes are influenced by many actors and driving forces, which often show limited co-ordination. Thus, the development of a more co-ordinated approach requires an integrated approach and a broader governance model that links these initiatives. This approach needs to be set in the context of other measures and should not be seen as a standalone solution.

Behavioural economics and consumption studies

Despite the focus from a policy perspective on the individual’s responsibility, neoclassical economic models have failed to significantly influence sustainable consumption behaviour, and the availability of better quality information has had

limited effects on changing behaviour (Whitmarsh, 2009). The rhetoric is strong and abundant but its impact is peripheral and falls well short of the scale of change required. This critique has come from two social/psychological sources: (1) behavioural economics and (2) consumption studies (Hall, 2013). Behavioural economics and the influence of behavioural science recognises that individuals do not act rationally in decision making; instead, they revert to familiar heuristics to process information more easily in decision making. Behavioural economics also recognises that decision making is influenced or constrained by the role of values, social norms and routines, including notions of community and fairness in economic outcomes (Folmer and Johansson-Stenman, 2011). Thus, individuals limit their information search, as information overload can lead to subsequent difficulties in decision making, although they may recognise the importance of their decisions or actions for wider society (Seyfang, 2011). These approaches are addressed by some of the papers addressing framings of the choice dilemma in consumer theory; however, the papers note that the impact on the consumer remains contested. Indeed, the literature recognises that there are significant deficits in the individual focus of both the utilitarian and the social-marketing approach:

- political support to enhance citizen-oriented choices is required;
- there is a need for social policies to redistribute resource consumption in a context of a no-growth scenario;
- climate change necessitates evolution – technologically as a response to a new or shifting ecological state, culturally to provide the context and leverage and, in regulatory terms, to provide the vehicles for implementation;
- communication approaches that advocate individual voluntary action ignore social and structural impediments to behaviour change;
- there is a need to develop a conceptual framework to analyse power and (dis)empowerment in transformative social change;
- there is a need to advance a conceptual model linking consumption with the population–environment literature;
- institutional change theory identifies the taxonomy of power and how institutions can determine individual choice and interaction structures – this

is inevitable but must be formally recognised and controlled;

- cases of collective action have been identified as examples of corporate action in relation to environmental issues – power, trust and integrity mapping are essential to establish validity;
- the importance of communities as a context for behavioural change needs to include the institutional context.

The form of behavioural modification largely defined by a social-marketing approach falls short of the wider goals required to make deep and enduring changes in the sustainability of consumption. The social-marketing approach has a contribution to make, but this can really take purchase only at a societal level where the norms of governance, culture, economics and the wider institutional frameworks are developed in parallel to provide the necessary decision environment. Thus, it is in the socio-technical domain, that which addresses governance and institutional change, that the real advances in sustainable consumption are needed and where the greatest opportunity and challenge rests.

4.5.4 Socio-technical (systems of provision/institutional) approach: the societal imperative

Sustainable consumption is a collective action problem and there are inherent difficulties facing groups of people trying to work together for the common good (Soper, 2007). Some of the most compelling characteristics of environmental problems are the social, cultural, political and economic structures within which they operate. Individuals are often faced with making daily decisions in a setting and context that they did not create, in terms of who has political power, who has control over resources and, in a broader sense, what infrastructural and technological options are available and why. What is well noted is the imperative of social and cultural systems to change – to adapt and evolve to meet the sustainability challenges at all levels (Tonn and Stiefel, 2012). Thus, interrogating the SLR literature (including grey literature content) from a socio-technical consideration views the data from an institutional and governance context and asks the question of who is really responsible for the development and practice of sustainable behaviour in our society and how this can

be progressed. The data from the literature suggest that this area has received less attention than that of the individual consumer or individual social-marketing perspective, yet it is this area that holds the greatest promise for real change in consumption behaviour. At its simplest level, governance and institutional activity can more sweepingly normalise choice arrays and define consumption impacts than providing the consumer with options of varying sustainability, outsourcing responsibility and waiting for them to choose. The literature from the SLR encompassing a socio-technical approach identifies a number of driving forces that shape this debate.

Decision making in the face of sustainability

The topic of information and communication was reviewed earlier under the individual theme of the individual as responsible consumer (utilitarian approach), as much of the contemporary focus is on individual behaviour. However, as was noted earlier, this requires a wider implementation context that ultimately requires the involvement of regulatory forces and governance models. The literature evidence suggests that, behind individual decision-making processes, there are a number of important challenges, including the level of consumer education that can inform more cognisant consumption, or recognition of the complex of pressures driving institutions in their attempts to make more sustainably motivated plans (Wensing and Torre, 2009). This becomes more complex when a distinction is required between consumption of a product on its own (disconnected both temporally and spatially) and consumption of a product with embedded information regarding the product's life cycle added to the decision proposition. This is connected to the often-stated need to reflect the impacts of the entire production process (including processing, distribution, consumption and disposal) for a product. Integrating this broader life-cycle perspective into consumer choice allows for a more extensive notion of consumer rationality and a better reflection of "relevant consumer values" than the conventional view of individual welfare maximisation (Paavola, 2001). Reflecting the full life-cycle dimensions of a product in the consumer decision framework is a challenging proposition for the consumer and the regulator. Indeed, there is little evidence of clarity on how best to reflect this full life-cycle perspective or

even decide on what information should be available. However, this cannot be seen as a derogation of responsibility on the part of governments; rather, the challenge must be recognised and engaged with if sustainable consumption is the goal.

Consumers and decision makers in institutions are often driven by a narrow set of constraints that limit information or the time and opportunity to obtain knowledge about a choice and that may conflict with wider sustainability concerns. Additionally, consumers are often faced with a lack of expertise or ability needed for important decision making, especially when faced with sources offering conflicting advice (Klintman, 2006). A number of the SLR papers, through both a policy and a consumption study lens, addressed the need to motivate individuals through reminding them of their responsibilities to future generations and sought to move their self-interest to encompass recognition of “public goods” (Rauschmayer and Omann, 2012; Schöpke and Rauschmayer, 2014). Other papers examined how scientists and policymakers need to deepen their understanding of the nature of individual motivation and trust, in order to influence individual behaviour (Heuer, 2012). Those in the marketing and consumer disciplines often sought to address this through utilising green branding, second-hand purchasing and green logistics, as well as calling for wider corporate social responsibility (CSR) to define business operations (Peloza and Shang, 2011; Adobor and McMullen, 2013; Wang and Gao, 2016). This takes shape through the call for more sustainable consumption in retailing, embedding the triple bottom line in logistics, promotion of sustainable branding and encouragement and support of the business case for CSR (Wang and Gao, 2016; Yang *et al.*, 2017). Those in the discipline of psychology impart interesting insights in terms of the processes of perception and communication in decision making (Ockwell *et al.*, 2009). Some of the environmental stewardship literature suggests that greater institutional and governance support is a prerequisite to developing a deeper sense of sustainability in society and more responsible consumption (Bennett *et al.*, 2018). Thus, although many of these papers address individual consumption behaviour, they acknowledge the need to embed this in a deeper policy shift towards institutional and corporate sustainability.

Political consumerism and the sustainability context

Political consumerism as the idea that active consumer choice is a promising means towards changing institutional or market practices (Micheletti *et al.*, 2004; Safarzyńska and van den Bergh, 2010) has been considered from a socio-psychological perspective, but can also be evaluated under the socio-technical lens. In green political consumerism, the environmental implications of consumption and production processes become an important focus. This is closely allied with environmental stewardship, the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes (Bennett *et al.*, 2018). Political consumerism and environmental stewardship fall within the bounds of normative political theory and have been recognised as forming part of governance arrangements in which agents regulate some issue area (consumption) by means of extra-institutional authority. In making sense of political consumerism, it is useful to ask the following questions: what are the grounds of such authority, what should be its institutional limits and how should it be exercised within those limits? Although there are different ways of characterising “political consumerism”, the concept is widely used in environmental and sustainability policy tool design. However, it is not always clear how the various views of the concerned consumer should be interpreted within this broader context of political consumerism. It was noted in the literature that there is a need to have a broader recognition of the subtle nuances and impacts of the often vague and sweeping reasoning of decision makers, planners and social movement organisations regarding the political importance of consumer choice (Micheletti, 2003; Föllesdal, 2004; Safarzyńska and van den Bergh, 2010). Globalisation has caused a mismatch between global economic effects and global political regulation. States may seem to have their formal sovereignty intact but their options are often greatly limited and they face eroding general trust in their ability or willingness to regulate markets (Heuer, 2012). If global and domestic markets are to be normatively justified, then the responsibility for ensuring social and environmental equity must come from governance structures. Markets can be morally legitimate but only when the state maintains just rules and ensures a fair and sustainable consumption

of resources and distribution of benefits. Political consumerism comes from an individual perspective but its implications are acted out at a governance and institutional level and it is in this context that the policy response must be shaped, responsibility re-taken and a more sustainable market created. To this end there is a clear call for clarifications on approaches that analyse current practical consumer-related policy processes and tools at both a governance and an institutional level. This can be simply stated as greater transparency, but it must address key issues such as policy effectiveness, whose values should be expounded and what standards should be developed and adhered to and, ultimately, define the appropriate role of governments and institutions. Thus, this “transparency” needs to really expose the full details of the processes and provide clarity on the intrinsic and extrinsic motivations of those involved and the outcomes intended.

Power and sustainability

A single global culture and a unique set of world institutional arrangements, based on an ever-increasing consumption of natural resources, is not sustainable (Tàbara and Giner, 2004). Implicit references to power have always been part of the sustainability debate. Safarzyńska and van den Bergh (2010) suggest that, to be successful, environmental policies must account for how different subsystems (markets, institutions, etc.), and within them different groups with conflicting interests (policymakers, consumers, investors, etc.), co-evolve and thus affect the evolution of socio-technological trajectories. Avelino (2017) and Schot and Geels (2008) describe a multilevel perspective that can be applied to this question and distinguish between three levels of functional application: (1) the landscape (exogenous macro trends, e.g. climate change), (2) regimes (dominant institutions and practices) and (3) niches (places of innovative practice). A transition occurs when changes at all three levels reinforce each other and result in an overall systemic transformation. This may present itself when landscape developments (e.g. greenhouse gas emissions) create a destabilising pressure on regimes (e.g. transport sector), which creates a “window of opportunity” for niche innovations (e.g. electric cars) (Avelino, 2017).

Although definitions of the regime differ, an essential characterisation lies in its preservation of dominant structures in the societal system. As such, the regime is typically associated with power, dominance and vested interests. Resistance at the regime level will stall the transition to a more sustainable state. The role of government as a regime player is evident in this regard and has been a major factor influencing the sustainability transition at a societal level. The willingness to lead is paramount but largely lacking because of the reluctance to cut across the interests of other actors that comprise the regime (Rickards *et al.*, 2014). The literature is clear in stating that the power of regimes over the power of niches stalls change and protects the status quo. Such privileging of stability over change is also manifested in power typologies in which power is mostly located at the level of structures and systems and/or is entirely dependent on controlling parties’ willingness and ability to draw on existing structures and systems (Avelino, 2017). This creates a circle of influence in which those within are protected and their interests prioritised. Addressing sustainability under this model of control and protectionism will be “light touch” and manifest itself in the promotion of actions that essentially are cost neutral with respect to the regime. Under such a system, sustainable policy development, including the development of a more sustainable consumption model, will be disjointed and spasmodic and lack the cohesion to make real differences, although the optics may appear promising.

Neoliberal model and social fabric

The current neoliberal economic philosophy that has prevailed for over 40 years in Ireland (and other Western states) has openly encouraged privatisation, deregulation and the removal of barriers to trade and investment. This has been advanced as being in the interests of economic growth and holding to the much popularised view that the market will self-regulate and thus improve the welfare of all through a trickle-down process. However, the outcome of this has been to give increased powers to institutions and corporations, which can move about in time and space in order to maximise their profits and avoid or control sustainability initiatives (Chaves and Monzón, 2012; Morgan, 2017). Indeed, Morgan (2017) notes that such

situations, where capital can flow to the most “efficient” place to defer crisis, are a challenge to the long-term, strategic, public and civic requirements of moving towards sustainability.

Another prominent critique of neoliberal economic growth for Irish and Western societies is the very real threat that this growth model represents to the community and social fabric, which is the basis of human health and well-being (Kasser, 2009). People need to feel secure, competent, efficient and able to choose in relative independence from coercion and internal or external pressures (Clayton *et al.*, 2015). However, where “economic growth is a key goal of a nation”, with its encouragement of self-enhancing, hierarchical, extrinsic and materialistic values, the fundamental needs required for human well-being are contradicted, as materialistic people are most likely to be dissatisfied with life, lack vitality, experience social instability and suffer from anxiety, depression and health problems (Koch, 2013; Yang *et al.*, 2017). The constantly growing cycle of production and consumption plays into the hands of the valorisation interests of various culture industries, but contributes little to human welfare and contradicts the principal reproductive needs of the Earth as an ecological system. Buying and consuming more for its own sake tends to imbalance the carbon cycle, as such “choices” are normally bound to matter and energy transformations that have negative sustainability impacts (Chaves and Monzón, 2012). The literature is clear in highlighting the need to recognise unsustainable resource consumption and for the absolute decoupling of economic growth from this consumption, with its associated impacts on climate, carbon emissions, biodiversity and the very fabric of our society. Relative decoupling, which refers to a decline in the ecological intensity per unit of economic output, is not acceptable as it matters little to the Earth’s systems if the total impact is still increasing. This is seen in Ireland, where greater efficiencies in certain sectors (e.g. transport) have been offset by increases in the overall scale of economic activity and consumption.

New public management

From the theoretical point of view there is an apparent imbalance between the rights of citizens and their responsibilities in contemporary society (Mostovicz *et*

al., 2009). Thus, it is widely regarded that, although all share similar responsibilities, not all citizens enjoy the same rights. It has been noted that governments have a duty to enhance citizens’ sense of responsibility through education and structures that encourage engagement (Mostovicz *et al.*, 2009; Wensing and Torre, 2009). Citizenship in Europe tends not to be authenticated by responsibility but rather by a matter of rights and choices (Mostovicz *et al.*, 2009). The European Commission has called for this approach, arguing that having the right to participate in economic, political and social life is not equivalent to doing so in practice, nor indeed being equipped to do so on equal terms (Cresson, 1998; Mostovicz *et al.*, 2009). Thus, it is reasoned that the government has a moral obligation to act for its citizens and to bear responsibility for society (Mostovicz *et al.*, 2009). In part as a response to these socio-political positions and in part as a response to the wider neoliberal approach to public management in the context of recent economic crises, a new philosophical approach, “new public management”, has emerged. NPM’s main hypothesis is that more market orientation in the public sector would be more cost-effective for governments and would have limited negative side effects. Its key idea is the decentralisation of public administrative management so that this function is subject to, and driven by, market forces in delivering public goods and services (Mostovicz *et al.*, 2009). Governments have used an emphasis on NPM as a means to move the focus of citizenship from citizens’ rights to citizens’ obligations. This approach has done much to dilute notions of state compassion and turned the citizen into a consumer and the state into a market-driven machine (Mostovicz *et al.*, 2009). Responsibility for sustainability as a policy principle and sustainable consumption as a process has been reduced to the level of transactions, subject to the rhetoric of market and economic considerations and analysis. Given the limitations of these approaches in terms of recognising environmental externalities, it is of little surprise to note the shortcomings of this whole model in advancing a deeper sense of sustainability in governance. Related to this dilemma is the type of problem under consideration, in that sustainability issues are often classed as “wicked” problems. Such problems and their solutions are typically complex, multifaceted, ambiguous and inconclusive and do not lend themselves to a simple response, and their criteria for judgement are difficult to assess

independently of the social actors involved (Mostovicz *et al.*, 2009). It has been suggested that one way to address such “wicked” problems is through increased citizen participation (Mostovicz, *et al.*, 2009; Mielke *et al.*, 2016). The problem with NPM and the neoliberal agenda underpinning policies that flow from it is that it relies on a narrow definition of prosperity and success. Indeed, the economic analysis tends to finish at the point where the money flow stops, such that goods and services appear in the economic system only where they exist in the form of commodities, and drop out of sight as soon as they lose this quality (Koch, 2013). In this context it is worth noting that, in thermodynamic economics, there is such a thing as “uneconomic growth,” that is, when the costs of growth in terms of the degradation of ecosystems arising from further throughput exceed the benefits (Koch, 2013). Koch (2013) also notes that there is a distinction between “growth” and “development”, whereby the former refers to a quantitative increase in gross domestic product (GDP) and the latter to qualitative change. This is not to suggest the abandonment of such measures as GDP, but that a governance model that seeks sustainability as a fundamental principle needs to broaden its purview in designing policy.

Sustainability translation

Notable efforts have been made to understand long-term processes of transformative change towards more sustainable societies (Avelino, 2017). To return to the core research questions, it has been the extrinsic values, those that generally include an individual's cognitive assessment of effort as a means to some extrinsic end, that have been to the fore in managing sustainability and consumption in society (Hall, 2013). McMeekin and Southerton (2012) note that a focus on changing consumer behaviour offers a less expensive and perhaps simpler way for governments to flag efforts designed to attain sustainability. Much of what has been presented by the Irish government creates a semblance of sustainable action or promotes the “label” of sustainability, but has limited real impact on consumption practices and wider sustainability concerns. These are many examples of these optically appealing sharp tactical tools adopted by governments and regulatory authorities to demonstrate sustainability and “green” credentials to wider audiences and the socio-cultural system. However, the literature data suggest that much of this is facile and optics based.

The evidence of a deeper integration of sustainability remains elusive, yet the need becomes ever more pressing – as if “cosmetic toolkits” somehow delude the natural course of real-world systems. It is imperative that governments engage with a deeper sustainability model and that this is reflected in society, through investment in infrastructure, governance structures and technology development, and a demonstration of the will and means to enable implementation. Thus, the data suggest that a sustainable future cannot be achieved by relying solely on initiating a “bottom-up” approach that seeks changes in individual consumer behaviour; rather, a macro-political and macro-institutional approach to sustainability in governance, policy and research is required (Boulton, 2010; Prothero *et al.*, 2011). A number of papers addressed these issues, advocating the need for policy and regulatory frameworks to be interconnected in order to handle conflicting objectives of economics, environment and social justice. It was noted in the literature that there needs to be a shift in thinking to recognise that markets can and do subvert democracy (Donnaruma and Partyka, 2012). There was a clear call to challenge the open and widely promoted presumption that competitive markets are necessary and optimal for organising economic activity. The synthesis of ideas in the literature data suggests that a defined set of key concepts needs to be used in guiding governance behaviour and sustainable policy design:

- People do not adopt sustainable consumption lifestyles for societal reasons; rather, cultural norms, institutional inertia and powerful actors, as well as individual reasons, all conspire to fashion the output observed and experienced.
- Communication is not enough for consumer awareness and sustainable behavioural change – the role of communication is often misplaced or misunderstood or even redirected when it is seen as contrary to accepted patterns or interests. Therefore, communication needs to be sensitive to its target group, multifaceted, bi-directional and dynamic.
- A new conceptual framing is needed that defines a culture of sustainability embodying individual practices, but more significantly changing social institutions, societal norms and governance systems; indeed, the need for developing a sustainable global society is advocated.

- There is a need to build concepts around an ethical society, linking an individual's worldview with planned societal or citizenship activities to ensure that society continuously improves its ethical behaviour.
- Sustainability is a “grand challenge” and requires “grand governance” in which the meaning and role of the citizen are elevated beyond paternalistic platitudes. There is a need for a new meaning of citizenship and a new form of governance reflecting a deeper sustainability model.

This approach calls for responsibility and accountability on the part of governments. Sustainability needs to be seen as a right and such rights need to be enshrined in legislation so that policies have the necessary traction to ensure implementation and avoid being seen as generalised aspirations.

4.6 Governance and Sustainability Policy Development Framework

The GSPD framework represents the culmination of the research process and addresses the research project objectives and work package tasks (see section 1.2) and the research questions (see section 2.3). The principles outlined in the following sections should be acknowledged in policy development designed to address sustainability in consumption and inform a deeper embeddedness of sustainability in citizenship and governance. These evidenced-based principles are derived from the above analysis and interrogation of the data and are set out under the three themes: (1) the individual as responsible consumer; (2) the individual within the social, marketing and institutional context; and (3) the institutional and governance (socio-technical) approach.

4.6.1 The individual as responsible consumer

This approach places responsibility at the level of the consumer. The notion of consumer citizenship reflects the societal ownership, rights and responsibilities of consumption more typically associated with political entities. Although the literature acknowledges the limits of this approach, a number of core principles are identified in this literature and can be utilised as a partial strategy to complement the social, marketing-institutional context and the institutional and

governance approaches. The following are identified as principles for policy development within this context:

- the process must distinguish between individuals as consumers and individuals as citizens;
- sustainable behaviour is more enduring when based on core intrinsic motivations;
- the need to embed the value of future generations in the policy framework should be explicit;
- approaches to policy design need to reach out to disconnected practices and societies;
- a participatory setting needs to be developed to drive individual empowerment, competence, social learning, self-reflection and emotional maturation;
- individual ethical and moral values, emotions and cognitive development need to be fostered;
- sustainable policy must call for a better worldview and changes in culture, values, economics and political systems, not just reflect these conditions;
- policy needs to empower consumers in the decision-making process through communication and data provision – it should enable decision making through reasoning;
- sustainable consumption policy needs to rise above the conventional welfare maximisation model.

4.6.2 The individual within the social, marketing and institutional context

This approach is set within the social and marketing-institutional context where sustainable consumer behaviour and the development of sustainable policies are driven by the interplay of individual and market. It places responsibility for sustainable consumption at the level of the individual, contextualised within a suite of stimulants and encouragements. Individual initiatives that fall within the scope of this theme have had some success in changing a narrow aspect of behaviour through their “nudging” of that behaviour. However, in the absence of greater co-ordination, these approaches will remain piecemeal and may even contradict each other. The development of a more balanced and contextualised approach to sustainable consumption requires an extended consideration that acknowledges the complexity of context and sustainability as a process. Notwithstanding that, sustainable consumption under the social,

marketing-institutional context can be advanced by recognition of the following principles:

- sustainable policy development needs to be adaptable and to recognise the rapidly changing environment within which it operates;
- policy should guide the consumer toward a decision that is optimal for sustainability and validated by objective standards;
- there is a need to avoid paternalistic overtones and control of the decision set;
- the challenge of product complexity should not be underestimated and needs to be reflected in the decision context;
- there is a need to recognise the decision capacity of the consumer making the decisions and to provide the right balance of information and validation;
- decision framings should be defined for consumers as they demarcate the democratic values of choice on the market;
- understand the role of policy in driving the political consumer choice set – dependent outcome and consequences;
- recognise that individuals do not act rationally but rather refer to familiar heuristics to avoid information overload in decision making with regard to sustainable consumption;
- recognise that consumers make decisions with due regard to the role of values, social norms and routines, including community patterns and fairness;
- sustainable consumption needs political support to drive citizen-orientated choices;
- economic growth needs a broader template for evaluation and resource consumption needs to be more equitable;
- the role of corporate action in policy development must be identified and incorporated in notions of power, trust and integrity mapping;
- there is a need for oversight and to actively co-ordinate initiatives to avoid a fragmented approach and strategic conflicts.

Drawing on both approaches; the individual as responsible consumer and the individual operating within the social, marketing-institutional context, Figure 4.3 illustrates where consumer-citizens are nested within social structures that can both enable

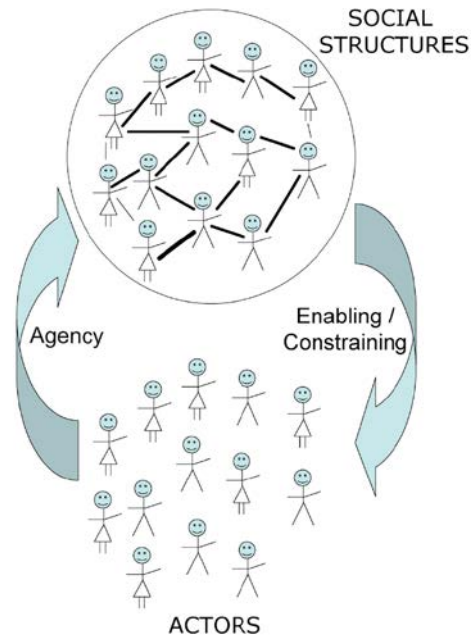


Figure 4.3. The dialectic of structure and agency.
© 2008 From *Internet and Society: Social Theory in the Information Age* by Fuchs, C., p.44.
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and constrain positive sustainable consumption behaviour.

Although both of these approaches have been the most heavily utilised in managing consumption behaviour, they do not account for the wider context of the society in which the social structures (and consumers) exist, nor the ecosystem and environment, often framed as an externality, in which the consumers (actors) are embedded. It is in the final approach, although poorly represented in both policy and the wider literature, that this research project makes its most significant contribution. The GSPD framework moves beyond a simplistic model that addresses discrete elements of human consumption behaviour and seeks to understand their embeddedness and co-ordinate their interaction within the culture and institutions of wider society.

4.6.3 Institutional and governance (socio-technical) approach

The GSPD framework is a guidance template that recognises the necessity of setting individual sustainable consumption within a decision context defined by a suite of powerful factors, including

political and government settings, the role of institutions, communities, social norms and culture. The development of this evidence-based framework with its associated principles can be presented under four thematic pillars that define the consumption–sustainability nexus in contemporary Western society. Thus, the advancement of a more sustainable society and the development of more sustainable consumption policies need to reflect the following principles of change:

- Society comprises economic, political and cultural aspects; therefore:
 - i the notion of extra-institutional authority should be embraced as a way of guiding governance and institutional responses to sustainable policy design;
 - ii the need for an ethical society should be recognised, linking sustainability across peoples, places and times;
 - iii communication for sustainability requires scientific rigour, consistency and objectivity;
 - iv sustainable consumption requires that institutional and governance structures re-take responsibility for creating sustainable market structures (democratic sustainability), a social “push back” from the consumption interface.
- Governments must:
 - i accept their responsibility for ensuring social and environmental equity to truly strive for sustainability in society;
 - ii ensure greater transparency such that values, standards and their effectiveness are clearly demarcated;
 - iii act together with institutions in drawing on existing structures and systems to effect change towards a more sustainable state;
 - iv avoid narrowly defining continuous economic growth as a national goal as its extrinsic, hierarchical, materialistic focus is contrary to the ideals of sustainability and sustainable consumption and has repeatedly led to social and economic instability;
 - v promote community and the fabric of society to enable sustainable consumption to promote human health and well-being;
- vi recognise socio-cultural complexity in consumer decision making and the impact on ESBs;
- vii promote security and freedom to choose independently from coercion or pressure;
- viii build in recognition of environmental externalities in the drive for a deeper sense of sustainability;
- ix interconnect policy design in order to handle conflicting objectives of environment, economics and social justice;
- x build ethics into developing and advancing sustainable consumption;
- xi be supported by investment in infrastructure, governance structures and technological developments that enable implementation engagement and advancement;
- The economic system must:
 - i avoid the narrow understanding of prosperity and the risk of uneconomic growth;
 - ii distinguish between “growth”, which is narrowly based, and “development”, which is broader, multifaceted, more robust and enduring;
 - iii recognise and incorporate the level of consumer liberty in a choice set;
 - iv recognise choice patterns and consumer heuristics in decision making;
 - v incorporate consumer rationality, education and understanding in adaptable communication policies;
 - vi create enduring value using intrinsic components within the socio-economy;
 - vii guard against the potential to subvert consumer democracy;
- Consumers-citizens must:
 - i understand and promote citizenship as a right, not just an obligation;
 - ii be encouraged and facilitated to engage, participate and trust;

- iii engage and demonstrate moral rational reasoning that defines belief systems;
- iv understand that, although sustainability awareness-raising schemes are good in themselves, they need to be contextualised within a broader strategy of sustainable governance and policy development that recognises the complexity of the environmental challenge.

By building on the three thematic approaches to the analysis and exploration of a core body of systematically selected literatures, it has been possible to develop a schema from the 27 principles outlined above to guide future development in this complex field of sustainable consumption from both a policy and a research perspective (Figure 4.4). Further, the use of the three theoretical considerations has thrown up some interesting insights that demonstrate the limitations of many current approaches to managing

sustainable consumption. However, through an interrogation and synthesis of concepts and contexts within the literature data, and ultimately by viewing these efforts firmly within a socio-technical (systems of provision/institutional) lens, it has been possible to fashion a GSPD framework or model (see Figure 4.4).

This structured approach or framework, with its four pillars, maps the context within which its embedded principles can be enacted. It also presents a number of parallels, with seminal contributions within the foundation literature (see Chapter 3) (Kollmuss and Agyeman, 2002; Fuchs, 2008, 2017; Phipps *et al.*, 2013) (Figure 4.5). It is a unique evidence-based contribution to the sustainable consumption literature and emphasises the importance of moving beyond the concept of the responsible consumer to encompass the interaction between society's complex infrastructures and human behaviour. In this sense, society itself, and its substructures, are recognised as complex socio-technical systems.

Pillars of the framework and the 27 PRINCIPLES of CHANGE

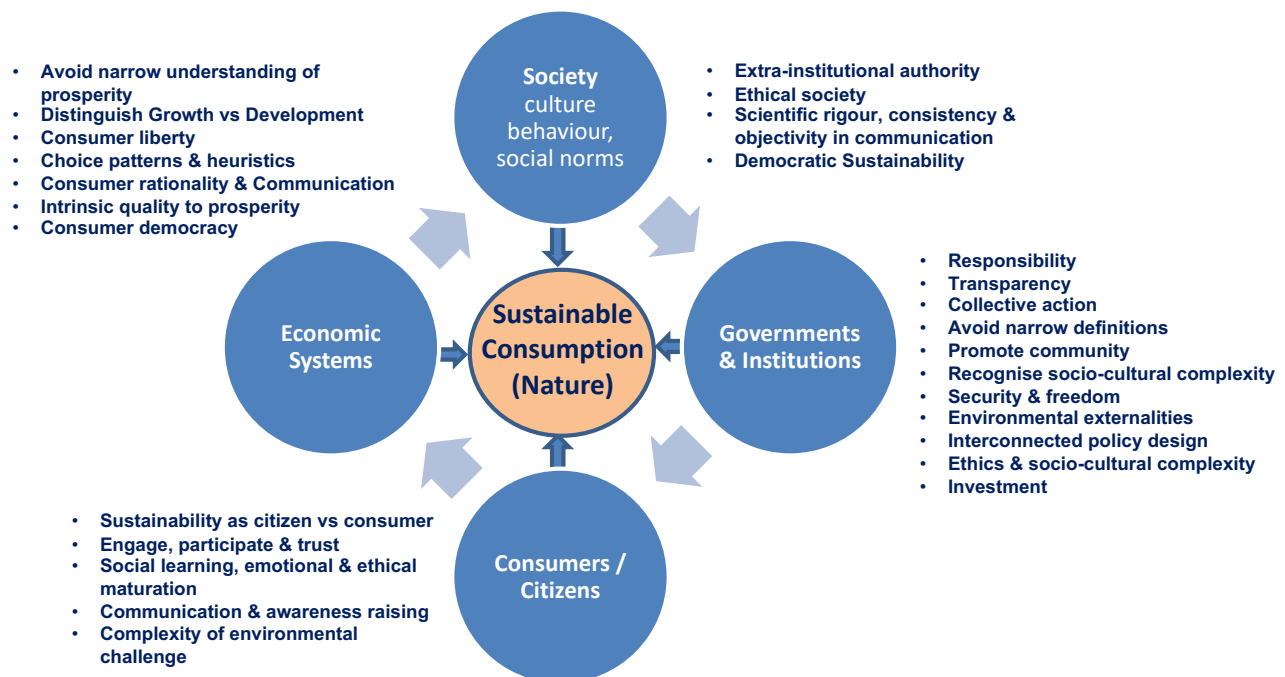


Figure 4.4. The GSPD framework (the “road map”).

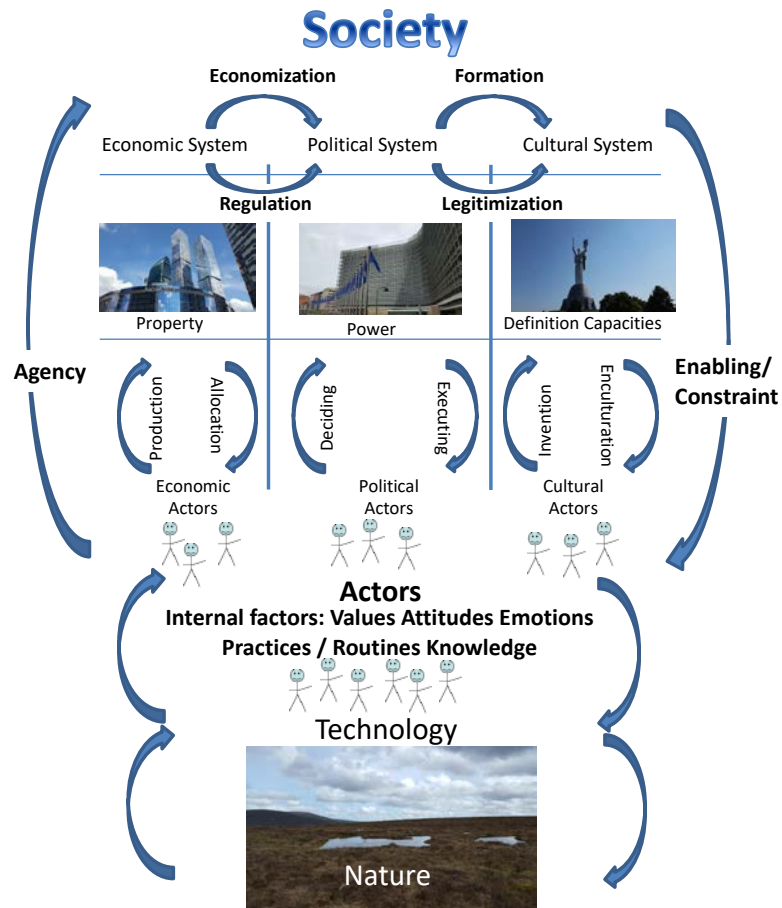


Figure 4.5. Sustainable consumption behaviour framework nested within societal subsystems. Adapted from Kollmuss and Agyeman (2002, p. 257), Phipps *et al.* (2013) and Fuchs (2008, p. 53; 2017, pp. 11–12).

5 Conclusion

This project sought to explore the nature of sustainability and consumer behavioural systems in society and how this process is shaped by the structures and dynamics at the governmental, institutional, community and individual levels. This was addressed through a detailed and systematic review of the seminal literature contributions that define the theory of sustainable governance and consumption in order to disaggregate and interrogate the core ideas and to reconfigure and synthesise a new understanding of where current thinking rests and offer a template to advance the sustainability agenda. The outcomes of this work address the research questions (see section 2.3) in developing an innovative and balanced guidance framework or policy “road map” grounded in the literature evidence and centred on sustainability-oriented behaviour to inform a new societal paradigm. The strength and novelty of this approach is the evidence-based outcome, which provides the necessary reliability and validity to the findings. It is startling to note the level of diversity and complexity in sustainability research and how this has added to the challenge of advancing tangible socio-political responses. This research provides clarity based on evidence and highlights the limited literature base linking sustainability and consumption, despite the popularity and frequency with which these topics are bandied about within the socio-economic and political system.

Many commentators who explore the nature of sustainability in contemporary society have emphasised the procedural notion of sustainability as a way of dealing with its complexity (Leach *et al.*, 2010). Accordingly, the UN report on sustainability (UNGSP, 2012, p. 6) links sustainable development to procedural issues:

Sustainable development is not a destination, but a dynamic process of adaptation, learning and action. It is about recognising, understanding and acting on interconnections.

The more recent UN SDGs call for the building of dynamic, sustainable, innovative and people-centred economies (UN General Assembly, 2015; UNEP,

2015). Thus, the outcomes of this study should be seen as another step along a path to greater sustainability. The speed of environmental change is rapid and non-linear such that it may well exceed the capacity of our individual psyches and social systems to cope. Indeed, any culture that disregards its own environmental status, its own life support system, is fundamentally dysfunctional. Thus, this underscores the imperative to act with urgency, responsibility and prudence and embrace a precautionary principle.

As already noted, this project sought to gain an understanding of the values and motivations that influence consumption behaviour and sustainability. These consumer values and motivations, both intrinsic and extrinsic, were discussed against the backdrop of a society dominated by a neoliberal philosophy that places greater emphasis on extrinsic values and by behavioural approaches that expound positive attitudes toward sustainability, but exhibit mostly unsustainable consumption patterns (Prothero *et al.*, 2011). Sustainable consumption behaviour in the context of climate change is a grand challenge that has been characterised as a “super wicked” problem because of the scale, scope and time horizon over which mitigation efforts must take place, without the certainty of a central authority (George *et al.*, 2016). George *et al.* (2016) note that often corporate responses to such challenges may be visionary and expansive initially, but become diluted over time because of the sheer contentiousness of the issues and scale of the challenges. This research adopted Hall’s (2013) framework of behavioural approaches, as well as Sedlacko *et al.*’s (2014) categorisation of agency, in the analysis and mapping of the core SLR literature with regard to the governance of sustainable consumption. These approaches informed the development of themes and the selection of the framework or “road map” to guide future policy development. Hall (2013) reminds us that failure to recognise the importance of socio-cultural structures in affecting behaviour has created a path dependency in which solutions to consumption are accepted only within the dominant governance and behavioural paradigm – this needs to be challenged. Indeed, it is a startling revelation of this research that the rhetoric

that places the focus of responsibility for sustainable consumption at the door of the consumer is misplaced. This study suggests that governments and institutions are remiss in this emphasis and that a new model is required that recognises the responsibility of those empowered to govern in driving sustainability and which acknowledges their role in defining societal values.

This research study sought to inform a conceptual framework on how sustainable consumption can be advanced at a political and policy level, building on a systematic evidence-based examination of the literature across many disciplines and outlets. It presents a guidance framework or policy “road map” for change that adds to the momentum that will drive this process forward. The GSPD framework presented addresses the four key pillars of society, including individual consumers, society and culture, economic systems and governance and institutions. The guiding principles of change (Figure 5.1) set out under these pillars represent core values that should be used to define how sustainability should be integrated in policy development.

This framework or “road map”, with its principles of change, provides a test bed against which initiatives can be measured, gauged and promulgated.

Additionally, the evidence base that underpins these principles has been rigorously and systematically interrogated and the outcomes strongly underscore the imperative for action to advance Irish and European sustainability in consumption. The evidence base of this approach defines its importance and relevance to policy and sets it apart from other notions of what might seem apt or appropriate but which lack the systematic grounding in data. It is evident that there are no exemplars of perfect sustainability or perfect policy, nor is there any delusion of the scale of the challenge, but neither of these considerations are reason for inaction. If the goals are to improve our societal status, to ensure the well-being and health of all citizens and to prosper as a people and a society, then the principles set out in this project report must become part of a new way of doing business and new way of living; they must become embedded in our way of life and define a new environmental paradigm.

The changes required for sustainability in its widest sense may become politically charged, as “expand or perish” is an inexorable force in a capitalist economic system (Hoffman, 2011). The contradiction of seeking to influence the consumption patterns of the citizen-consumer, whilst capitalist actors seek continued increases in sales and profits, with no interest in societal benefits, is clear. Linking the macro approach

Pillars of the framework and the 27 PRINCIPLES of CHANGE

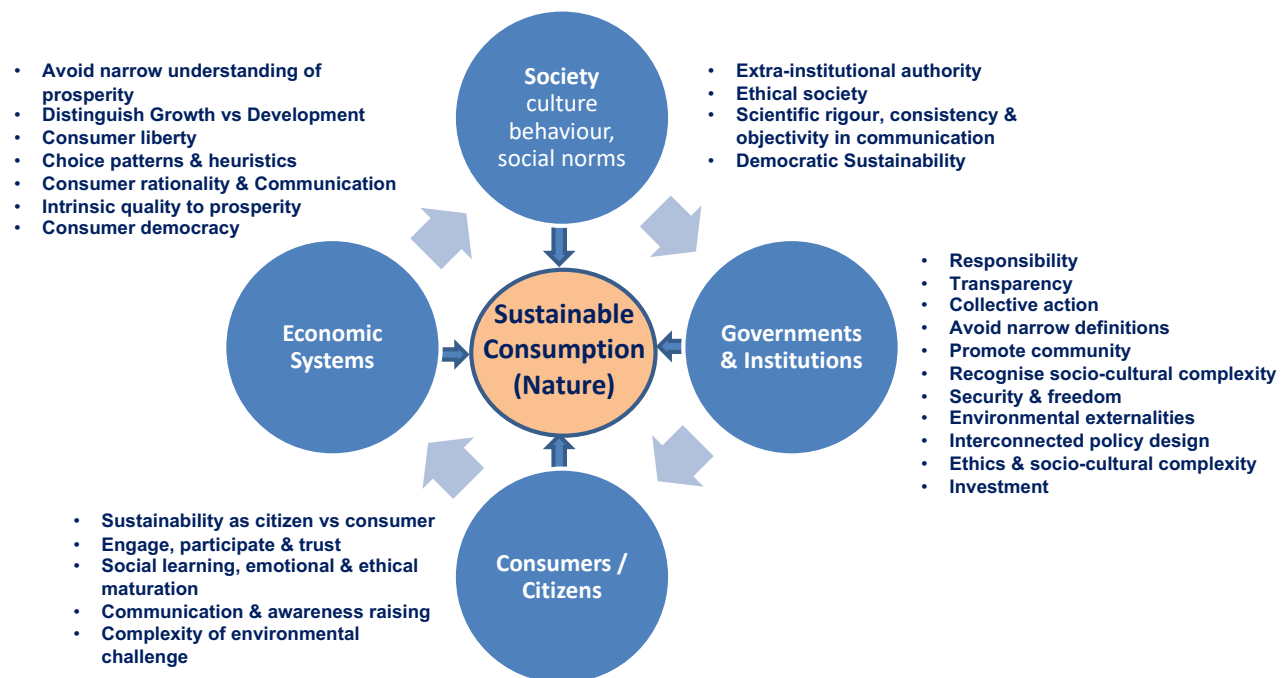


Figure 5.1. The GSPD framework (the “road map”).

of new institutionalism in recognising the impact of the institutional or societal logic of capitalist economics to the culture and practice of consumption is crucial. Implementation of sustainability policies must result in a change not only in individual practices but also in the mindset of wider society and governance systems. Dacin *et al.* (2002) aver that institutional concepts and arguments seem ready-made to address the complex processes now unfolding as inhabitants of our planet become more interdependent. Hoffman (2011, p. 9) cites the chief economist of the International Energy Agency (IEA):

Potentially, we are already with our feet in water, reaching the level of our knees. Yet we make decisions and keep promising that our toes will remain dry.

Spaargaren (2011) has even gone as far as to call for the development of new forms of environmental authority, beyond nation states, in order to bring about effective forms of global governance for sustainable consumption in a new world order. George *et al.* (2016, p. 1893) also call for action, citing the UN SDGs as a framework, and the statement of their proposer, the UN Secretary General H.E. Ban Ki-Moon, that “There is no Plan B for action, as there is no Planet B.” They cite the moral imperative in that we must all act to guide business leaders, employees and stakeholders with systematic, unbiased and empirically robust evidence on mechanisms with which to tackle the persistent, but tractable, global problems confounding us.

6 Dissemination

6.1 Introduction

This project had a number of targeted outputs, including traditional academic channels and a proposed programme of public engagement initiatives. This chapter briefly outlines the project outputs, including works in progress.

6.2 Academic Journals and Conferences

This project has sought to generate four journal articles over the course of the work. This includes articles based on material from the foundation research activities, the foundation literature review and the SLR. This target was met, with a total of four articles published, accepted for publication, in review or in preparation. Another output sought was in the form of conference papers. A total of eight conference papers were delivered or have been accepted for delivery at international conferences, including (1) the Midwest Political Science Association Annual Conference, Chicago (April 2017); (2) the European Group for Public Administration Annual Conference, Milan (August 2017); (3) the UK Congress on Obesity (UKCO) (September 2017); (4) the International Conference on Sustainable Development, Rome (September 2017); (5) the Midwest Political Science Association Annual Conference, Chicago (April 2018); (6) the International Sustainable Development Research Society Conference, Messina (June 2018); (7) the International Education with Sustainability Conference, Sligo (August 2018); and (8) the Irish Academy of Management Conference, Cork (September 2018). In addition, a launch event and presentation workshop was undertaken under the auspices of the Irish Social Policy Association (ISPA). A further showcase event has been planned for autumn 2019 in conjunction with the Institute of Public Health (IPH).

6.3 Network Meetings

A series of meetings and events were choreographed around the research project: (1) Horizon 2020 Societal Challenge 1 Proposal Consortium Development with

15 EU partner countries, advancing sustainability, society and health (Paris, December 2017); (2) Fingal County Council community initiatives, including the launch of a lunchtime lecture series on sustainability, consumption and landscape for Fingal County Council and interested parties (2018); (3) Irish lead in the Responsible Research for Business and Management (RRBM) Network – endorser of a White Paper, *A Vision for Responsible Research in Business and Management*, which calls for actions to transform business and management research towards achieving humanity's highest aspirations for a better world, with reference to the UN SDGs and influences on consumption. The RRBM Network is a Global Network Group across more than 25 university-based business schools in 10 countries, with support from partners including the Association to Advance Collegiate Schools of Business (AACSB), the European Foundation for Management Development (EFMD), the UN's Principles for Responsible Management Education (PRME), Aspen Institute Business and Society Program and the Globally Responsible Leadership Initiative (GRLI).

This networking and project development has resulted in the award of a Horizon 2020 grant [Integrating Environment and Health Research: A Vision for the EU (HERA)]. This provides a context for the advancement of this research project, supported through European funding.

6.4 Digital Media

6.4.1 Project website

Project dissemination also entailed the creation of a public website (<http://www.dit.ie/eshi/eparp/>), which includes data and download links for presentations, posters and other outputs of the project. It also presents thematic synopses and links to related information and was designed to meet contemporary web standards and to be responsive in layout. Best practice protocols were used for the analysis and tracking of information-seeking and communicative actions from website users. This approach also centralised the use of tools such as Google Analytics

(www.google.com/analytics), which performs real-time collection and aggregation of data on website visits. Such data can inform subsequent changes to the website structure, as a picture of how it is used and accessed emerges.

6.4.2 Film clip: YouTube

A short film clip was produced to promote the project idea, aimed at the general consumer audience. The film clip was titled with the project title and is hosted on YouTube and linked to the project web page (https://youtu.be/D5VE4JgN_zs). This film clip uses an

engaging design to raise awareness of sustainability, values and the relationship of sustainability to economic prosperity, while acknowledging the role of consumption in society. It also seeks to pose questions about the limits to growth and what strategies might be required to address this challenge.

6.4.3 Twitter account

A dedicated Twitter account, SusConBehaviour (@EPA_COHESION), was also established and used throughout the project run time to engage in outreach communications and promote activities and events.

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Abbreviations

CSR	Corporate social responsibility
EPA	Environmental Protection Agency
ESB	Environmentally significant behaviour
EU	European Union
GDP	Gross domestic product
GSPD	Governance and Sustainability Policy Development
NEP	New ecological paradigm
NPM	New public management
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
RRBM	Responsible Research for Business and Management Network
SDG	Sustainable Development Goal
SLR	Systematic literature review
UN	United Nations
VBN	Value–belief–norm

Appendix 1 Selection Criteria Used to Implement the SLR

Table A1.1. Inclusion criteria for the SLR

Inclusion criteria	Categorisation	Justification
Includes reference to society and the natural environment	Topic/focus	Links sustainability with the natural and social environment
Addresses sustainability communications and interventions	Practice/implementation	To include studies that have demonstrated a practice or implementation focus
Sustainable/sustainability	Definition	To ensure that the topic of sustainability refers to environmental sustainability and natural resource management
Environment/environmentally	Definition	To ensure that references to the environment include both the social and the natural environment
Consumer/consumption behaviour	Definition	To ensure that behaviour considered is consumption based
Governance	Definition	Consistency and common understanding
Policy	Definition	To ensure that the policy concerned is directed at sustainability as defined
Values	Definition	Consistency and common understanding
Intrinsic	Definition	Consistency and common understanding
Extrinsic	Definition	Consistency and common understanding
All disciplines and research domains	Discipline type	To ensure that the search is not restricted by any discipline or topic area
Studies published since 1 January 2002	Time frame	Limited by time as this is the period with the greatest number of contributions and the most relevant type of contributions to the topic of interest
Academic journal, e-journal	Document types	To ensure that only peer-reviewed articles were selected
Full text online	Search display format	To ensure that the full content and contribution of the articles and studies concerned were accessible for review and evaluation
Scholarly material including peer-reviewed papers and studies	Search engine parameter	To target the seminal theoretical developments and contributions in the academic literature
Include results beyond the library collections of the institutions concerned (UCD and DIT)	Search engine parameters	To ensure that all relevant articles, papers and studies are included in the SLR search process
English	Language	Articles either fully written in English or with an English-language abstract, as English is the academic reference language

DIT, Dublin Institute of Technology; UCD, University College Dublin.

Table A1.2. Exclusion criteria for the SLR

Exclusion criteria	Categorisation	Justification
Sustainability as an economic concept	Definition	To exclude references to economic or commercial sustainability
Studies published before 1 January 2002	Time frame	Studies published before this date are less relevant to current theoretical developments. The environmental change perspective has accelerated since 2002 and hence the reference period selected is proportionally more significant

Table A1.2. Continued

Exclusion criteria	Categorisation	Justification
Non-English-language papers	Language	Based on the academic norm that all significant academic contributions have an abstract available in English (even if the full-text article is published in another language)
Newspaper articles, book reviews and dissertations	Document type	In the context of this study, newspaper editorials, general book reviews, advertisement features, trade articles and dissertations do little to advance the research topic. It is noted that outputs of meritorious dissertations will have generated peer-reviewed academic publications and, if relevant, will be identified through the publication path

Appendix 2 Study Selection

Table A2.1. General screening criteria for the eligibility assessment template^a

Screening criteria	Categorisation	Comment/analysis
<i>Duplicate papers</i>		
Duplication of a paper	Duplicate entry – sometimes attributable to a slight difference in the library categorisation details	The search terms and inclusion/exclusion criteria when used on the literature databases can generate some duplicate outputs – these need to be filtered
<i>Socio-political boundaries</i>		
Irish, EU and Western societal-based studies	Participants and context	Data from participants and social settings based outside Ireland/EU and Western societies were considered less relevant from a societal, regulatory and operational perspective and were omitted
<i>Discipline focus and thematic boundaries</i>		
Disciplines/topics that addresses the research questions	Topic/scope	Overarching requirement that the topic of this research study is addressed in the paper being assessed to ensure that relevant works are included
Studies that address societal structures and sustainability	Social paradigms and sustainability	This identifies papers that link the key concept of sustainability with society
Studies that demonstrate frameworks and templates	Tools and structures of social/ environmental change	To include papers that address translational processes – consider implementation schemes
Articles that include consumption, behaviour and behavioural control	Consumption models and theory	To identify papers that address consumption and behaviour in the context of sustainability – controlling mechanisms
Papers that reference societal values	Decision theory	To explore the linked hierarchy of values and decision making – contrasting and shifting realities of society
Papers that explore governance and institutions	Power, regulation, standards and social context	To expand the concepts of actors and influence in institutional and political governance and social change
Papers that address sustainability policy	Public policy design	To examine the context of sustainability in policy design, public policy and policy implementation
<i>Alternative key term definitions</i>		
Sustainable and sustainability – alternative interpretations	Definition	To exclude studies that use the term sustainability in a manner inconsistent with the stated definition
Environment and environmental – alternative uses and interpretations	Definition	To exclude references to the operating environment and commercial environment
<i>Methodological approach</i>		
Theoretical reviews	Methodology – measurement approach or key variable	To ensure that studies that address key theoretical considerations and concept development are included
Qualitative studies	Methodology – research design	To ensure that studies that address qualitative dimensions are included
Quantitative studies	Methodology – measurement/key variable	To exclude studies concerned with purely quantitative analysis

^aPapers must comply with the screening eligibility criteria to be included in the core list.

Table A2.2. Contribution to the sustainability paradigm using full-text evaluation (eligibility assessment template)

Eligibility criteria	Categorisation	Comment/analysis
<i>Discussion and analysis approach</i>		
Evidence of data interrogation and theoretical contribution	New data and theory	To identify papers with seminal or novel interpretations of data and papers that provide data or theoretical contributions on society and sustainability for analysis and synthesis
Evidence of insights and analysis with implications for the advancement of sustainability in society	Models that advance understanding of the societal sustainability paradigm	To include papers that make seminal contributions that address implementation models, analysis and synthesis

Appendix 3 Summary of Articles Reviewed

Author	Title	Findings (studies)	Approach
Yang <i>et al.</i> , 2017	Sustainable retailing in the fashion industry: a systematic literature review	Lack of research on sustainable retailing	SLR
Rickards <i>et al.</i> , 2014	Barriers to effective climate change mitigation: the case of senior government and business decision makers	Factors informing senior management decision making are largely focused on local context and pressures, with a focus on a narrow base	Review
Bennett <i>et al.</i> , 2018	Environmental stewardship: a conceptual review and analytical framework	Review of environmental stewardship to provide framework and definition	Review
Mielke <i>et al.</i> , 2016	Stakeholder involvement in sustainability science – a critical view	Basic typology to understand stakeholder needs and involvement	Conceptual paper
Wensing and Torre, 2009	The ecology of education: knowledge systems for sustainable development and sustainability	Poor efficacy and validity of climate education, which needs to improve	Conceptual paper
Chaves and Monzón, 2012	Beyond the crisis: the social economy, prop of a new model of sustainable economic development	Advocates scoping out the social economy further – implications for widening economic analysis	Review paper
Ockwell <i>et al.</i> , 2009	Reorienting climate change communication for effective mitigation: forcing people to be green or fostering grass-roots engagement?	Argues that communication should facilitate public acceptance of regulation and, second, to stimulate grassroots action through affective and rational engagement with climate change	Conceptual paper
Tonn and Stiefel, 2012	The race for evolutionary success	A review of the forces threatening species survival, with a comprehensive scan of factors. These could lead to four types of evolution (cultural, regulatory, ecological and technological) that could avert massive species extinction. Focus: humans	Review paper
Schäpke and Rauschmayer, 2014	Going beyond efficiency: including altruistic motives in behavioral models for sustainability transitions to address sufficiency	Differentiation between self- and other-oriented goals and behaviour, utilising theory to analyse the effectiveness of sufficiency policies on sustainability and quality of life	Conceptual paper
Peloza and Shang, 2011	How can corporate social responsibility activities create value for stakeholders? A systematic review	CSR systematic review with focus on public governance	SLR
Kollmuss and Agyeman, 2002	Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour?	Evaluation of factors that have an influence, positive or negative, on pro-environmental behaviour to incorporate them in a model	Conceptual paper
Clayton <i>et al.</i> , 2015	Psychological research and global climate change	Psychological perspective should inform efforts to avoid misunderstandings about human behaviour and motivations that can lead to ineffective or misguided policies	Conceptual paper
Soper, 2007	Re-thinking the good life: the citizenship dimension of consumer disaffection with consumerism	Advocates enlarging the framework of thinking about contemporary “civic” or “republican” aspects of consumption in order to understand how to encourage concerned citizen or “ethical” consumers and motivations through more effective policies	Conceptual paper
Heuer, 2012	Sustainability governance across time and space: connecting environmental stewardship in the firm with the global community	Linking models of firm-level environmental stewardship with three types of trust to create value for consumers (and firms)	Review paper
Jagers <i>et al.</i> , 2017	Testing the importance of individuals’ motives for explaining environmentally significant behavior	Attempts to explain how different motives affect behaviour and how the causal chain of values and beliefs forms our understanding of and motives for private sphere ESBs	Empirical study – survey

Author	Title	Findings (studies)	Approach
Klintman, 2006	Ambiguous framings of political consumerism: means or end, product or process orientation?	Dominant framings in consumer theory regarding organic food labelling and impact on consumers remain contested	Case study of non-governmental organisation documents
Adobor and McMullen, 2013	Global governance: the case of global nongovernmental regimes.	Cases of collective action identified as examples of corporate action in relation to environmental issues	Conceptual paper
Avelino, 2017	Power in sustainability transitions: analysing power and (dis)empowerment in transformative change towards sustainability	Conceptual framework to analyse power and (dis)empowerment in transformative social change	Conceptual paper
Curran and de Sherbinin, 2004	Completing the picture: the challenges of bringing "consumption" into the population–environment equation	Conceptual model linking consumption with population–environment literature	Conceptual paper
Safarzyńska and van den Bergh, 2010	Evolving power and environmental policy: explaining institutional change with group selection	Institutional change theory identifies taxonomy of power and how institutions can determine individual choice and interaction structures	Conceptual paper
Heiskanen <i>et al.</i> , 2010	Low-carbon communities as a context for individual behavioural change	Communities as a context for behavioural change	Empirical paper: case study
Koch, 2013	Welfare after growth: theoretical discussion and policy implications	Recognition of the need for social policies for redistribution in the context of a no-growth scenario	Theory paper
Wang and Gao, 2016	What do we know about corporate social responsibility research? A content analysis	A systematic review of the CSR literature to examine underlying trends and milestones and to clarify and categorise the structure of CSR studies	Systematic review/ content analysis
Gjerris <i>et al.</i> , 2016	What to buy? On the complexity of being a critical consumer	Political support to enhance citizen-oriented food choices is required	Discussion paper
Sacchetti, 2015	Inclusive and exclusive social preferences: a Deweyan framework to explain governance heterogeneity	Framework explains governance heterogeneity by contrasting exclusive and inclusive social preferences in co-operatives and social enterprises, as well as traditional corporations	Theoretical paper
Donnaruma and Partyka, 2012	Challenging the presumption in favor of markets	The presumption of competitive markets as necessary for organising economic activity is challenged. A shift in thinking to recognise how markets can on occasion subvert democracy	Conceptual paper
Boulton, 2010	Complexity theory and implications for policy development	Policy and regulatory frameworks need to be interconnected to handle conflicting objectives of economics, environment and social justice	Conceptual paper
Rauschmayer and Omann, 2012	Transition to sustainability: not only big, but deep	People do not adopt sustainable consumption lifestyles for societal reasons, but because of cultural norms, institutional inertia and powerful actors, as well as for individual reasons. Communication is not enough for consumer awareness and behaviour change	Response paper
Tàbara and Giner, 2004	Diversity, civic virtues and ecological austerity	Concept change needed for a culture of sustainability examined at the level of individual practices and in social institutions and the need for developing a sustainable global society is advocated	Conceptual paper
Mostovicz <i>et al.</i> , 2009	Is an ethical society possible?	Conceptual build for an ethical society – linking an individual's worldview and planned societal or citizenship activities to ensure that society continuously improves its ethical behaviour. Examines the meaning of citizenship and the state	Literature review

AN GHNÍOMHAIREACHT UM CHAOMHNÚ COMHSHAOIL
Tá an Gníomhaireacht um Chaomhnú Comhshaoil (GCC) freagrach as an gcomhshaoil a chaomhnú agus a fheabhsú mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaoil a chosaint ó éifeachtaí díobhálacha na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialú: Déanaimid córais éifeachtacha rialaithe agus comhlionta comhshaoil a chur i bhfeidhm chun torthaí maithe comhshaoil a sholáthar agus chun díriú orthu siúd nach gcloíonn leis na córais sin.

Eolas: Soláthraimid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spriocdhírthe agus tráthúil chun bonn eolais a chur faoin gcinnteoireacht ar gach leibhéal.

Tacaíocht: Bimid ag saothrú i gcomhar le grúpaí eile chun tacú le comhshaoil atá glan, táirgiúil agus cosanta go maith, agus le hiompar a chuirfidh le comhshaoil inbhuanaithe.

Ár bhFreagrachtaí

Ceadúnú

Déanaimid na gníomhaíochtaí seo a leanas a rialú ionas nach ndéanann siad dochar do shláinte an phobail ná don chomhshaoil:

- saoráidí dramhaíola (*m.sh. láithreáin líonta talún, loisceoirí, stáisiúin aistrithe dramhaíola*);
- gníomhaíochtaí tionsclaíocha ar scála mór (*m.sh. déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta*);
- an diantalmhaíocht (*m.sh. muca, éanlaith*);
- úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe (*OGM*);
- foinsí radaíochta ianúcháin (*m.sh. trealamh x-gha agus radaiteiripe, foinsí tionsclaíocha*);
- áiseanna móra stórála peitril;
- scardadh dramhuisce;
- gníomhaíochtaí dumpála ar farraige.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Clár náisiúnta iniúchtaí agus cigireachtaí a dhéanamh gach bliain ar shaoráidí a bhfuil ceadúnas ón nGníomhaireacht acu.
- Maoirseacht a dhéanamh ar fhreagrachtaí cosanta comhshaoil na n-údarás áitiúil.
- Caighdeán an uisce óil, arna sholáthar ag soláthraithe uisce phoiblí, a mhaoirsiú.
- Obair le húdaráis áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhíriú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúchán.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídionn an ciseal ózóin.
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaoil.

Bainistíocht Uisce

- Monatóireacht agus tuairisciú a dhéanamh ar cháilíocht aibhneacha, lochanna, uisce idirchriosacha agus cósta na hÉireann, agus screamhuisc; leibhéil uisce agus sruthanna aibhneacha a thomhas.
- Comhordú náisiúnta agus maoirsiú a dhéanamh ar an gCreat-Treoir Uisce.
- Monatóireacht agus tuairisciú a dhéanamh ar Cháilíocht an Uisce Snámha.

Monatóireacht, Anailís agus Tuairisciú ar an gComhshaoil

- Monatóireacht a dhéanamh ar cháilíocht an aeir agus Treoir an AE maidir le hAer Glan don Eoraip (CAFÉ) a chur chun feidhme.
- Tuairisciú neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil (*m.sh. tuairisciú tréimhsiúil ar staid Chomhshaoil na hÉireann agus Tuarascálacha ar Tháscairí*).

Rialú Astaíochtaí na nGás Ceaptha Teasa in Éirinn

- Fardail agus réamh-mheastacháin na hÉireann maidir le gáis cheaptha teasa a ullmhú.
- An Treoir maidir le Trádáil Astaíochtaí a chur chun feidhme i gcomhair breis agus 100 de na táirgeoirí dé-ocsaíde carbóin is mó in Éirinn.

Taighde agus Forbairt Comhshaoil

- Taighde comhshaoil a chistiú chun brúnna a shainaitheint, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeráide, an uisce agus na hinbhuanaitheachta.

Measúnacht Straitéiseach Timpeallachta

- Measúnacht a dhéanamh ar thionchar pleananna agus clár beartaithe ar an gcomhshaoil in Éirinn (*m.sh. mórfhleananna forbartha*).

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taismí núicléacha.
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta.
- Sainseirbhísí cosanta ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Faisnéis Inrochtana agus Oideachas

- Comhairle agus treoir a chur ar fáil d’earnáil na tionsclaíochta agus don phobal maidir le hábhair a bhaineann le caomhnú an chomhshaoil agus leis an gcosaint raideolaíoch.
- Faisnéis thráthúil ar an gcomhshaoil ar a bhfuil fáil éasca a chur ar fáil chun rannpháirtíocht an phobail a spreagadh sa chinnnteoireacht i ndáil leis an gcomhshaoil (*m.sh. Timpeall an Tí, léarscáileanna radóin*).
- Comhairle a chur ar fáil don Rialtas maidir le hábhair a bhaineann leis an tsábháilteacht raideolaíoch agus le cúrsaí práinnfhreagartha.
- Plean Náisiúnta Bainistíochta Dramhaíola Guaisí a fhorbairt chun dramhaíl ghuaiseach a chos agus a bhainistiú.

Múscailt Feasachta agus Athrú Iompraíochta

- Feasacht chomhshaoil níos fearr a ghiniúint agus dul i bhfeidhm ar athrú iompraíochta dearfach trí thacú le gnóthais, le pobail agus le teaghlaigh a bheith níos éifeachtúla ar acmhainní.
- Tástáil le haghaidh radóin a chur chun cinn i dtithe agus in ionaid oibre, agus gníomhartha leasúcháin a spreagadh nuair is gá.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an ghníomhaíocht á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d’Oifigí:

- An Oifig um Inmharthanacht Comhshaoil
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Fianaise is Measúnú
- Oifig um Chosaint Radaíochta agus Monatóireachta Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag comhaltaí air agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inní agus le comhairle a chur ar an mBord.

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Current economic strategy and government policy strongly support the idea of “green growth”, which is described as continued economic growth at the same time as increasing sustainability. However, successfully achieving this type of growth in society has a wide range of implementation challenges – addressing these challenges will require a more advanced understanding of the values and motivations that influence consumption in society and a move to new models of control and governance.

Identify pressures

The challenges to sustainability and sustainable development have been amplified by the continued growth of the global economy. This research explored ways to gain a better and wider understanding of the values and motivations that influence sustainable consumption behaviour. A key challenge to green governance, sustainability and sustainable consumption is the dominant social paradigm, which can be characterised by a belief in unlimited abundance and progress, materialism, faith in the power of technology, minimal government intervention and unlimited private property rights, which greatly defines our neoliberal discourse. The findings from this research highlight the need for improved governance across all sectors in order to manage sustainable consumption and to recognise the strong link between environmental sustainability and health and well-being. Ultimately, it is important to recognise the interconnected nature of environmental systems and the inevitability of limits to growth.

Inform policy

Policymakers view the challenges of “green growth” as ways to effectively link individual behavioural change, consumption and economic progress while also addressing the sustainability agenda. However, the findings from this research suggest that large-scale decarbonisation of society can be achieved only if fundamental changes are made to our current consumption patterns and lifestyles. The state utilises a range of policy measures to achieve its policy goals based on defined assumptions regarding individual and collective behaviour, which places a high degree of responsibility on individual action. This study challenges these assumptions as they relate to behaviour, values and governance and offers new insights to inform policy design. This study moves beyond a simplistic approach that addresses discrete elements of human consumption behaviour and seeks to understand their embeddedness within the culture and institutions of wider society and hence inform policy from a new and more insightful context.

Develop solutions

The outputs of this project present the synthesis of a systematic literature review directed at a new understanding of the challenges of consumption policy, social structures and the boundary arrangements of governance. What emerges is a focus on the institutional and governance (socio-technical) approach. This evidence-based review proposes a new framework or “road map” to guide decision making and aid understanding of what motivates individuals and institutions within a wider neoliberal societal system to manage their consumption from a more sustainable policy and governance perspective. Indeed, a startling revelation of this research is that the rhetoric that places the focus of responsibility for sustainable consumption at the door of the consumer is greatly misplaced. This study suggests that governments and institutions need to acknowledge their role in defining societal values, norms and behaviours and calls for a new approach that recognises the responsibility of leading commercial interests and those empowered to govern in driving sustainability.