

Faculty of Agriculture and Forestry Department of Economics and Management

Avoiding Consumer Scapegoatism

Towards a Political Economy of Sustainable Living

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Doctoral Dissertation

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Abstract

Transitioning to sustainable living is a complex, conflicting, and highly contested issue. As part of this push, governments and businesses have focused on promoting green consumerism - framing people as primarily consumers with "a utility function" and seeking to solve the consumerism problem by paradoxically building consumer capacity to purchase more energy and material efficient products. The now-debunked assumption is that a critical mass of informed, ecologically conscious consumers can, through the market mechanism, apply pressure on producers and thus transform the economic system into a sustainable one. In this thesis I argue that this approach, which is driven by economistic thinking, is consumer scapegoatism, and is both simplistic and flawed. In light of the magnitude and urgency of the unsustainability problem, green consumerism could even be dangerous as it delays deployment of effective solutions. Consumer scapegoatism occurs when ecological imbalance is examined primarily through an economic-growth lens, and the critical role of addressing these systemic flaws is ascribed to the consumer without proper regard for whether he or she has the power to influence other more salient actors in the system.

This thesis argues for the need to develop an explicit political economy approach to sustainable living research, policy and practice. Political economy asks questions about power, institutions and agency. For sustainable living, these would be questions such as: who benefits or loses from current patterns of consumption, what are the drivers and structures that propagate unsustainable consumption, where are the meaningful points of intervention that can have desired effects. Critical to finding solutions is in understanding the power dynamics around the issue.

I analyse sustainable living as an issue of heterogeneous claims and conflicting interests. The means and practical implications of achieving sustainable living threaten the interests of powerful actors such as national governments, large transnational corporations, and institutions that together shape contemporary politics, policy, and markets. Such actors are also responsible for the systems of provisioning and choice architecture that largely predetermine how individuals and communities pursue and meet their needs. As heterogeneity and conflict of interests are essential to political economy, this approach is well situated as the organizing frame of the field of sustainable living. I discuss the main tensions embodied in the pursuit of sustainable living, and juxtapose these with characteristics of the political economy approach that make it a suitable research framing. Political economy characteristics include: understanding of social transition; interdisciplinarity in research design; use of a moral perspective; and praxis, or practice orientation.

I emphasize the element of power as vital in the articulation of social transformation, and highlight the need for sustainable living research to undertake a systemic analysis of power. To apply this, I develop the In-Power framework for analysing power dynamics within a system. The in-power framework has four components: institutions, interests, instruments, and influence. Institutions set the conditions or "rules of the game" for how actors operate in the production-consumption system; Interests identify stakes, showing heterogeneity or homogeneity of those interests in the sustainable living issue; Instruments refer to sources of power and tools available to each stakeholder to support its objectives; and Influence refers to activities stakeholders undertake and reflects agency.

I use the framework to analyse the global value chain of consumer goods with a view to understanding drivers of consumption, how power is wielded by stakeholders, and potential points of effective intervention that can enable sustainable living. Dismantling the architecture of unsustainability would invariably call for a questioning of corporate architecture, not only due to the environmental impact

resulting from its mode of operation, but also its lock-in effect on institutions and other actors of society. By extension, understanding unsustainable consumption and approaching sustainable living has at its core the need to address the balance — or imbalance — in power dynamics between consumption patterns and corporate power.

Using the in-power framework to analyse power flows in a value chain leads to identifying the nexus of influence and the lead actor. The nexus of influence is the concentration of stakeholders who act interdependently and who have a combined decisive influence on the final product and also on the eco-system around it. The lead actor is the main actor in the system with a critical marketing, technological, or financial edge that permits it to set the standards or specifications for other actors in the value chain, and the characteristics that determine its production and use. Thus I argue that consumer scapegoatism, assigning full responsibility to the consumer, is ineffective; a more effective approach to addressing the systemic flaws causing or caused by unsustainable consumption is to target the nexus of influence and the lead actors in order to reform the choice architecture and systems of provision upon which people depend for meeting their needs and wants. Finally, I discuss two points not addressed in this thesis but which are essential to the political economy of sustainable living. They are: the need to define parameters for a sustainable consumption space; and to move research on sustainable living out of the shadows of economics.

Keywords: Sustainable living, Green consumerism, Consumer scapegoatism, Political Economy, Power Dynamics, Agency, In-Power Framework, choice architecture

List of original publications

This thesis is based on the following publications:

- i. Akenji, L., 2014. Consumer Scapegoatism and Limits to Green Consumerism. *Journal of Cleaner Production*, DOI: 10.1016/j.jclepro.2013.05.022
- ii. Vergragt, P., Akenji, L., and Dewick, P. 2014. Sustainable production, consumption, and livelihoods: global and regional research perspectives. *Journal of Cleaner Production*, *63*, 1–12. doi:10.1016/j.jclepro.2013.09.028
- iii. Akenji, L., Bengtsson, M., Bleischwitz, R., Arnold Tukker, Schandl, H. 2016. Ossified materialism: introduction to the special volume on absolute reductions in materials throughput and emissions. *Journal of Cleaner Production*, Vol. 132, 20 Sept. 2016, Pages 1–12. http://doi.org/10.1016/j.jclepro.2016.03.071
- iv. Akenji, L. and Bengtsson, M. 2014. Making Sustainable Consumption and Production the Core of Sustainable Development Goals. *Sustainability*, 6(2), 513–529. doi:10.3390/su6020513

Kuluttajien syyllistämisen välttäminen: kohti kestävän elämäntavan poliittista taloutta

Abstrakti

Siirtymä kohti kestävää elämäntapaa on kompleksinen, ristiriitainen ja erittäin kiistanalainen asia. Osana tätä liikettä hallitukset ja liike-elämä ovat alkaneet edistämään vihreää kuluttajuutta – jossa ihmiset kehystetään pääasiassa kuluttajina, joilla on "hyötyfunktio", ja joka pyrkii ratkaisemaan kuluttajuuden ongelman paradoksaalisella tavalla lisäämällä kuluttajien kapasiteettia energia- ja materiaalitehokkaampien tuotteiden ostamiseen. Jo kumottu oletus on se, että informoitujen ja ekologisesti tiedostavien kuluttajien kriittinen massa voi antaa painetta tuottajia kohtaan markkinamekanismin kautta, ja näin muuttaa talousjärjestelmän kestävämmäksi. Tässä väitöksessä esitän, että kyseinen lähestymistapa, jota ajaa ekonomistinen ajattelu, tarkoittaa kuluttajan syyllistämistä ja on sekä yksinkertaistettu että virheellinen. Kestävyysongelman suuruuden ja kiireellisyyden valossa vihreä kuluttajuus voi olla jopa vaarallista viivyttäessään tehokkaiden ratkaisujen käyttöönottoa. Kuluttajien syyllistämistä ilmenee silloin, kun ekologista epätasapainotilaa tarkastellaan pääasiassa talouskasvun näkökulmasta ja näiden systeemisten vikojen korjaamisen kriittistä roolia tarjotaan kuluttajalle ilman asianmukaisen huomion kiinnittämistä siihen, onko kuluttajilla valtaa vaikuttaa järjestelmän muihin keskeisiin toimijoihin.

Tässä väitöksessä puolletaan tarvetta kehittää eksplisiittisesti talouspoliittinen lähestymistapa kestävän elämäntavan tutkimiseen, poliittiseen päätöksentekoon ja käytäntöön. Poliittinen taloustiede kysyy valtaa, instituutioita ja toimijuutta koskevia kysymyksiä. Kestävän elämäntavan tapauksessa näitä kysymyksiä ovat esimerkiksi seuraavat: kuka hyötyy tai häviää nykyisten kulutuskäytäntöjen takia, mitkä tekijät ja rakenteet levittävät kestämätöntä kulutusta, missä sijaitsevat merkitykselliset intervention kohteet, joihin puuttumalla voidaan saavuttaa haluttuja vaikutuksia. Ratkaisujen löytämisessä kriittisen tärkeää on asiaa ympäröivien valtadynaamisten tekijöiden ymmärtäminen.

Analysoin kestävää elämäntapaa ilmiönä, johon liittyy heterogeenisiä väitteitä ja ristiriitaisia intressejä. Kestävän elämäntavan saavuttamisen keinot ja käytännön seuraukset uhkaavat sellaisten voimakkaiden toimijoiden kuten kansallisvaltioiden, suurten ylikansallisten korporaatioiden ja instituutioiden intressejä, jotka yhdessä muokkaavat nykyistä politiikkaa, päätöksentekoa ja markkinoita. Nämä toimijat ovat myös vastuussa niistä rahoituksen ja valinta-arkkitehtuurin järjestelmistä, jotka määräävät pitkälti ennalta sen, miten yksilöt ja yhteisöt ajavat etujaan sekä täyttävät tarpeitaan. Koska heterogeenisyys ja eturistiriidat ovat keskeisiä poliittisessa taloustieteessä, tämä suuntaus on omiaan muodostamaan kestävän elämäntavan kenttää järjestävän kehyksen.

Painotan valtaelementtiä keskeisenä tekijänä yhteiskunnallisen muutoksen artikuloinnissa ja korostan tarvetta ryhtyä vallan systeemiseen analyysiin kestävän elämäntavan tutkimuksessa. Tämän soveltamiseksi kehitän vallan tutkimuksen kehyksen (In-Power Framework), jolla vallan dynamiikkaa voidaan tutkia järjestelmän sisällä. Tämä kehys sisältää neljää osaa: instituutiot, intressit, instrumentit ja vaikutusvallan. Instituutiot asettavat "pelisääntöjen" reunaehdot sille, miten toimijat toimivat tuotannon ja kulutuksen järjestelmässä; intressit tunnistavat pelin panokset ja näyttävät näiden intressien hetero- tai homogeenisyyden kestävää elämäntapaa koskien; instrumentit viittaavat vallan lähteisiin ja niihin työkaluihin, joita jokaisella eturyhmällä on käytettävissään tavoitteidensa tueksi; ja vaikutusvalta viittaa eturyhmien toimiin, heijastaen toimijuutta.

Käytän tätä kehystä analysoimaan kulutushyödykkeiden globaalia arvoketjua, pitäen silmällä kulutuksen muutosajurien, eturyhmien vallankäytön ja kestävää elämäntapaa mahdollistavien

tehokkaiden interventiokohteiden ymmärtämistä. Kestämättömyyden arkkitehtuurin purkaminen vaatisi poikkeuksetta suuryritysarkkitehtuurin kyseenalaistamista sekä sen toimintatavan ympäristövaikutusten että sen yhteiskunnan instituutioita ja muita toimijoita sisäänsä sulkevan vaikutuksen takia. Laajemmin ajateltuna kestämättömän kulutuksen ymmärrys ja kestävän elämäntavan saavuttaminen pitävät sisällään tarpeen kiinnittää huomiota kulutuskäytäntöjen ja yritysten vallan välisen valtadynamiikan tasapainoon – tai epätasapainoon.

Kehyksen käyttö arvoketjun valtasuhteiden analysointiin johtaa vaikutusvallan keskipisteen ja johtavan toimijan tunnistamiseen. Vaikutusvallan keskipisteessä on se eturyhmien keskittymä, joka toimii keskinäisriippuvaisella tavalla ja jolla on yhdessä ratkaisevaa vaikutusvaltaa lopputuotteeseen sekä sitä ympäröivään ekosysteemiin. Johtava toimija puolestaan on se järjestelmän pääasiallinen toimija, jolla on kriittistä markkinointiin, teknologiaan tai talouteen liittyvää kilpailuetua, joka antaa sen määrittää arvoketjun muiden toimijoiden standardit tai spesifikaatiot sekä tuotannon ja käytön määrittäviä ominaisuuksia. Näin ollen esitän, että kuluttajien syyllistäminen, eli kokonaisvastuun siirtäminen kuluttajien hartioille, on tehotonta; parempi tapa kestämättömän kulutuksen aiheuttamien tai kestämätöntä kulutusta aiheuttavien systeemisten vikojen korjaamiseen on ottaa kohteeksi vaikutusvallan keskipiste sekä johtavat toimijat, jolloin valinta-arkkitehtuuri ja ne järjestelmät, joista ihmiset ovat riippuvaisia tarpeidensa täyttämiseksi, voidaan reformoida. Lopuksi käsittelen kahta seikkaa, joita ei ole käsitelty tässä väitöksessä, mutta jotka ovat kuitenkin oleellisia kestävän elämäntavan talouspolitiikalle. Ne ovat tarve määrittää kestävän kulutuksen tilan parametrit, ja kestävää elämäntapaa koskevan tutkimuksen siirtäminen taloustieteen varjoista kohti keskustaa.

Avainsanat: Kestävä elämäntapa, vihreä kuluttajuus, kuluttajien syyllistäminen, poliittinen taloustiede, valtadynamiikka, toimijuus, In-Power Framework, valinta-arkkitehtuuri

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For Esther Ijang Akenji

1 Introduction: The complex phenomenon of unsustainable living

1.1 Consumerism and its discontents

Recent research on consumption and lifestyles provides an understanding of sustainable living as a complex, conflicting, and highly contested issue. It is complex because human behaviour, even the routine aspects – to the extent that they can be characterised as such – are influenced by a wide range of dynamic factors from different domains of practice interacting with Earth's systems (Rockström et al. 2009; Millennium Ecosystem Assessment 2005). It is conflicting because consumption by a growing global population with accelerating appetites for material goods is at odds with the equilibrium of Earth's systems upon which it depends, and also against the momentum of centuries of economic history and traditional pursuit of development (Durning 1992; Hoekstra and Wiedmann 2014). And it is contested because it proposes a different paradigm for society, engaging different actors with varying viewpoints and practices, each one of which either seeks to influence or/and is affected by the transition to sustainable living (Le Billon 2001; Fuchs 2013; Jackson 2009).

An assessment of the theories of consumption and behavioural frameworks suggests that people do not undertake everyday consumption with the intention to harm the environment; the resulting environmental impact is an unintended consequence of the pursuit of well-being. People consume for multiple reasons; as Gabriel and Lang (2006) and Miles (1998) observe, cognitive abilities, psychological, social, economic, and institutional frameworks all play a role in the final decision or pattern exhibited. Max-Neef's (1991) framework of fundamental human needs and satisfiers suggests that people consume in order to meet essential needs such as nutrition and shelter. According to the theory of social practice, people consume in order to fulfil social functions/expectations such as showering and dressing up to look presentable, and travelling to meet friends and maintain relationships (Spaargaren 2004; Gram-Hanssen 2009; Shove 2004). Seyfang (2009) and Jackson (2005) argue that people also consume to satisfy personal desires, preferences and tastes, as per neoclassical economic and behavioural psychology theories. Veblen (1899) has famously argued that through conspicuous consumption wealthy individuals consume highly conspicuous goods, displaying their wealth as symbols of high social status. Marketing theories and practices confirm that people consume due to the influence of advertising. The systems of provision framework (Fine 2006) and studies on 'lock-in' effects of institutional arrangements and infrastructure suggest that people consume in particular ways because they are railroaded to do so by the design of provisioning systems and limitations of available options (see, for example, Martens and Spaargaren, 2005; Morris, Kirwan, and Lally, 2014; Sahakian and Steinberger, 2011). These driving factors behind lifestyles are interlinked and sometimes contradictory.

Regardless of this multi-disciplinary understanding of consumption and lifestyles, some of the most widely used approaches to engender sustainable living, such as awareness raising and improvements in technical efficiency, have fallen short of achieving sustainable living. One of the main reasons for this is what Hobson (2006) has observed as being a consequence of the framing of individuals as primarily consumers with "a utility function" for the free market. The tendency then is thus to improve the utility function of these consumers or the technical efficiency of these markets. It also implies that sustainability solutions are being consigned to the market and sought within the contemporary economic paradigm (Princen, Michael, and Conca 2002; Maniates 2001). The now-debunked assumption is that the consumer has enough agency to influence production trends and the larger economic system. The logic for promotion of green consumerism is that in a democratic market economy, there would be continued production of a product only if there is a market for it; since the consumer is the target, through the patterns of consumption and the choices they make, there is a direct consequence on what is produced. Thus a critical mass of informed, ecologically conscious

consumers can, through the market mechanism, apply pressure on producers that would translate to how the environment is being treated (Akenji and Bengtsson 2010; Akenji 2014; Vergragt, Akenji, and Dewick 2014). I have termed this approach consumer scapegoatism (Akenji 2014). Consumer scapegoatism occurs when ecological imbalance is examined primarily through an economic-growth lens, and the critical role of addressing these systemic flaws is ascribed to the consumer without proper regard for whether he or she has the power to influence other more salient actors in the system. This is typically exhibited in approaches that are limited to consumer information and technological or product efficiency, or eco-efficiency (Jalas 2006).

The argument for reliance on awareness-raising and technology is questionable in the face of the evidence. There is now wide acknowledgement of the knowledge-action or awareness-behaviour gaps - a weak association between pro-environmental attitudes and observed behaviours. In some countries where there is very high awareness of the negative impacts of unsustainable consumption, practice of sustainable living is still limited to a significantly small size of the aware population, as shown by, for example, Barth, Fischer, Michelsen, Nemnich, and Rode (2012), Heiskanen (2005), and Mont and Dalhammar (2005). On the reliance of eco-efficient technologies, the transformative character of technology and its historically instrumental role in raising standards of living - e.g., through electrification, improvements in agriculture, and the internet - has also been a driver of consumer society. The central role of eco-efficiency in the promotion of sustainable living is symptomatic of government and corporate perception of the innovative ability of technology to bring about sustainability. While technology in theory can reduce the intensity of individual environmental impact, in practice technological improvements have coupled with unsustainable production and consumption patterns to result in higher total consumption of natural resources, goods and services. This is attributed to the so-called rebound effect. Accordingly, technological progress increases the efficiency with which a resource is used (reducing the amount necessary for any one use), but the rate of consumption of that resource rises because of increasing demand, thus cancelling out the efficiency gains (Hertwich 2005).

Some of the most influential consumer technology is that which shapes cultural values and perception of reality, which is the case with media technology that drives consumerism (Miles 1998; Heiskanen and Pantzar 1997). Values are powerful determinants of attitudes and actions; arguably, they are the bedrock on which lifestyles manifest (McCracken 1990). People tend to consume in order to fulfil certain personal, cultural, or ethical value-laden objectives (Mont and Power 2013). In recognising the consumption as a cultural phenomenon, McCracken (1990) has placed it at the centre of western culture, arguing that: in Western developed societies culture is profoundly connected to and dependent on consumption. Without consumer goods these societies would lose key instruments for the reproduction, representation and manipulation of their culture. Following this logic, a key challenge of sustainable living involves changing this culture to reflect more sustainability values. While there is broad-based agreement on the need to change the value system that drives consumerism, concerns are also expressed on how this can be achieved. Some of these have to do with the question of who decides on the dominant values of society, and why others should be subjected to these values, especially if they are exogenously decided. Increasingly, Fuchs (2013) argues, these values and practices are shaped by corporations and corporatized national governments and global governance systems.

Part of the discussion on how predominant societal values are shaped is reflected in the political economy discourse on power and instruments of influence (e.g., Fuchs, 2013; Le Billon, 2001). Heiskanen and Pantzar (1997), for example, demonstrate how modern media can change values quickly - with implications that values relevant to sustainability can also be quickly adopted. The

corporate media with its near ubiquitous presence has proven and continues to be one of the strongest influences on values, social norms and lifestyles, shaping consumer preferences and spreading and accelerating the social norms of consumerism. One instrument of the corporate media, advertising, and marketing strategies often help create fabricate new (sometimes false) 'needs' and trends, encouraging consumers to replace still functioning products for newer ones (Cooper 2004). The power of the media, especially corporate media, is in its ability to use tailored messaging to the audience in a desired direction, or, as Gabriel and Lang (2006) describe advertising: "the systemic moulding of consciousness". Heiskanen and Pantzar (1997) describe the history of diffusion of popular culture mass media technology such as the telephone, radio, television, and internet, surmising that for technology to have fast and deep penetration, the medium must have the capacity not only to replicate reality, but to rearrange it in an imaginative way.

It is this refashioning of reality through well-marketed ways of living by drawing a connection between materialism and wellbeing that is leading to a number of phenomena observed of dissatisfied consumerism. The Easterlin (2003) paradox and numerous supporting empirical studies suggest that increasing material consumption beyond certain levels of saturation – which are often exceeded by consumers in industrialised countries – does not necessarily translate into happiness. Rather, subjective wellbeing correlates well with the levels of trust, health, strong social ties, meaningful employment, and does not change with income. There is emerging evidence that the market is not delivering on its advertised promise of prosperity for consumers, that consumerism is not only negatively impacting the natural environment but also individuals and households, which are deeply entrenched in the materialistic pursuit of wellbeing (Eräranta, Moisander, and Pesonen 2009).

The literature notes undesirable effects that people experience during shopping, such as choice paralysis (too many choices), decision fatigue (decrease in quality of decisions during a long session of decision-making), and willpower depletion (deteriorating ability to maintain willpower with each resisted temptation). Psychologist Schwartz (2015) has observed that there is a "paradox of choice" – that the onslaught of products and multiple brands of similar products constantly pushed at consumers is causing psychological distress instead of pleasure or happiness. One effect, cognitive dissonance, occurs when a person holds two conflicting ideas in their head, and utilizes motivated reasoning to justify behaviour leaning one way or the other. For example, people may value animal welfare and the relatively low environmental impact of a vegetarian diet but choose to eat meat because they see it as a cultural norm and thus socially justified (O'Riordan and Stoll-Kleemann 2015). With consumerism, cognitive dissonance leads to post-shopping buyer's remorse, when people regret their choices for ethical, financial or even practical reasons.

The rebound effect refers to an instance where savings from a net positive activity are offset by increased activity elsewhere, creating a net-zero gain (Hertwich 2005; Alcott 2008). Relatedly, moral licensing can occur when people perceive that engaging in positive behaviours provides a 'license' to also engage in negative behaviours (Sachdeva, Jordan, and Mazar 2015). For example, there are observed instances where people who save energy or money by reducing consumption in one place tend to increase energy use elsewhere, or spend the money on another consumptive activity, thus resulting in net zero savings. Similarly, people who avoid eating meat frequently, would often feel morally licensed to eat meat when given the option (even in restaurants with ample vegetarian options), also resulting in net zero impact (Bacon and Krpan 2018).

1.2 A research agenda for sustainable living

Although the rise of early forms of advocacy and campaigns for sustainable consumption and lifestyles was influenced by moral concerns such as social justice, equity, and addressing poverty, current design of academic and policy research is highly dominated by influences from the field of economics and methodologies for natural resource accounting (Schandl and West 2010; Hertwich 2005; Jackson 2009; Seyfang 2009). Princen, Michael, and Conca (2002) note that the influence of economics is not limited just to research on sustainable living, writing that "much of the social sciences has come under the sway of economistic reasoning". Economic theories have been used to explain the role of consumers as economic actors, and to theorise about consumer motivations and drivers (OECD 2002; Mont and Power 2013; Fine 2006). After all, the consumer is the most visible end user of market products and often assumed to have free will and rational expression of choice. The contribution of economic factors such as income as a key driver of consumption makes it easier to use economic theories and assumptions to investigate possible transitions to sustainable living. Linking income expenditure to consumption of natural resources, waste generation, pollution and greenhouse gas emissions, and using methodologies such as life-cycle analysis and material flow accounting, enable researchers to estimate the footprint of a given consumption pattern. There is a clearly observed correlation between level of income, resource consumption and environmental impact (Steinberger, Krausmann, and Eisenmenger 2010). This contributes to explaining why accounting for material flows and resource efficiency has had such a strong influence on quantitative research methods for consumption impact and attempts to identify generalised opportunities for sustainable living.

Although useful as starting points, the economic and material footprint approaches have come up against limits in finding ways to recommend a transition to sustainable ways of living. A strong limitation of the footprint approach is that it only looks at material aspects of consumption, without extending to the non-material aspects that are central to consumption choice and quality of life (Moore 2015; Ridoutt and Huang 2012; Institute for Global Environmental Strategies, Aalto University, and D-mat ltd 2019). Furthermore, it registers only flows of resources that go through the formally accountable economy, whereas in many societies, especially developing countries, the informal economy is very large.

Similarly, part of the problem with subordinating sustainable consumption research to economics methods and methodologies is that what constitutes lifestyles, patterns of behaviour of different groups of people in society, is reduced to economic roles, ignoring other arguably stronger influences and drivers of human behaviour and interaction. People do not go about living by playing roles as rational actors in the formal economy, nor do they necessarily always seek to meet their needs and desires through quantifiable material means. People also love, generate ideas, take care of family, create art, cherish silence, pray, fast, in ways that material flows and market economics cannot account for. This is part of the challenge of research for sustainable living, that this mixed bag of material and intangible, rational and emotional, biological and cultural, all come together in vastly differing configurations across billions of people, driving and manifesting in indeterminate ways differently from when the same persons act as individuals, in groups and from one circumstance to the next.

Miles (1998) makes a succinct observation that begins to describe the mandate of research for sustainable living; he notes that: "How we consume, why we consume and the parameters laid down for us within which we consume have become increasingly significant influences on how we construct our everyday lives" (my emphasis). The sentence recognises the need to distinguish between drivers of consumerism ("why we consume"), and the patterns ("how we consume"), both of which have gained significant attention across multiple disciplines, such as psychology, behavioural economics,

and sociology. The statement also recognises what an increasing number of researchers and observers (see, for example, Seyfang (2009), (Jackson (2005)) are beginning to describe: that there are certain key determinants ("the parameters") of these dominant patterns of consumerism that are exogenously directed ("laid down for us"). Acknowledging this has implications on scholarship intended to analyse the phenomenon of consumerism, and for the design of interventions towards sustainable living. Lifestyles occur within, or are railroaded by, broader social and physical contexts; in approaching sustainable living, it is important to differentiate between factors that can be addressed at the individual or the household level, and those that are broader influences beyond individual control. It is in this vein that a new wave of scholars has begun to argue that individualistic conceptions of subjectivity and human agency are problematic (Autio, Heiskanen, and Heinonen 2009) as they fail to recognise the historical, political and social conditions and limitations of everyday life (Heiskanen 2005; Moisander 2007; Shove 2004).

Research for sustainable living is concerned with the drivers, patterns and impacts of overconsumption and under-consumption, and the socio-technical paradigm within which such a society functions (Jackson 2005; Kearney 2010; Moisander 2007). Furthermore, unlike some scientific disciplines that simply seek to understand phenomena under investigation, an objective of research for sustainable living is to help in identifying solutions towards a transition and practice of sustainable ways of living. In this respect, there is a presumed urgency around the necessity of this research that can be said to be commensurate with the urgency of sustainability solutions (Institute for Global Environmental Strategies, Aalto University, and D-mat ltd 2019). Further implications are that analytical perspectives, methods and methodologies for sustainable living research would need to be located within the transition to sustainability while respecting principles of scientific research.

1.3 Negotiating consumption: political economy and sustainable living

Consumption is constantly under negotiation – the conditions under which people consume and the patterns of consumption are constantly changing (Gabriel and Lang 2006; Lorek and Vergragt 2015). This is evident in the roles especially of individuals and households undertaking the function of consumption, with constantly changing tastes, drivers and patterns. Government has to set the framework under which the market operates, with new issues frequently arising, influences from stakeholders of different powers, and unintended consequences from existing policies. Businesses provide goods and services, having to find new markets or face new conditions, create and promote new products, and face changing competition.

This thesis is about the political economy of sustainable living; it seeks to address two interlinked questions: i) How can a political economy perspective reframe the complex phenomenon of unsustainable living to identify more effective intervention points and tools for solutions?; and, ii) what characteristics of political economy approach support development of an explicit approach to sustainable living?

It discusses the political forces that shape consumption, the systems of provisioning that direct it, and the influences of the various stakeholders that determine final consumption and its impacts. It views consumption not just as an economic activity but also as a socio-cultural and political phenomenon (Schor 1999; Miles 1998), one that is shaped and upheld by large complex institutions and processes, especially by governments and businesses (North 1990; Fuchs 2007), over which consumers and households have far little influence than is always apparent (Princen, Michael, and Conca 2002; Lorek and Spangenberg 2001). Miles (1998) describes this in more stark terms, that "consumption has clearly been hijacked" and turned into consumerism. He argues that: "The freedoms provided for consumers by the marketplace have always been a key arena within which political battles have been fought"

(Miles 1998). Miles thus links consumption and consumerism to key historical processes, and to social, political and economic institutions of the modern life, adding that "In effect...consumer freedom has come to be equated with political freedom, as part of a long-term historical process." In this constant negotiation of consumerism through history and across society, political consumerism is indicative of how consumers or citizens attempt to represent their position in the marketplace and outside of it; approaches such as planned obsolescence, media control and advertising, and government lobbying represent some of the business instruments used to direct consumer behaviour and ways of living; and policy design such as product safety, eco-efficiency and awareness raising typify government efforts (Moisander, Markkula, and Eräranta 2010).

Maniates (2001) underscores the importance of political consumerism when he observes of ecologically minded citizens that: they "see that their individual consumption choices are environmentally important, but that their control over those choices are constrained, shaped and framed by institutions and political forces that can be remade only through collective citizen action...". Politicizing consumption, for example, can also be seen in the history of the consumer rights movement and attempts such as mass demonstrations and boycotts by consumers in order to get wider representation of their concerns in more organized form¹.

A precursor to the current organized consumer approach can be observed from March 1960 when the first international conference of consumer organizations took place in The Hague resulting in an agreement to foster a global consumer movement and to create the International Organisation of Consumers Unions (International Consumers 2010). Through the years, as environmental and social concerns grew, these organisations sought to use consumer influence to achieve more (Akenji 2014). Issues such as animal rights, poverty, and child labour became prominent in public discourse and activist organizations such as Greenpeace emerged and began employing more radical approaches – e.g. demonstrations against companies, calls for product boycotts – that created broader consciousness and demanded urgent action, mostly on moral and ethical grounds. Autio and Heinonen (2004), for example, note that in Finland "green lifestyles", a form of conscious consumption, emerged with youth cultural movements, with examples such as the "hippies" in the 1960s and present-day "freeganism". Similar observations are made by Eräranta, Moisander, and Pesonen (2009) in their study of communes as an example of "micro practices of power and resistance through which individual members of the environmental movement pursue their political agenda."

By looking at the evolution of the public mind, conscious consumption is the practical, early baby step that grew into sustainable living and pushed it into the policy or political agenda. Harrison, Newholm and Shaw (2005) have argued that the increased responsibility welcomed by consumers can also be seen in light of attempts by consumers seeking to maximize their political effectiveness in a rapidly changing global economy. They further propose the following external factors that influence the growth of ethical consumption: social and environmental effects of technological advance; the rise of campaigning pressure groups; increasing product choices and a shift in market power towards

¹ Gabriel and Lang (2006) identify four "waves" or types of widespread consumer activism. The co-operative movement began as a working-class reaction to excessive prices and poor quality products by local monopolies and aimed to take back control of production. The value-for-money movement rose in the 1930s also against corporations seen to be exploiting consumers and started empowering consumers by conducting research and providing information from product tests for safety, quality, pricing, etc. Naderism, named after American Ralph Nader who championed public anger against corporate greed, fought against corporate profiteering at the expense of consumer and public health and safety. The alternative wave of activism is the most recent and argues for complete restructuring of the system and redefining consumption on more ethical and ecological grounds.

consumers; globalization of the markets and weakening of national governments; the rise of transnational corporations and brands; and effectiveness of market campaigning; and the growth of a wider and wider corporate responsibility movement.

The role of governments in the negotiation of the production-consumption space has been twofold. One of them is the government itself being a major consumer through public procurement practices. The second is in creating the policy framework that determines how and what type of consumption takes place, through, for example, acting "as a guarantor of consumer rights and minimum standards" (Gabriel and Lang 2006)². (The latter is the interest of this thesis.) With increasing information on some types of consumption, or as the impacts of certain products become clearer, government has come in to set new standards and policy. Eco labels and efficiency standards are examples, as are bans on some products (e.g., plastic bags in some countries). How objective or effective the government is in playing this role is itself part of the discussion on the politics of consumption (Fine 2006). What is evident from practice, for example, is the increasing options for consumerism and the rebound effects of increased efficiency due to attendant standards.

For its part, business is negotiating the emerging paradigm of sustainability by developing new business strategies, introducing new products, or repositioning old products through messaging that fits evolving consumer perspectives. For example, there is a new and growing market for green products, attempts at servicizing - providing functions instead of products, in an attempt to reduce individualized material accumulation – and the growing sharing economy with well-known examples like Uber and Airbnb³. But the growth-oriented economic system still prevails and the majority of businesses are locked into old modes of production, with mostly marginal attempts to modify existing practices. Supply chains for even basic products have become complex, global and opaque, making accountability even more difficult and for green claims to be doubtful (Gereffi, Humphrey, and Sturgeon 2005; Deutsch 2010). Sometimes, business strategy involves intentional actions that are economically profitable but against the intended objective of sustainability. The practice of planned obsolescence (Cooper 2004), for example, encourages faster product turnover and sales of newer versions by deliberately making products that have shorter use lifespans, limited warrantees, reduced or patented reparability, or operate on obsolete platforms. Another area of business is the gradual formalisation of the informal economy, especially in more traditional areas including physical exercise, babysitting, caring for the elderly at home, and cooking of family meals (Akenji et al. 2011; D. Wiedenhofer et al. 2018; Gwozdz, Reisch, and Sousa-Poza 2010).

Scholars such as Maniates (2001), Eräranta, Moisander, and Pesonen (2009) and Lorek and Fuchs (2013) make the observation that sometimes those aspiring towards sustainable living face obstacles. For many product and service categories, the sustainable options, if they exist, are usually limited in numbers and likely to be more expensive. Dominant societal patterns and the lock-in aspects of current systems of provision make it a challenge for consumers interested in sustainability to go against prevailing trends and the market-driven narrative in order to practice sustainable living.

² The authors have also observed that the government is itself "a provider of goods and services" such as education and healthcare. With consumerism as an ideology and increasing marketization of major aspects of modern life in Western economies, it is "the new role of the state to create markets and market disciplines out of what were previously seen as public goods and services."

³ Recent research on share or collaborative economy services such as Airbnb for housing and Uber for transport shows that they are not always environmentally sustainable. See for example the report to the European Commission: "Environmental potential of the collaborative economy: Final Report and Annexes". Available at: http://trinomics.eu/wp-content/uploads/2018/04/Environmental-potential-of-the-collaborative-economy.pdf (Accessed January 20 2018)

Sometimes, government policy ends up punishing the do-gooder, instead of making it easier. A case in point is the application of eco-labels. In addition to typical production requirements, ecologically minded producers have to go through complicated and costly administrative processes to be certified to use eco-labels. Sometimes the smaller and arguably more sustainable ones give up on the process (Koos 2011). On the consumption side, the multiplicity of eco-labels that are indistinguishable from each other and that target the same small market segment of green consumers ends up overwhelming and causing paralysis (ASEM SMEs Eco-Innovation Center 2015). By using behavioural insights it would be more practical to make the more sustainable option the default. In such a case, government could flip the logic of eco-labels by instead placing the burden of proof (and related demanding process) on unsustainable producers, introducing "un-eco" labels for already well known products⁴ with negative impacts.

If we accept the premise that consumption is constantly evolving and under negotiation, then consumerism, which is the resultant dominant practice, is indicative of the prevailing narrative and paradigm, and thus the influence that is winning in the market economy. To better understand this point, this paper argues that political economy provides a suitable tool for such analysis, and that research for sustainable living needs to develop an explicit political economy approach.

In my research, I adopt a political economy perspective to analyse consumption, the power dynamics that propagate prevailing patterns, agency (or the lack of it) by actors, and linkages between ways of living and global change. Sustainable living, especially the element of consumption, is an issue of heterogeneous claims and conflicting interests, and heterogeneity and conflict of interests are essential to political economy. In fact, it is this characteristic that many analysts argue either implicitly or explicitly that political economy should be the organizing frame of the field of sustainable consumption and lifestyles (Drazen 2000). Princen, Michael, and Conca (2002) argue that, "Political economy, a diffuse field aimed at bridging the behavioural and institutional aspects of material provisioning may be better placed to examine consumption critically." This paper contributes to early steps to develop an explicit political economy approach to research for sustainable living. A starting point from which to understand why the political economy approach is suitable is based on the following:

- a) Consumption and lifestyles are both personal and public; living usually involves difficult
 motivational and operational conflicts, arising from the incompatibility of pro-sustainability
 attitudes and behaviour on the one hand, and the predominant system and infrastructure on
 the other hand (Moisander 2007);
- b) Consumption has a central role in the contemporary economic system, where economic growth depends upon continuous consumption (Jackson 2009; Smith 2010);
- c) The economy is prioritised in national and global politics, both as a facilitator of relations and an indicator of progress or development (Easterly 2001; Ravallion 2010; UNESCAP 2005); and,
- d) The expressed need and objective of a shift to sustainable living, in order to mitigate the negative impacts of consumption on the deteriorating natural environment, fundamentally effects or even threatens the contemporary economic and political paradigm (Fuchs 2013; UNEP 2011; Hertwich, van der Voet, and Tukker 2010; Steffen et al. 2015).

⁴Some analysts have noted that the focus on final consumer products also means that the role of large bulk commodity supply chains (such as oil and steel) is neglected, despite their environmental importance and the fact that they operate in communities – some of which are vulnerable. One suggestion from industry, though not well developed in academia, is the need for businesses to obtain a "social license to operate" – having legitimacy, credibility and trust, from a legal, social and environmental perspectives (Gehman, Lefsrud, and Fast 2017).

Thus, political economy, which is concerned with the interplay between economics, society and politics, presents an integrated perspective from which to understand sustainable living and the prospects of change towards a sustainable society. Political economy asks questions such as who benefits or loses from current patterns of consumption, what are the drivers and structures that propagate unsustainable consumption, and where are the meaningful points of intervention that can have desired effects (Seyfang 2009; Jackson 2009; North 1991; Drazen 2000; Røpke 1999). In Vergragt et al. (2014), we suggest that the persistence of current unsustainability, despite evidence of awareness of the consequences, can be analysed from an institutional lens – the 'rules of the game': both 'formal' (rules, laws, constitutions) and 'informal' (socio-cultural norms of behaviour, conventions, self-imposed codes of conduct) that shape the environment in which consumption takes place. Using a political economy approach would analyse the persistence of institutions, many of which are not focused on sustainability, or are even promoting unsustainability. A political economy perspective can help researchers develop greater clarity about the forces promoting and impeding living and to focus policy and practice on what actions could effectively strengthen existing or potential drivers of desired change.

2 Definitions and Clarification of Concepts

2.1 Sustainable consumption and sustainable lifestyles

Like most other definitions related to sustainability, those of sustainable lifestyles and sustainable consumption are modifications of the now-classic definition⁵ of sustainable development offered by Brundtland: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). Although the root concepts "lifestyle" and "consumption" have been defined before, the modifier "sustainable" brings additional complexities for practice as well as the need to consider whether to define them by simply modifying earlier classic academic definitions of each root concept, or to adopt the policy community's definitions that have led the charge in underscoring what, practically, constitutes sustainable consumption and sustainable lifestyles.

Sustainable consumption is both a concept and practice; research on sustainable consumption sets out to understand and promote the types of consumption behaviours that are conducive for sustainable development (Reisch and Thøgersen 2015). This is reflected in one of the earliest and most widely used definitions of sustainable consumption which establishes the concept as an element in the broader sustainable development discourse, with echoes of the Brundtland definition (WCED 1987): sustainable consumption is "the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations" (Norwegian Ministry of Environment 1994).

The definition of sustainable lifestyles goes beyond consumption to reflect more intangible aspects, and clusters of different habits that to different extents are embedded in societal infrastructures (Christensen 1997). One common definition, adopted for this thesis, is: "A sustainable lifestyle minimizes ecological impacts while enabling a flourishing life for individuals, households, communities, and beyond" Vergragt et al. (2016).

In policy and sometimes academic discourse, the two terms sustainable consumption and sustainable lifestyles are often used interchangeably, and confusingly so (see, for example discussions by Gabriel and Lang (2006), and Miles (1998)). In the production-consumption system, consumption and lifestyles are presented as demand-side related concepts – they address mainly actors and activities in the "use" phase in the post-production stage (although implications do go beyond the post-production stage). One helps in defining the other and vice versa – sustainable consumption research emphasizes the material aspect of sustainable lifestyles, and conversely one's lifestyle determines

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⁵ The term sustainable development was coined by the Brundtland Report *Our Common Future* (WCED 1987), commissioned and published by the World Commission on Environment and Development. One influence of the classic definition on sustainability discourse is that the Brundtland Report was accepted by the United Nations General assembly, giving the term sustainable development political salience, and paving the way for the definition to form the foundation of policy and action at the international and national level. This point is crucial not only in understanding the definition of several sustainability concepts but also in understanding why sustainability science, policy and practice has been so heavily influenced by policy processes and related institutes, and not primarily as an academic field. Widely accepted and used definitions of concepts such as sustainable consumption and production, sustainable lifestyles, etc. are shaped by outcomes of policy processes and then adapted by academia.

one's consumption patterns. While sustainable consumption tends to address decisions and actions linked to purchase, use and post-use disposal of material products, sustainable lifestyles further incorporates other activities and also intangible aspects such as values, education, peerage. Recognising this relationship, Di Giulio and Fuchs (2014), for example, have argued that a definition of sustainable consumption should extend to both a minimum level of natural and social resources and a maximum level of natural and social resources needed to attain a good life.

2.2 Sustainable living

Sustainable living is a widely encompassing term that has been explored in a variety of ways. In practice and in research literature it is described with linkages to, for example, minimalistic living such as voluntary simplicity (Shaw and Newholm 2002); and healthy living, often combining physical and spiritual health and with limited role of materialism (Kasser 2002). In public health policy it tends to address promotion of one or more of sports, culture, working conditions and health (Gonçalves 2014). It also addresses provisioning for livelihoods, sometimes referred to as sustainable livelihoods (Fujii 2015). In business, sustainable living would include working culture and conditions (Jackson and Victor 2011; Nye and Hargreaves 2009), and in marketing the availability of "green" or health product and service choices (Nuñez 2011).

Sustainable living has been promoted at different levels and scales. In researching sustainable living, analyses seeking to quantify the environmental impact of daily living have focused heavily on the material aspects of food, mobility and housing (Tukker et al. 2014; Moore 2015; Rogelj et al. 2016), while more qualitative approaches have extended these areas to include leisure, work-life balance, and other aspects with relatively limited or less understood material implications (Schor 1999; Veblen 1899). Elgin (2006), for example, argues for sustainable living through "simpler ways of living" at the personal level, "new types of communities for sustainable living", new policies at the national level, and magnified global awareness.

The term sustainable living as used here incorporates both sustainable consumption and sustainable lifestyles, but without taking on the notion of urbane, conspicuous lifestyles as advertised by corporate marketing (Miles 1998). Choosing to integrate sustainable consumption and sustainable lifestyles is both to acknowledge the complementarity of the concepts, and to address the discursive confusion arising from the interchangeable use of the two concepts. Thus, in advance of defining it, it bears to elaborate on why the preference for the term sustainable living instead of either sustainable consumption or sustainable lifestyles exists.

The first reason is the shifting use and implications of the term(s) consumer, consumerism, consumption, and other variants. In "Consumerism – as a Way of Life", Steven Miles (1998) explores the tensions between use of terms consumption versus consumerism, noting that defining the relationship between the two is fraught with difficulties, and that one is not conterminous with the other. Other authors are concerned with the dialectics and implications of usage. Uusitalo (2011), for example, explores this in "Good Bad Consumption"; in their book "The Unmanageable Consumer", Gabriel and Lang (2006) argue that the words have come to mean different things to different people in different contexts, and that even within academic research it is common to slip between meanings (see also: Lorek (2010)). Some of these different meanings include consumerism as a moral doctrine in industrialised countries; consumerism as the ideology of conspicuous consumption; consumerism as a political ideology; and consumerism as a social movement seeking to promote and protect the rights of consumers. The choice of the term sustainable living acknowledges these variations in interpretation and focuses them on the ecological implications of meeting needs and pursuing wellbeing – either as individuals or as a society.

The second reason is the connotations of the terms consumption and lifestyles as embedded in popular language preceded their social science definitions. Featherstone (2007) notes that the term lifestyles is in "vogue"; "within contemporary consumer culture it connotes individuality, selfexpression, and a stylistic consciousness. One's body, clothes, speech, leisure pastimes, eating and drinking preferences, home, car, choice of holidays, etc. are to be regarded as indicators of the individuality of taste and sense of style of the owner/consumer." Sustainable living is done by individuals and collectively by society; it refers to everyday interactions with nature and society and long-term habitual patterns that contribute to wellbeing and have the least negative impacts on others in society and on the environment. Sustainable living is both a means to, and the objective of supporting sustainability - or in other words, ways of reconciling our wellbeing with the biophysical limits of the planet upon which human civilisation depends. Given that the scale of consumerism is both environmentally and psychologically damaging, sustainable living has what some observers have called a double dividend: the ability to live better by consuming less and reduce our impact on the environment in the process (Jackson 2005). This double dividend draws upon evidence of the need for dematerialisation and studies on human happiness to suggest that sustainable living objectives are much in keeping with environmental sustainability objectives – i.e., excessive material consumption can be detrimental to wellbeing (Kasser 2002; Easterlin 2003).

The third reason for preferring sustainable living is the inevitability of consumption, not only as a social but also a biological need. To detractors, sustainable consumption invokes notions of denialism and going "back to the caves". However, in order to live one must consume. Davies, Fahy, and Rau (2014) write that at one level we all need to consume, to breathe air, to eat and drink, to be warm enough to ensure basic bodily functions operate (see also: Doyal and Gough (1991); Max-Neef (1991)). Sustainable consumption is also more complex than simply making a distinction between consumerism (a preoccupation with materialism) and consumption. Some consumption that may not necessarily be consumerism can also be unsustainable – for example, heating the home during winter could be unsustainable, not because of the action to meet the human survival need to stay warm but because of the climate-changing, polluting, and land-degrading source of energy if it is fossil-fuel based. Thus, while as a social science concept sustainable consumption can be understood as a device for communication and practice (which are very relevant to the success of the concept), it seems a jarring contradiction to juxtapose the word consumption (which suggests using up something) with sustainable (which suggests making something last). Sustainable living brings together elements of ecological consciousness, sufficiency, individual and social wellbeing, and a value system that transcends materialism. In doing so, it is not the act of consumption that is intrinsically unsustainable but rather what is consumed and how.

The fourth reason is the increasing appropriation of sustainability concepts for usage other than implied – such as for greenwashing (Saha and Darnton 2005). Dauvergne and Lister (2013), for example, use the term "eco-business" in order to avoid using "sustainable business". Eco-business, according to the authors, refers to companies that are "taking over the idea of sustainability and turning it into a tool of business control and growth" and profits with no fundamental interest in limits of natural resources or waste sinks. Contemporary use of the term consumption (from being a consumer) invokes participation in the marketplace. Thus the term sustainable consumption in its everyday use gives the impression of being circumscribed by the marketplace and limiting sustainability options to economic parameters (Lorek 2010). It accounts for the appropriation of the concept by corporations, playing and confusing with closely related undertones such as green consumption, thus using green and eco-efficient products which might be relatively more sustainable in one or more aspects but not sustainable overall. An example is LOHAS products – products appealing to "Lifestyles of health and sustainability" (Nuñez 2011; Wan and Toppinen 2016).

Sustainable living includes out-of-market solutions, non-consumption and, on a broader scale, an appreciation of an alternative paradigm that is not circumscribed by the schizophrenic subservience to economic growth.

For this thesis I define it as follows:

Sustainable living is equitable consumption and lifestyles that contribute to wellbeing of individuals and society within ecological limits.

The above definition has at the core of it three key elements: ecological limits as a basis and boundary for providing individual and societal needs; equity and justice in how we organise ourselves as a society and purse our needs; and wellbeing as a shared objective. It also recognises that behaviours are embedded in a social context and facilitated by institutions, norms and infrastructures that frame individual and collective choice. Implicit in the definition is recognition that there is more than one way of living sustainably; there are different approaches by different individuals and societies that could be described as sustainable. Hence, sustainable living as used here is a simplified phrasing for varieties of *sustainable ways of living* (SWOL). Throughout this thesis, I will use the two definitions interchangeably, and will draw very heavily from literature on sustainable consumption and sustainable lifestyles. The definition and concept are further elaborated in Chapter 4: **Framing sustainable living**

2.3 Green consumerism

Miles (1998), in making a distinction between consumption (described as the relatively straightforward process of simply purchasing and consuming a particular good or service) and consumerism, argues that while consumption is an act, consumerism is a way of life. He describes consumerism as "the cultural expression and manifestation of the apparently ubiquitous act of consumption".

The word "green" has become a modifier that helps in distinguishing traditional concepts by highlighting their pro-environmental sustainability credentials. Examples include green marketing and green products. The broader concept of green consumerism is better understood in the context of two notions. One is Overconsumption, which Princen et al. describe as "the popularly understood sense of using more than is necessary" (Princen, Michael, and Conca 2002); the other is Consumerism, also described by the authors as "the crass elevation of material acquisition to the status of a dominant social paradigm" (Princen, Michael, and Conca 2002), and similarly by Gabriel and Lang (2006) as "a life excessively preoccupied with consumption". In less value-laden terms, Burgess et al. (2003) define consumerism as "the stimulation of economic production and the distribution of an expanding range of goods and services for purchase". With an "ism" at the end, consumerism denotes selective consumption, using specific criteria to discriminate against one type of consumption in favour of another. Thus "green consumerism" reflects the undertaker's intention to discriminate in their choice of consumption for reasons of pro-environmental sustainability. It is closely linked to the individual's moral, ethical, and political values, beliefs, and perceptions (Sachdeva, Jordan, and Mazar 2015). In this regard, green consumerism provides a broad framing for various types of pro-sustainability consumerism, including moral, ethical, and political consumerism. The definition adopted for my research and used in this paper is: "Green consumerism refers to the production, promotion, and preferential consumption of goods and services on the basis of their pro-environment claims" (Akenji 2014).

2.4 Consumer scapegoatism

This is a composite term. The dictionary definition of Scapegoatism is "the act or practice of assigning blame or failure to another, as to deflect attention or responsibility away from oneself⁶. Attaching "ism" as a suffix to the word scapegoat denotes a systemic characteristic of discriminatory practice. I argue that green consumerism is a form of consumer scapegoatism: government and market promotion of green consumerism at once lays the responsibility on consumers to undertake the function of maintaining economic growth while simultaneously, contradictorily, and with limited agency, bearing the burden to drive the socio-economic system towards ecological sustainability (Akenji 2014). This is aligned with observations by Davies, Fahy, and Rau (2014) who describe "a bias in [sustainability] policy circles which places great value on the potentialities of cleaner production through enhanced resource efficiency allied to market-based regulatory measures". Princen, Michael, and Conca (2002) refer similarly to "a deeply seated economistic reasoning and a politics of growth" in the supposedly sustainable consumption policy-making arena. This results in what Davies, Fahy, and Rau (2014) describe as "...[Any] problems relating to consumption remaining after the techno-fiscal fix has been applied will be resolved by autonomous, self-interested, all-knowing and economically rational individuals." Consumer scapegoatism occurs when the broader socio-technical context and power systems shaping ways of living are not factored into design for sustainability transition, when agency by citizens or consumers is not weighted against the urgency, magnitude and scale of the problem of unsustainability (Akenji et al. 2016).

⁶ See random House Dictionary online at http://www.dictionary.com/browse/scapegoatism.

3 Overview of main articles for this thesis

This chapter introduces the main articles upon which this thesis is based. Four papers are selected among my list of publications so that together they present an overall balance that elaborates on the arguments in this thesis. Together, they provide a broad narrative of what shapes the complex phenomenon of sustainable ways of living, showing where macro or structural level actions (such as economic policy and international trade) interlink with micro level consumption and lifestyles (such as availability of sustainable services or prices of preferred products). The papers are also selected because they jointly locate sustainable living research within the larger sustainability discourse, including technical assessments such as material flow accounting (natural resource use and biodiversity loss) and biophysical changes (such as climate change), as well as locating it in international policy agenda (such as the how sustainable living is reflected in the recent Sustainable Development Goals). The papers highlight two concepts which I have introduced to sustainable consumption and production research: consumer scapegoatism (Akenji 2014), and absolute reductions (Akenji et al. 2016). Finally, together they connect the various aspects of my research into a coherent framework — one that begins to outline possible approaches to developing a political economy approach to research on sustainable living.

This thesis is based on the following academic papers:

- v. Akenji, Lewis, 2013. **Consumer Scapegoatism and Limits to Green Consumerism**. *Journal of Cleaner Production*, DOI: 10.1016/j.jclepro.2013.05.022
- vi. Vergragt, P., Akenji, L., and Dewick, P. 2014. Sustainable production, consumption, and livelihoods: global and regional research perspectives. *Journal of Cleaner Production*, *63*, 1–12. doi:10.1016/j.jclepro.2013.09.028
- vii. Akenji, L., Bengtsson, M., Bleischwitz, R., Arnold Tukker, Schandl, H. 2016. **Ossified** materialism: introduction to the special volume on absolute reductions in materials throughput and emissions. *Journal of Cleaner Production*, Vol. 132, 20 Sept. 2016, Pages 1–12. http://doi.org/10.1016/j.jclepro.2016.03.071
- viii. Akenji, L. and Bengtsson, M. 2014. **Making Sustainable Consumption and Production the Core of Sustainable Development Goals**. *Sustainability*, 6(2), 513–529. doi:10.3390/su6020513

In the following section, each of the papers is briefly introduced, highlighting the background context in which each was written, the main arguments in the paper, and key concepts that apply to this thesis and political economy.

3.1 Consumer scapegoatism and limits to green consumerism.

Lewis Akenii (2013)

Journal of Cleaner Production, DOI: 10.1016/j.jclepro.2013.05.022

This paper draws on the discursive confusion over discourse and practice of sustainable consumption in order to clarify the differences between green consumerism and sustainable consumption. It defines green consumerism as "the production, promotion and preferential consumption of goods and services on the basis of their pro-environment claims". It then introduces the concept of consumer scapegoatism — government and market promotion of green consumerism that at once lays the responsibility on consumers to undertake the function of maintaining economic growth while simultaneously, contradictorily and with limited agency bearing the burden to drive the system towards sustainability. This paper provides the framework and the main concept — consumer scapegoatism — of this thesis.

The term sustainable consumption as used in this paper is similar to "strong sustainable consumption" as used by earlier researchers, notably Fuchs and Lorek (2005). In the paper, I analyse research, policy design and practice of sustainable consumption and lifestyles. While presenting evidence of failure, especially in policy and governance, I argue against the prevalent market-driven axiom that if more consumers understand the environmental consequences of their consumption patterns, then through their market choices they would invariably pressure retailers and producers to shift towards more sustainable modes. This paper uses an implicit political economy approach to analyse power dynamics among groups with heterogeneous interests in consumption and consumerism. It highlights the need for better research design that addresses the drivers of unsustainable consumption and the system perpetuating it, as well as development of policy with more effective interventions to break this dynamic.

3.2 Sustainable production, consumption, and livelihoods: global and regional research perspectives

Philip Vergragt, Lewis Akenji, Paul Dewick (2014) *Journal of Cleaner Production*, 63, 1–12. doi:10.1016/j.jclepro.2013.09.028

This paper is based on submissions for the international workshop "Global Research Forum on Sustainable and Production Systems: Achievements, Challenges, and Dialogues". It is an introductory paper to a special issue of the *Journal of Cleaner Production*. The workshop was organised by the Global Research Forum on Sustainable Production and Consumption (GRF) on the sidelines of the 20th anniversary conference of the United Nations Conference on Environment and Development (Rio+20). I am one of the co-founders of GRF, one of the guest editors of the special issue of the journal.

The paper serves as a literature review assessing the state of research on sustainable consumption, the need for a systemic and transdisciplinary approach to sustainable consumption research, and contribution of sustainable consumption research to a broader transition to a sustainable society. The paper argues that conceptualising and researching transitions to sustainable consumption is challenging; the research field is not yet well structured and its boundaries are still fluid. It often remains unclear where research ends and social practices and policies begin. Looking through contemporary literature, the paper observes that a number of clarifications need to be made among scholars on what constitutes sustainable consumption research, including the following distinctions: a distinction between research on *present* patterns and practices of consumption and studies reflecting the *aspiration* of sustainable consumption; a distinction between *individual* production and consumption practices and the *collective* practices, reflecting the cultural notion of a consumer society and consumerism lifestyles; and a distinction between *material* aspects of consumption (e.g. food and housing), *economic* aspects (e.g. buying and selling), and *cultural* notions (e.g. norms, habits, etc).

Key concepts addressed in the paper include: systemic change, sustainable consumption research, sufficiency, efficiency, and political consumerism. All these themes are discussed and expanded upon in this thesis.

3.3 Ossified materialism: introduction to the special volume on absolute reductions in materials throughput and emissions.

Lewis Akenji, Magnus Bengtsson, Raimund Bleischwitz, Arnold Tukker, Heinz Schandl (2016) *Journal of Cleaner Production*, 132, 1–12. http://doi.org/10.1016/j.jclepro.2016.03.071

This paper is an introduction to the Special Issue of the *Journal of Cleaner Production* titled Absolute Reductions. The paper analyses the literature to understand how global society can radically transform itself and reduce its footprint to stay within planetary boundaries while securing wellbeing for all and within a timeframe that avoids irreversible ecological harm. This paper has mostly been referenced as

the first paper in which the concept of Absolute Reductions was introduced, in contrast to relative reductions that do not consider the biophysical and temporal limits of planetary system in relation to consumerism.

In the paper we argue that current approaches to resource management lack a system-wide perspective and fail to respond to the multidimensional nature of these complex problems. Drawing from recent findings from natural resource and biophysical sciences, this paper argues for the need for absolute reductions in material throughput, energy use and emissions in society at a global scale⁷. Sustainable consumption and lifestyles are addressed in this paper from the perspective of material flow analysis, global trade and economics, and other macro factors and broader perspectives that are not usually immediately apparent to, but do affect actions and patterns of households and individual consumers. It is thus included among the papers in this dissertation in order to highlight the natural resource governance perspective and its linkages to consumption and lifestyles.

Main concepts discussed in this paper include social change, power, natural resource consumption, planetary boundaries, system complexity, sustainability science, and global trade.

3.4 Making Sustainable Consumption and Production the Core of Sustainable Development Goals

Lewis Akenji, Magnus Bengtsson (2014). Sustainability, 6(2), 513–529. doi:10.3390/su6020513.

The paper was initially written as a discussion paper directed towards expert meetings supporting countries during negotiations to develop a common set of global sustainable development objectives under the United Nations. The UN has already declared unsustainable patterns of consumption and production as the primary cause of environmental deterioration, first at the United Nations Conference on Environment and Development (UNCED, or the Rio Summit) in 1992. Governments gathered at the 20th anniversary of the 1992 conference, the so-called Rio+20 meeting in 2012, agreed to develop a set of goals that would unify efforts and concretize actions towards sustainable development – the Sustainable Development Goals (SDGs). Views were invited from topic experts to provide science-based inputs to discussions in the so-called Open Working Groups meant to formulate proposals for potential SDGs to be considered by countries during negotiations. This paper argued that sustainable consumption should be set as both a means and an objective of the SDGs. It also served as a background paper for the Independent Research Forum and its training sessions for United Nations policy makers. Based on discussions and comments from experts at the Independent Research Forum and the Open Working Group, the discussion paper was later revised, peer reviewed and published in academic format.

This paper delves into some of the intricacies and challenges of international governance and policy design for sustainable consumption and production. More specifically, it attempts to locate sustainable consumption within the sustainable development goals (SDGs) from a global perspective, first by analysing how it can be reflected alongside other major sustainability objectives, and also how

⁷ In assessing the need for absolute reductions at a global scale, the paper suggests four key issues that the research community needs to be addressed: "(i) the cause of unsustainability, identifying the main drivers of material and energy use and emissions and how they are represented in different locations; (ii) the magnitude (intensity) of the problem, including the size of the expected impacts for environment and human health; (iii) the scope (spread) of the problem, including how far-reaching the consequences could be, and asking which groups and regions are affected most; and (iv) the urgency of the problem, identifying how soon it should be addressed to avoid large adverse impacts on society and environment." The paper surmises that "the magnitude, scope and urgency of the sustainability challenge command nothing less than drastic change in global civilisation, including a radical transformation of the institutional arrangements and socio-technical systems that facilitate the pursuit of wellbeing" (Akenji et al. 2016).

to address both over-consumption and under-consumption in the same policy framework. The paper proposes that in the context of global policy, framing for policy needs to understand sustainable consumption in three critical ways. The first is through an understanding of the drivers of consumption, including the social, economic and cultural context in which these activities take place. From a political economy perspective, these would include: inequity, commodification of culture and many forms of human interaction, individualism and competition, marketing and advertising practices, corporate governance and the design of financial markets. The second is understanding patterns of consumption in society, including planned obsolescence in products, inefficiencies in provision systems, peer-to-peer influence, and how these respond to the identified drivers. The third critical way consumption needs to be understood is using a life-cycle perspective to prioritise areas where consumption has the highest impact on society and the environment. These have been highlighted by several researchers and the International Resource Panel as: food and agriculture, transport and mobility, housing and construction, and consumer goods.

Identifying the above further requires that differences between over-consuming and underconsuming societies be reflected in the policy. In the UN system, this difference typically manifests as a difference between developed and developing countries. Agenda 21 already recognises this challenge and recommends "a multipronged strategy focusing on demand, meeting the basic needs of the poor, and reducing wastage and the use of finite resources in the production process". Thus, for the SDGs, the paper argues for two seemingly opposite strategies - adopting an approach of contraction and convergence among countries of different economic development status and consumption levels. For over-consuming industrialised countries, the approach would be to achieve reduced levels of consumption. Analysts have argued that for international frameworks such as the SDGs to be seen as applicable to all, industrialized countries need to, while ensuring the wellbeing of their citizens, commit to reducing their level of material consumption. This is as much desired as it is imperative in order to give the SDGs fairness and legitimacy. From the other end, for under-consuming and still industrialising countries, the approach would be to achieve increased quality of consumption. Noting that the condition of poverty is unsustainable, the paper argues that developing countries need to increase the level of consumption of low-income groups, especially of basic necessities, to at least meet minimum requirements for health and dignity, while adopting the most sustainable methods available to avoid causing the same levels of ecological harm as has been seen with the developed countries.

The above points highlight three contentious aspects of SCP governance at a global scale: equity among populations and equal access to ecological resources to meet well-being needs; fairness in distribution of burden and damages from historic and present unsustainable consumption and production; and differences in capacities of developed and developing countries to address the problems of unsustainable consumption and production.

Among the concepts addressed in this paper are under-consumption and over-consumption, fairness and equity, sustainable development goals, sustainable consumption and production governance.

The rest of this thesis is designed to elaborate on the arguments that bring these papers together, and to elaborate on some aspects of the papers that were only briefly explained in the journal paper format, arguing towards developing an explicit political economy approach to research on and in support of sustainable ways of living.

4 Framing sustainable living

This chapter aims to establish a framework through which sustainable living can be described, by discussing some of the sustainability tensions that are inherent in sustainable living, highlighting the main principles that are basic to understanding the concept, and then highlighting some key factors that shape its practice — or the lack thereof. Together these locate the concept in the larger sustainability discourse, showing its importance but also some contradictions. The tensions described in this chapter engage multiple stakeholders, with different interests and perspectives, thus making it a political economy issue, too. Following that, the chapter discusses some of the basic principles that apply to sustainable living, in order to be able to identify what constitutes sustainable living and what does not. Finally, a distinction is made between motivators, drivers and determinants of consumption patterns. It draws from the literature on consumer behaviour, noting that needs and wants are framed by factors ranging from the individual and personal level, through enablers or constraints of broader socio-economic and physical conditions. Together, these provide an extended understanding of what sustainable living is, and set the stage for why an explicit political economy approach is needed to support its research.

4.1 Three sustainability tensions in the framing of sustainable living

Chappells and Trentmann (2015) have argued that sustainability is a crises concept that emerged out of "the heat of economic development and industrialization" versus the consequences on resources and society. In this respect, sustainable living is a crises management concept with a more narrowed focus on ecological crises caused by or affecting consumerism. It is thus fitting that sustainable living is elaborated between the demands of consumerism and its impacts on nature and society. For example, Heiskanen and Pantzar (1997) argue that research on environmentally relevant consumer behaviour was partly a response to the energy crisis in the 1970s and the solid waste crisis in the 1980s, leading to the "opportunity" of green consumerism.

Discourse on sustainable living can be summarized as bringing together multiple academic disciplines and practices into jointly addressing three key sustainability tensions, which I have termed as follows:

- i. Nature over-demand: Tension between increasing demand and extraction of limited natural resources, and the limited capacity of planet Earth to sustain over the long term.
- ii. Socio-economic dichotomies: Tension between the co-existence of excessive wealth and poverty, and the development objective of achieving wellbeing and happiness.
- iii. Natural-sink overload: Tension between waste and pollution generated from human activity and the capacity of nature to absorb and process this waste.

Table 1 presents a summary of each tension and its characteristics, followed by a brief description of how these apply to sustainable living, and the importance of a political economy approach in addressing these tensions. Discussing these tensions also helps to serve as a literature review framework for how discourse on broader sustainability applies more specifically to sustainable living.

Table 1: Three sustainability tensions embodied in sustainable living

Tension	Related (sub)themes	Sample indicators	Areas of power dynamics and stakeholder agency
Tension 1: Nature over-demand Limited natural resources versus increasing demand and extraction	 Resource scarcity Rebound effects Biodiversity loss Overshoot and collapse Non-use (stranded assets) 	 Ecological footprint Material flow accounting Global hectare (per person) 	 Extraction industry – e.g. non-use approaches (stranded assets), Investors (profiteering), Civil society organizations (boycott campaigns, local community rights), consumers (e.g. shopping, one-planet living, low-carbon lifestyles)
Tension 2: Socio- economic dichotomies Increasing consumerism versus wellbeing; extremeness of poverty and wealth	 Affluenza Consumerism Wellbeing Consumer paralysis Uneconomic growth Poverty Sustainable livelihood One-planet living 	 Ginicoefficient Happy planet index 	 Brand owners (advertising and creation of false needs, corporate pay scales) Excessive wealth and consumption power (e.g. the one-percent) Government and public policy (e.g. luxury taxes, progressive charges, focus on GDP growth, social welfare systems) Civil society organizations and Consumers - social unrest (boycotts, buycotts) "Moral imperatives" (fair trade, ethical consumption)
Tension 3: Natural-sink overload Increasing waste and pollution versus decreasing natural sinks	 Climate change Health and pollution Desertification 	 Pollution index Greenhouse gas emissions Planetary boundaries 	 Technology industry Waste industry and, for example, landfilling NIMBY (Not In My Backyard) tensions Extended producer responsibility

Source: Author

4.1.1 Tension I. Nature over-demand

Tension between increasing demand and extraction of limited natural resources, and the limited capacity of planet Earth to sustain over the long term.

This sustainability tension is elaborated by the natural resource and biological sciences. These sciences concern themselves with links between demands of consumerism and natural resource use – including rates of use of renewable resources versus natural rates of regeneration, as well as non-renewable resources and their permanent depletion. They also look at implications of consumerism on biological diversity, including species loss, invasive species, and, in a full-circle, the return impacts on society and

nature. Power dynamics can be observed among stakeholders involved in resource extraction and raw materials for production, including resource industry and producers, investors, local communities, government and policy makers, local communities, and civil society organisations. In transforming a production-consumption system towards absolute reductions in material throughput, the main intervention nodes are: reduction in natural resource extraction and production; reduction in (quantity of material) use and consumption; and reduction of waste generation and pollution.

One approach to understanding the role and impact of the demand side is to use sustainability indicators combining carbon footprints, material footprints and ecological footprints in order to identify key domains of consumption which have the highest impact on the environment. For example, the International Resource Panel (IRP) produced a synthesis report (Hertwich, van der Voet, and Tukker 2010) with a global assessment of final consumption categories and product groups that have the highest environmental impacts across their life cycle. The leading domains include: food and agriculture, housing and building construction, and mobility and transportation, and consumer goods and manufacturing. Similar studies with focus on national (e.g. Lettenmeier, Liedtke, and Rohn, 2014; Michaelis and Lorek, 2004) and regional (OECD 2002; Backhaus et al., n.d.; EEA 2012) levels draw similar conclusions. A variety of studies examining examples of material footprints such as abiotic and biotic resources and erosion in Finland (Lettenmeier, Liedtke, and Rohn 2014) and ecological footprints in the United Kingdom (Wiedmann, Minx, Barrett, and Wackernagel, 2006) also conclude that mobility, housing, nutrition and household goods are the priority areas.

Even with knowledge from quantitative assessment of the tension between demand and availability of resources, current approaches to resource management lack a system-wide perspective and fail to respond to the multidimensional nature of the problems. For example, systems analysts are now warning that for many types of resources there is a time lag between overconsumption and serious negative effects (Hertwich, van der Voet, and Tukker 2010); actions to limit unsustainable consumption of resources risk being delayed for lack of immediate or visible evidence. The impacts of overexploitation tend to accumulate over time and are non-linear. Overfishing and agriculture that depletes soil carbon, for example, can go on for a considerable time until serious impacts emerge, but when this happens the impacts can be both rapid and severe (Roberts, Hawkins, and Gell 2005; Kitzes et al. 2008; Pretty et al. 2002). As a result of such time lags, human society does not receive timely feedback on the harmful consequences of its resource overuse (Friedlingstein et al. 2003; Heimann and Reichstein 2008). By using system dynamic models, it can be seen that actions to limit resource consumption are therefore often delayed, possibly until serious irreversible damage has already been done.

Furthermore, present attempts at sustainability solutions tend to address single issues (e.g. pollution) or resources (e.g. scarcity). This reductionist approach however misrepresents the dangers involved by isolating single strands in a vastly complex socio-ecological system. Of increasing concern from recent research is the poorly understood confluence of cascading and exacerbating issues that highlight the interlinkages across resource consumption patterns. One case in point is the resource nexus, defined as a set of context-specific critical interlinkages between two or more natural resources used as inputs into socio-economic systems (Bazilian et al. 2011; Giurco et al., n.d.) (Andrews-Speed et al. 2014; Adnan 2013). An example is the nexus between food, water, and energy, three key resource areas upon which human biological survival and social stability are totally inter-dependent

(Bazilian et al. 2011; United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) 2013)⁸.

There are, however, limitations to research using calculations of integrated assessment models, and relying only on their results for policy design and action. There is, for example, debate about quantitative methodologies, especially the degree of sophistication of analytical models used and the question of whether quantitative models can be used to analyse something as complex as lifestyles (Rogelj et al. 2016). Relating to this is the quality of data in such studies and assumptions made by the analysts. Some critics refer to the large number of individual product life-cycles that would need to be analysed for footprints in order to provide a comprehensive impact assessment, and the fact that most quantitative analyses reflect consumption in industrialised parts of the world, not least because data is more readily available in these regions and many institutions conducting such studies are based in them.

Thus, for a broader picture of lifestyles impacts, quantitative methods (such as footprint analysis) need to be complemented with normative, qualitative assessments. A more expansive view of sustainable living would address more than material consumption alone. Consumption and lifestyles are linked to intangible "soft" aspects such cultures and identities, moral issues, and politics. Beyond environmental impacts, the soft causes and impacts of consumption and lifestyles can be equally or even more problematic and might present challenges to attempts at addressing such complexities primarily through quantitative methods and numbers.

4.1.2 Tension II. Socio-economic dichotomies

Tension between the co-existence of excessive wealth and poverty, and the development objective of achieving wellbeing and happiness.

Political economy analysis identifies a number of challenges that need to be overcome at a broad systemic level in order to achieve absolute reductions in material throughput and energy use in society. First, there is a resource-intensive template for development. The literature shows no role model for a "developed" country that is environmentally and socially sustainable and that can act as an example to so-called developing countries. As countries follow the traditional model of economic growth, they increase the material consumption of citizens, become more affluent and their percapita demand for resources increases to unsustainable levels – see, for example, Laakso and Lettenmeier (2014), Mair et al. (2014) and Hirschnitz-Garbers et al. (2014).

Second, macroeconomic structures and trade tend to exacerbate the problem of unsustainability, as illustrated by the following. Prices of products and services in the market do not properly reflect resource depletion and associated negative impacts. Also, the impacts of overconsumption are often

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⁸ Akenji et al., (2016) explain the interlinkages as thus: "Globally, there is increasing incidence of droughts and floods, and shortage and pollution of water. Many urban areas and increasing urbanisation are being confronted with water stress, characterised by scarcity or pollution of drinking water and that for other domestic uses. Agriculture is heavily dependent on water, consuming about 70% of the global fresh-water demand. Food production and water demand are projected to increase, owing to growing world population and changes in diets towards increasing meat consumption. Energy to power the world economy competes with agriculture for water, which is needed in extraction, transport, and processing of oil, gas and coal. The IEA estimated that water withdrawals for energy in 2010 were 583 cubic billion meters, of which the annual volume of water withdrawn but not returned to its source was about 66 billion cubic meters. It then projected that water consumption to meet energy demands will rise by 85% over the period to 2035, reflecting a move towards more water-intensive power generation (IEA 2012). Unless there is a drastic change, this increase in energy demand will primarily be met by burning fossil fuels, which is now well established as a primary cause of climate change."

felt in locations (often poorer countries or neighbourhoods) far from where critical decisions on investment and profits are made (see, for example, Cazcarro et al. (2014)), which are often the wealthier countries. Furthermore, product supply chains have become increasingly global and complex, separating consumption and production and shifting the ecological burden (see Schandl et al. (2015)).

The third challenge is that there is an enhanced efficiency fallacy, typified by favouring post-consumption recycling instead of reduction of material goods. However, recycling cannot be relied upon as a reductions strategy, for multiple reasons: recycling requires input of more resources such as energy and also causes pollution (see Kuramochi (2015)); recycling can only be carried out in a limited number of cycles without additional input of virgin resources (see Chen et al. (2014)); the quality of recycled materials and products is seen as inferior to that of virgin materials or goods from virgin materials; in terms of logistics, only a fraction of total waste can be collected and recycled (see Welfens et al. (2015)); there are technical challenges to recycling some materials; e.g. concrete cannot be recycled; and the appetite for more materials to be introduced into society to meet ever-growing consumerism outstrips (hypothetical 100%) the amount of recycled materials available. For these reasons and more, recycling and technical efficiency are together not a valid standalone approach to sustainable consumption.

The sustainability tension from socio-economic dichotomies is elaborated mainly by the social sciences and humanities, including sociology, psychology, behavioral economics, political science, applying concepts such as needs and wants, overconsumption and under-consumption, affluenza and poverty, equity, etc. Studies here examine how society organizes itself (institutions, production, distribution, consumption, and norms) to deliver on the objective of development, i.e., the achievement of wellbeing. Discussions within this tension also include environmental justice or the lack thereof (Martinez-Alier et al. 2016; Schlosberg 2004). In this regard it analyses access to and opportunities for consumption, especially compared to environmental consequences on populations (Anguelovski and Martínez-Alier 2014). It also encapsulates debates on whether population size or per capita consumption is the bigger driver of environmental problems. One growing area of interest is the extremes of poverty and wealth — a growing dichotomy of social co-existence where some people live in material excess in the same global or even local society where poverty blights others and limits opportunities for wellbeing in marginalised parts of cities and villages (Akenji 2012).

Environmental economics concepts such as the steady state economy and uneconomic growth are also used to approach this tension. They call for an analysis of the economy, systems of provision, applied technologies, social practices, and governance. Power dynamics around this tension can be seen among stakeholders involved in production and distribution of goods and services, investors, infrastructure development, public administrators and policy makers, citizens and consumers, as well as civil society organisations.

Princen et al. (2002, Pg 3) describe elements of this tension through their observation of growing interest in environmental issues that conventional debates over population, technology, green production, and recycling tend to miss. These include: throughput (the overall flow of material and energy in the human system); growth (increasing economic activity or throughput or both); scale (the relationship of the scope and speed of economic or "material provisioning" activity to human and ecological capacity); and patterns of resource use (the quantitates and qualities of products used, their meanings, and their changes per capita over time).

4.1.3 Tension III. Natural-sink overload

Tension between waste and pollution generated from human activity and the capacity of nature to absorb and process this waste.

Discussions within this tension include: greenhouse gas (GHG) emissions (mainly responsible for climate change) versus the quality of carbon sinks (such as forests, cool oceans and seas) (UNEP 2014); increasing solid waste generation and limited land for landfills and land degradation from inorganic waste production (Akenji et al. 2011; EU Commission 2014); melting ice sheets and rising sea levels, floods, landslides (IPCC et al. 2013); and the impact of such pollution on human and planetary health, etc. The environmental and biophysical sciences have been especially instructive in development of elements of the discourse on natural-sink overload. This understanding can be translated into impacts of consumption⁹ using systems modeling and life-cycle analysis. For example, allocation of global carbon footprints indicate that final consumption categories and product groups that have the highest environmental impacts across their lifecycle include nutrition (20%), shelter (19%), mobility (17%), services (16%), manufactured products (13%) and construction (10%) (Hertwich and Peters 2009). The sustainability tension here is embodied in the study of planetary boundaries (Steffen et al. 2015; Rockström et al. 2009) and how to prevent them from being transgressed due to human activity.

The three sustainability tensions above demonstrate how sustainable living fits within the wider perspective of sustainability. They also demonstrate how sustainable living articulates where consumerism links resource demands and human impacts on the natural environment. Sustainable living thus provides a space from which research anchors the discourse and policy of climate change, waste, biodiversity loss, inequity, etc. on people's everyday lives, their consumption patterns and lifestyles, and the context that frames their behavior.

4.2 Principles of sustainable living

From the definition of sustainable living and the sustainability tensions discussed above, it can be derived that sustainable ways of living are built on three main principles.

The first principle is living within ecological limits. Partly captured by the concept of planetary boundaries, this principle is also referred to as one-planet living (Moore and Rees 2014). It is reflected in the tensions on nature over-demand and natural-sink overload. Important here are the rate and intensity of consumption. Rate of consumption could reflect frequency or amount or both (in other words, how much society consumes). Intensity represents the impact of each unit on the environment (or how environmentally unfriendly each unit consumed is) — typical indicators include greenhouse gas, resource/material, energy, and water, which are frequently expressed as footprints.

The second principle is equity. This is captured by the concept of ecological justice in access to resources and opportunities to fulfil needs (Anguelovski and Martínez Alier 2014). Given that the impacts of unsustainability do not necessarily occur locally where the problems are caused or do not necessarily affect the perpetuators directly, the principle of equity also seeks a response to the

⁹ One of the widely acknowledged indicators of how human activities are changing the planetary system is human induced climate change, through increased emissions of greenhouse gases, especially from fossil fuels and agricultural activities. Similar to the situation with overuse of resources, climatologists warn of complexities such as time lags between GHG pollution and the harmful consequences on the planet, and the extra urgency accentuated when considering positive feedback loops within ecological systems that accelerate ecosystem decline (Schuur et al. 2015; Friedlingstein et al. 2003; Scheffer, Brovkin, and Cox 2006; Heimann and Reichstein 2008).

political economy question of who benefits from the system and who suffers from the impacts. Furthermore, it reflects both intra-generational justice among current generations and intergenerational justice which promotes preservation of opportunities for future generations to support their own wellbeing within ecological limits (Alcott 2008; Kiss, Castro, and Newcombe 2002). Equity is reflected in the tension on socio-economic dichotomies.

The third principle is that living within ecological limits and equitable consumption should contribute towards the wellbeing of individuals and society (Millennium Ecosystem Assessment 2005; Kasser 2002). Sustainable living thus supports quality of life (O'Neill et al. 2018; Di Giulio and Fuchs 2014). This principle is reflected in the tension on socio-economic dichotomies.

4.3 Distinguishing between motivators, drivers and determinants of consumption

Earlier parts of this thesis have made the argument that in order for research to support policy and practice towards sustainable living, it is critical to be context-specific, to understand why people consume and what shapes the patterns of behaviours they manifest. People consume for multiple reasons; cognitive abilities, psychological, social, economic, and institutional frameworks all contribute to one-off decisions or patterns of behaviour. Max-Neef's (1991) framework of fundamental human needs and satisfiers suggests that people consume in order to meet essential needs such as nutrition and shelter. According to the theory of social practice, people consume in order to fulfil social functions/expectations such showering and dressing up to look presentable, and travelling to meet friends and maintain relationships (Spaargaren 2004; Gram-Hanssen 2009; Shove 2004). People also consume to satisfy personal desires, preferences and tastes, as per neoclassical economic and behavioural psychology theories. Marketing theories and practices confirm that people consume due to the influence of advertising (Moisander, Markkula, and Eräranta 2010). The systems of provision framework and studies in 'lock-in' effects of systems and infrastructure suggest that people consume in particular ways because they are railroaded to do so (see, for example, Martens and Spaargaren, 2005; Morris, Kirwan, and Lally, 2014; Sahakian and Steinberger, 2011).

The essence of the argument by scholars the likes of Hobson (2006), Spaargaren (2004), and Jackson, (2005) is that needs and wants are framed by factors ranging from the individual and personal level, through enablers or constraints of broader socio-economic and physical conditions. Defra (2011) has referred to this as a distinction between behavioural factors and situational factors. The ability to satisfy needs and wants is encompassed by influences on a graduated scale from the micro level (particular to the individual) to the macro level (reflecting broader factors). In Figure 1 below this graduated scale is pictured as overlapping layers, from the innermost being human needs to the outermost layer being biophysical limits within which society must operate. The most immediate layer of influence is constituted by individual needs, as exemplified by Max-Neef's fundamental needs. In addition to needs are people's desires and wants, which, although not necessities are perceived through a combination of psychological and social mechanisms as contributing to the individual or social satisfaction. How these needs and desired are met is influenced by one's personal situation (the second layer), including income level, gender, age, one's friends and peers, etc. Following that is the layer of socio-economic conditions that frame one's personal situation and the pursuit of needs and wants; factors include the predominant culture in which people find themselves, the state of the economy and politics, religious norms, media messages, etc. All these layers then have to operate within biophysical boundaries, such as geographic conditions, and the climate.

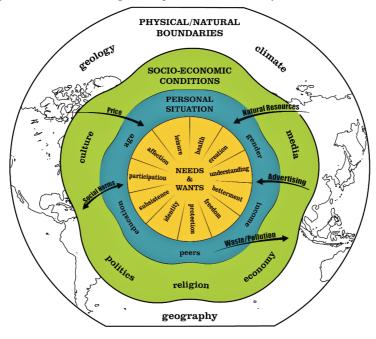


Figure 1: Layers of factors influencing consumption choices and lifestyles.

Source: Adapted from Akenji and Chen (2016)

Factors affecting consumption and lifestyles are varied, inter-linked, and sometimes contradictory. Davies, Fahy, and Rau (2014a) write that, "The web of factors - the drivers, actors, agencies, and motivations that influence the way we live, whether that is moving, dwelling or eating – is complex". Some of the widely referenced ones from the literature include income level, technology, market prices, physical infrastructure, cognitive and physical abilities, values, social norms and peers, media, knowledge and awareness, policies and institutional framework. A comprehensive listing of such factors, however, would be inexhaustible and would vary from place to place, from individual to individual, and even from season to season; this would neither reflect the complexity of the topic nor would it provide much additional practical value. Instead, the factors need to be contextualised to understand their typology. A distinction showing endogenous and exogenous factors influencing consumption and lifestyles is sometimes implied but not explicitly brought together in the literature on sustainable living. Such a typology is important in a political economy analysis in order to understand the limits of individual agency and the role of factors beyond control of a person or community. Analyses done with an understanding of such a distinction of factors would ensure that design of policy and other interventions that aim for a transition to sustainable ways of living recognise what actions would be most effective if targeted at the individual and what actions have better impact by addressing the broader context that shapes behaviour. Using a political economy perspective (see section 5.1.2), Akenji and Chen (2016) propose to distinguish between three interlinked and often confused types of factors: motivators, drivers, and determinants of consumption patterns and lifestyles. It emphasizes differences between the intrinsic and extrinsic factors, personal and contextual factors, and thus what an individual can control and what is beyond individual control.

Motivators refer to the immediate personal and social reasons, and what urges people and communities in society – e.g. the need for shelter, to spend time with friends and family. Gatersleben and Vlek (1998) highlight basic human needs as some of the key motivational factors behind behaviour patterns. Some of these are reflected in Max-Neef's (1991) universal basic needs, such as shelter, nutrition, affection, security. Although basic needs are easily linked to biological functions and survival, a more philosophical sphere for needs, as human society progresses, involves social needs. For example, Amatya Sen (1999) has famously reframed development as freedom and being able to live a life of dignity in one's community. As well as needs, motivations also reflect convictions and desires, which, although not imperatives still have strong influence on consumption choice and lifestyles. Notably, however, motivations alone don't always lead to the occurrence of related action or behaviour. For one to act upon motivations, the other types of factors, drivers and determinants, are necessary (Akenji and Chen 2016).

Drivers according to Gatersleben and Vlek (1998) are the opportunities present and abilities for consumption. Examples include cultural norms, advertising, media marketing, knowledge and awareness, technology, peers, income. Drivers reflect the degree of control over consumption and lifestyle choices, and provide circumstances that support motivation, normalising certain consumption patterns and lifestyles or making them practicable. The literature on consumption drivers is quite extensive and diverse. While motivations and driving factors explain the need or desire for a particular way of living, this can only be actualised with certain key determinants in place. The third type of factors are determinants of consumption patterns and lifestyles. Determinants are aggregating factors that play a decisive role; their presence (or absence) can make the difference between whether a consumption choice or way of living is actualised or not. As an example of a distinction: while one may have a need (a motivator) to travel to see family and desire to use a luxury car being advertised (a driver), it would be impractical if the person could afford the car for the trip but there were no motorable roads (a key determinant). In the absence of key determinants, even with enough motivation and drivers, it becomes very challenging to manifest a particular instance of behaviour, and even more difficult to establish an unsupported pattern of consumption or way of living. Akenji (2014) has identified three key determinants from academic literature and evidence from practice: i) the attitudes of people and communities, reflecting the propensity to consume; ii) facilitators, reflecting agency or access to consumption opportunities; and iii) physical and social infrastructure, including products and services that are actually consumed or the infrastructure that locks people into particular patterns of consumption¹⁰. These determinants are further discussed in Section 8.2 below.

This section has discussed a framework for sustainable living, including the sustainability tensions it seeks to address, principles that determine sustainable living, and a distinction between graduated factors that can be influenced at the individual level to those that are externally determined. Consumption and ways of living can thus be seen as part of a larger context that is constantly under negotiation by actors of varying interest and influence. To understand the context of consumption better, and to argue for research that recognises the politics of consumption, the following chapter begins to expand on political economy theory and the relevant characteristics of the political economy approach that are applicable to research on sustainable living.

¹⁰ Seto et al. (2016) conduct a review of literature across various disciplines and identify three main types of carbon lock-in that are intertwined and contribute to the inertia of carbon emissions: infrastructural and technological, institutional, and behavioral.

5 Political economy theory and sustainable living

As elaborated in previous sections, sustainable living is an issue of heterogeneous claims and conflicting interests (Gabriel and Lang 2006)11. While the benefits of sustainable living are widely recognised¹², the means and practical implications of achieving sustainable living pose a major challenge to the current political and economic paradigm and threaten the interests of powerful stakeholders that uphold and benefit from the system (Princen, Michael, and Conca 2002; Jackson 2009). Engendering sustainable living as a central indicator of development and prosperity requires shifting away from politics and policies that uphold consumerism and towards a system that nurtures the commons. It also requires a shift from individualised notions of responsibility and wealth towards collective approaches to wealth generation and access (Jackson 2005; Maniates 2001). It would require editing of systems of profit creation that do not increase collective wellbeing but which pillage on scarce natural resources with impacts that threaten planetary boundaries (Sustainable Consumption Roundtable 2006). Such changes are radical, and stand in the way of powerful national governments, large transnational corporations, grandfathered institutions and the global financial system that together shape contemporary politics, policy, and markets. Such stakeholders are also responsible for the systems of provisioning and choice architecture largely predetermining the way individuals and communities pursue and meet their needs. Challenging such a system pits advocates of sustainable living, those who argue for placing wellbeing and environmental sustainability as key indicators of social progress, against the institutions and interest groups that govern them or benefit from the current political and economic system (Gandy 1992). As heterogeneity and conflict of interests are essential to political economy, many analysts argue either implicitly or explicitly that political economy, a "diffuse field aimed at bridging the behavioural and institutional aspects of material provisioning" (Princen, Michael, and Conca 2002) is well situated as the organizing frame of the field of sustainable living (Drazen 2000).

Some departure points from which to understand why the political economy approach is suitable for research on sustainable living follow thus. Consumption and lifestyles are both personal and public; sustainable living usually involves difficult motivational and operational conflicts, arising from the incompatibility of pro-sustainability attitude and behaviour on the one hand, and the predominant system and infrastructure on the other hand (Moisander 2007; Knoeri, Steinberger, and Roelich 2016). At a macro level, since economic growth and its key measure the gross domestic product depend upon continuous consumption, consumption has a central role in the contemporary economic system (Jackson 2009; Smith 2010). Further to the importance of consumption, the economy is prioritised in national and global politics, both as a facilitator of relations and an indicator of progress or development (Easterly 2001; Ravallion 2010; UNESCAP 2005). It is thus built into government legitimacy to promote consumption, even if at once contradictorily appearing to promote watered-down versions and peripheral aspects of sustainable living. A result of such integration of consumption and consumerism is that the expressed need and objective of a shift to sustainable consumption, in order to mitigate the negative impacts of consumption on the deteriorating natural environment, fundamentally effects or even threatens the contemporary economic and political paradigm (Fuchs

¹¹ Gabriel and Lang (2006) argue have grouped expressions of consumerism into five different variants, including: consumerism as a moral doctrine in industrialised countries; consumerism as the ideology of conspicuous consumption; consumerism as a political ideology; and consumerism as a social movement seeking to promote and protect the rights of consumers. The authors then argue that: "In all its meanings, consumerism is neither ethically or politically neutral and is therefore a terrain to be contested and argued over." This applied to sustainable living, arguably a concept seen as addressing social and environmental issues rising from consumerism.

2013; UNEP 2011; Hertwich, van der Voet, and Tukker 2010; Steffen et al. 2015). Thus, political economy, which is concerned with the interplay between economics, society and politics, presents an integrative perspective from which to understand sustainable living and the prospects of change towards a sustainable society.

Veseth (2010) has linked the growing prominence of political economy to the continuing breakdown of disciplinary boundaries between economics and politics in particular, and among the social sciences generally. He argues that increasingly, the most pressing issues are those that can best be understood by using a multidisciplinary, interdisciplinary, or transdisciplinary perspective. Political economy pulls down the fences that restrict intellectual inquiry in the social sciences so that important questions and problems can be examined without reference to disciplinary borders. This approach reflects on sustainable living, a research area that can hardly be confined to one traditional academic discipline.

Political economy, as described by Hall (1997), asks questions about power, institutions and agency. For sustainable living, these would be questions such as who benefits or loses from current patterns of consumption, what are the drivers and structures that propagate unsustainable consumption, where are meaningful points of intervention that can have desired effects, etc. (Princen, Michael, and Conca 2002; Seyfang 2008). For example, in Vergragt et al. (2014), my co-authors and I suggest that the persistence of current unsustainability, despite evidence of awareness of the consequences, can be analysed from an institutional lens - the 'rules of the game': both 'formal' (rules, laws, constitutions) and 'informal' (socio-cultural norms of behaviour, conventions, self-imposed codes of conduct) that shape the environment in which consumption takes place (North 1990; Hall and Taylor 1996). A political economy approach to research can analyse and describe the persistence of institutions, many of which are not focused on sustainability, or are even promoting unsustainability. A political economy perspective can help researchers develop greater clarity about the forces promoting and impeding sustainable living and to focus policy and practice on what actions could effectively strengthen existing or potential drivers of desired change. In the contemporary field of sustainable consumption, researchers taking a political economy approach to sustainable living tend do so implicitly rather than overtly (see, for example: Cohen, Brown, and Vergragt, 2010; Fuchs and Lorek, 2005; Hobson, 2006; Princen, Michael, and Conca, 2002; Schor, 1999). There is also an observable overlap between the political economy of consumption and what has come to be termed ecological macroeconomics, as demonstrated by the works of Jackson (2009), Peter Victor (Victor 2008; Jackson and Victor 2011). This thesis is mainly concerned with the need to map out why and the elements that research on sustainable living needs in order to develop a clearly defined political economy approach. In the next section I proceed to introduce characteristics of the political economy approach that make it suitable for analysing sustainable living.

5.1 Characteristics of Political Economy approach relevant to sustainable consumption

Political economy draws from a long line of thinkers over a 400-year history¹³, including works by Adam Smith, David Ricardo, John Stuart Mill, Karl Marx, etc. (Mosco 2009)¹⁴. Recently the field has been experiencing a rejuvenation and what is widely referred to as a political economy approach has

¹³ The etymology of the term political economy also makes it a natural fit for analysing household consumption, being derived from two Greek words *polis* (which means "city" or "state,") and *oikonomos* (which means "one who manages a household or estate").

¹⁴In his abridged and annotated version of the classic "Principles of Political Economy" by John Stuart Mill, author J. Laurence Laughlin presents a detailed description of the early history of PE from an economics perspective and also suggests of early relevant reading in the introductory section titled "A Sketch Of The History Of Political Economy" (Laughlin 1885). This footnote is for purposes of historical reference as the publication itself is dated and does not cover the new political economy perspective subscribed to in this paper.

been adapted to analyse several contemporary issues that relate to institutions and that display variations in power among concerned stakeholders. For example, the political economy approach has been applied to analysis of national healthcare systems, development and development aid, rent seeking, mass media and communication, international conventions such as biodiversity and toxic waste export, etc. The UK Department for International Development (DfID 2009) has employed the political economy approach to support more effective and politically feasible development strategies, as well as inform more realistic expectations of what can be achieved, and the risks involved as it works with developing countries. Many of these countries face social and economic challenges linked to political turmoil and corruption, often captured by the dichotomy of a few elites overconsuming while significant numbers of people in the same societies are experiencing poverty. According to the Department, political economy helps to understand what drives political behaviour, how this shapes particular policies and programmes, and who are the main "winners" and "losers". Knowledge of this can contribute to better development aid by identifying where the main opportunities and barriers for policy reform exist and how donors can use their programming and influencing tools to promote positive change.

Political economy can be seen in terms of deficiencies of, and in comparison with, neoclassical economics. Mosco (2009) presents a summary of arguments with this view, that economics is a "is a hollow science indeed that wold try to comprehend economic behaviour without understanding the complexities of power, social structure, organizational behaviour, and cultural practice". The approach of economics stems from "a naïve and simplistic social theory: society is the sum of individuals; human action is predominantly rational; information flows freely to everyone; and markets disperse power, signal human wants, and, most importantly, register genuine social needs." Environmental political economy, for example, identifies and challenges irrationalities in an economic paradigm that celebrates growth in gross domestic product from massive oil spills because clean-up increases spending in on labour and capital equipment (Mosco 2009). Similarly, feminist political economy presses for the need for the field to take into account feminist thought, including attention to domestic labour, household maintenance, and increasingly gender equity.

Another example of use of the political economy approach is in analysing mass media and communication. Gandy (1992) posits that the role of the mass media in a capitalist political economy represents a unique critical problem that is based in part on the dual, conflicting, and perhaps at times contradictory role of the entrepreneur. He argues that the media are seen to have an economic as well as ideological role, sometimes derided as "tools of the ruling classes", and yet on the other hand produce material that is highly critical of key aspects of the capitalist social order.

While the approach of political economy evades a simple definition and is applied varyingly, depending on the research discipline and objective of analysis, there are characteristics to this approach that hold across disciplines. Vincent Mosco (2009) addresses this challenge to offering one main definition by synthesizing the literature for defining characteristics of the field. Such an approach, the author argues, broadens the meaning of political economy beyond what is typically provided in definitions and focuses on cornerstones that make it applicable to various issues under analysis. He highlights four qualities and characteristics: social change and history, social totality, moral philosophy, and praxis. Understanding these characteristics allows for an assessment of how relevant the approach is to research on sustainable living. The following section is thus an adaptation of characteristics that are suitable and can support design of a political economy approach to sustainable living. They include: understanding of social transition; transdisciplinarity in research design; use of a moral perspective; and praxis, or practice orientation. These characteristics are briefly discussed below, including also

reflections on how each characteristic has been applied to, and potentially contributes to emerging perspectives on sustainable living research.

5.1.1 Social transition

A central application of sustainable living research is in support of a social transformation from current ecologically harmful consumerism towards ways of living that respect planetary boundaries (see definitions under Chapter 2.2 above). Sustainable living research is in essence concerned with practical social change, to which this thesis contributes with a reflection of embeddedness of political economy theory in pursuit of such research. One approach is to learn from the history and evolution of consumer society. For example, Fine (2006) links the emergence of consumer society to the onset of the industrial revolution. Accordingly, as production for subsistence came to be replaced by wage labour, people inevitably became consumers as well as producers. Fine then argues that from a long term historical perspective, there emerged evidence of a radically different way of life in terms of social structures, social values and attitudes – slowly, a new type of society developed with a thirst for novelty upon which the economic system preyed. Gabriel and Lang (2006) make a similar point, that consumerism is a product of long-term historical changes. According to them, it was pre-configured in earlier societies; in advanced capitalist societies the transformation of consumerism from an elite to a mass phenomenon in the 20th century was signalled by Fordism. Mass production and marketing, coupled with increased disposable income and purchasing power such as through the more recent advent of credit cards and consumer loans, led to the rise of consumerism.

The political economy approach is, and traditionally has been, interested in the process of social change and transformation, as per the example above. Classical political economy theorists like Adam Smith, David Ricardo, and John Stuart Mill, took the political economy approach to understand the capitalist revolution that has now engulfed today's society; they analysed the upheaval that transformed societies based primarily on agricultural labour into commercial, manufacturing, and, ultimately, industrial societies (Muller 2002). Karl Marx used the political economy approach to examine the dynamic forces in capitalism responsible for its growth and change (Marx and Engels 2016; Veseth 2010). In view with this interest in social transformation, Mosco (2009: Pg 26) concludes from the works of Smith, Ricardo and Marx, that the object was to identify both cyclical patterns of short-term expansion and contraction as well as long-term transformative patterns that signal fundamental change in the system.

This aspect of social change and history can be observed in consumption patterns. How and what people consume, the role of the consumer and of consumption, and the impact of consumption have all changed over time (Trentmann 2016; Fine 2006). For example, while earlier societies focused on needs and subsistence, today the population segment that accounts for the highest amount of material consumption does so to fulfil wants and desires (Gabriel and Lang 2006). From more local drivers and determinants, consumption has changed; it is now consumerism (Miles 1998) and is driven by transnational agents and processes, including the media, global brands and value chains, and increasingly interconnected systems, most of which are defined by the quest for financial profit and economic growth (Fuchs 2013; Gereffi and Christian 2010). Consumerism has become the norm in industrialised societies, a major influence in industrialising countries, and has forged global identities and aspirations. Another change is that consumption has shifted from mainly satisfying individual and community needs, to the consumer playing a bigger role in society to maintain and grow the economy. Along with the changing scale, the impact of high consumption has changed, as demonstrated by its link to environmental problems such as pollution and climate change. Thus, the social change and historical interest of political economy present the tools with which to understand this transformation

of consumption over time – see, for example, Cohen, Brown, and Vergragt (2010), Brown and Vergragt (2014) on the evolution of consumption.

Following the above understanding, political economists addressing consumption from a social change perspective are interested in understanding whether we are in the midst of a large-scale societal transformation – akin, for example, to the Industrial Revolution. A growing body of literature is asking this question, documenting growing indications of profound social change and analysing for signs of fundamental rearrangement of social structures and processes that reflect prospects for post-consumerism (Migone 2007; Sachdeva, Jordan, and Mazar 2015), post-capitalism (Blühdorn 2017), post-materialism (Inglehart 1981; Wang 2016; Salonen and Åhlberg 2013), and the development of new attitudes and practices, and corresponding institutional arrangements to better reflect the impact of consumerism on the environment and on society.

5.1.2 Transdisciplinary approach

The political economy approach does not constrain itself to issues under one academic discipline but cuts across multiple compartments to assemble as many perspectives and analytical tools as possible in order to understand the issue under study. From its foundations, it has been "firmly rooted in an analysis of the wider social totality" (Mosco 2009). This fits well with the transdisciplinary approach needed to understand consumer society and the environment. For example, in their review of what environmental issues have been studied in consumer research and how they have been approached, Heiskanen and Pantzar (1997) argue that "environmental issues are hybrid problems": with causes from social and economic behaviour, they are mediated through technical systems and affect the natural environment, which in turn has social and economic impacts. Thus, analysis of these issues requires inputs from a variety of disciplines. Similarly, in describing consumerism as the dominant way of life, Miles (1998) notes that it touches on social, political, development and economics aspects; Gabriel and Lang (2006) add to this elements such as citizenship, activism, and art. All the authors conclude that research on sustainable living requires a trans-disciplinary approach. Easily linking to this call to a trans-disciplinary approach, Reisch and Thøgersen (2015) in their introductory chapter to the Handbook of Research on Sustainable Consumption acknowledge that while sustainable consumption is deeply embedded in the fields of consumer research, environmental and ecological economics as well as psychology, many more disciplines and research fields have profoundly contributed to the advancement of the field in recent years.

The transdisciplinary and comprehensiveness of political economy, described by Mosco (2009) as social totality, is captured in the approach by the International Social Science Council (ISSC) in addressing sustainability research and the role of the social sciences. The ISSC uses the notion of "integration" to unpack social totality, which it presents as: the co-design and co-production of knowledge across scientific borders, across national boundaries, and with the involvement of so-called research users. This social totality approach by the ISCC, or integration, refers to research that is interdisciplinary (including and working across all disciplines and fields of science); trans-disciplinary (collaborating with multiple societal actors, including decision makers, practitioners and civil-society organisations); and global in nature (working with multiple socio-geographic perspectives and approaches, incorporating communities of practice and epistemic frameworks from all parts of the world (Hackmann and St. Clair 2012)).

A transdisciplinary approach to sustainable living, for example, would draw upon disciplines such as: sociology, in order to understand social class and consumption; psychology, in order to understand consumption identity; marketing, in order to understand consumption and corporate power; ecology,

in order to understand consumption and its impact on the natural environment; and political science, in order to understand entrenched interest and governance of consumption.

Table 2: Transdisciplinary influences¹⁵ on sustainable living

Discipline	Sub disciplines	Concepts and approaches
Sociology	Environmental	Ecological modernisation, social class, peer pressure,
Sociology	sociology,	association, social norms, embedment of individual
	political	behaviour in social settings, ownership, consumerism,
	sociology	conspicuous consumption, life-stage transitions
Psychology	Consumer	Identity, distancing, nudging environmental behaviour,
1 Sychology	psychology,	motivation, cognitive dissonance
	environmental	motivation, cognitive dissolitance
	psychology	
Business	Marketing,	Green marketing, green consumerism, greenwashing,
Dusiness	Business ethics,	advertising, consumer paralysis, profits, planned
	Business etines,	obsolescence, production/consumption modes, servicizing
Economics	Behavioural	Consumer choice, utility, heuristics, rebound effects,
	economics,	context dependencies, co-production, "homo economicus"
	Environmental	content dependences, so production, nome coonsimula
	economics,	
	ecological	
	economics	
Ecology	Social ecology,	Complexities and interconnectedness of the ecological,
	urban ecology	economic and social systems, social metabolism, carbon
	•	footprint, ecological debt
Political	Political economy	Governance, stakeholder interests, power, consumer
science		policy, consumer citizenship
Philosophy	Applied	Consumption ethics, values, moral imperatives
	philosophy	
History	Economic history	Path dependency, large scale transitions in history (e.g.
	Environmental	industrial revolution, women's vote, slavery), traditional
	history	ways of living, evolution (e.g. of social class, households,
	History of Ideas	technologies), historical civilisations
Engineering	Industrial	Sustainable design, modular products, recycling, repair,
	ecology,	energy efficiency, technology diffusion, resource
	Industrial design	efficiency, ecological design
	maastriar acsign	consisting, coolegical acougn
Biophysical	maastriar aesign	Anthropocene, feedback loops, planetary boundaries, bio-

Source: tabulated by author

5.1.3 Moral perspective

The tensions between the environment and society being addressed through sustainable living (see Section 4.1 above) present not only technical issues but also raise moral considerations: whether production activities serving current generations should continue with overexploitation of resources, which reduces options for future generations; whether some societies should continue to

¹⁵ The disciplines, sub-disciplines, concepts and approaches listed in the table are not necessarily compatible with each other on their views of sustainable living. Given the broad and sometimes contested characteristics of the concept of sustainable living, these influences sometimes have conflicting assumptions and contradicting views. Also, depending on the school of thought, some sub disciplines presented above could also fall under different categorizations.

overconsume while others remain in need; whether societies should continue to generate waste and pollution while also depleting natural carbon sinks, and at the same time those living in societies that pollute the least continue to suffer the ecological consequences the most. In fact, the foundations and definition of sustainability are based on morally defined questions: do humans, recognising their impact on the environment, have a responsibility to ensure the integrity of Earth, in order to not deprive future generations of their own opportunities? Is there fairness in capital valuation and economic production, or in the skewed distribution of consumption opportunities, or in the perverse consequences of overconsumption falling mostly on the under-consuming and generations not yet born?

According to Patomaki (2008), the term political economy referred originally to the study of social activities of production and exchange defined largely in terms of morality, prevailing customs, laws and systems of government. The moral philosophy characteristic of the political economy approach refers to social values and to the conception of appropriate social practices, to "make explicit the moral positions of economic and political economic perspectives" (Mosco 2009), especially since these perspectives are not often transparent in analyses that have wide impacts beyond the analyst's perspective. Political economy therefore goes beyond strictly technical issues of efficiency to tackle moral questions.

There are arguments that such a moral perspective goes against customary western views of separating science from morality, the view that instead of scientific rationality, logic, and positivism, moral concerns interfere with scientific objectivity and might prevent a clear understanding of the issue at hand. However, political economy views that morality could have a role in motivating the need to address an issue, but in the course of scientific inquiry and analysis, moral perspectives should be left out. The above concerns are part of the wider and unending debate over separation of fact and morality, analysis and prescription, economics and moral philosophy. In the meantime, moral concerns have been used to analyse issues such as apartheid, gay and lesbian rights, poverty, climate change, etc. Use of moral philosophy is inescapable if one is to address power dynamics around heterogeneous issues concerning multiple stakeholders.

Thus a political economy inquiry into sustainable living would examine the role of social norms and mores influencing consumption patterns (Miles 1998; Fine 2006). This has been done, for example, by Halim, Hasking, and Allen (2012) to understand that campus norms are predictors of social drinking and alcohol abuse, and by Allcott (2011) to show that, controlling for prices, energy consumption behaviour can be influenced through getting households to understand norms applied by others in their neighbourhoods. Political economy would also directly address the question of what moral and philosophical bases influence laws and practices (especially directed by those in positions of power) to promote or constrain particular forms of consumption. It has been applied to consumption-related issues such as social justice and ecological justice (Martinez-Alier et al. 2016; Schlosberg 2004). I further contend that, drawing from the moral philosophy characteristic of political economy, sustainable living research should address issues such as equity, and aim at reduced extremes of poverty and wealth in society.

5.1.4 Praxis, or practice orientation

Praxis has its historical roots in philosophy. Aristotle considered economic, political and ethical studies as forms of practical knowledge. He made a distinction between theory, poiesis and praxis, where theory sought truth, poiesis and the production of something, and the goal of praxis being action. Praxis insists on knowledge that is useful, practical. Praxis, according to Mosco (2009), "refers to human activity and specifically to the free and creative activity by which people produce and change

the world, including changing themselves". On its importance to the epistemological premise of political economy, Mosco argues that: "praxis guides a theory of knowledge to view knowing as the ongoing product of theory and practice. It rejects as partial those epistemologies which conclude that truth can only result from contemplation. Knowledge requires more than a process of honing and purifying conceptual thought. Rather, it grows out of the mutual constitution of conception and execution."

Praxis as a characteristic of political economy makes it an action-oriented field — as in action research. Applying praxis to sustainable living research implies that knowledge generated should be practical or have practical implications on addressing the unsustainability challenge. Praxis is important towards an agenda of societal transformation, and thus in the insistence that sustainable living research goes beyond theorising, and to provide an understanding of both awareness and agency. Consumers aware of the agenda and importance of sustainability should also be able to find meaningful forms of engagement toward solutions (Ballard 2005). Likewise, knowledge of businesses should inform possible new strategies for meeting societal needs without externalising the ecological impacts, and institutional and government design of policies affecting consumption should reflect an understanding of the limitations or extent to which consumers can effectively drive the sustainable consumption agenda.

The above-discussed characteristic transdisciplinary nature, interest in social transition, moral perspective and praxis have many implications on adopting a political economy lens to analysis of sustainable living. As demonstrated, the insights of political economy in social change and history offer SL research the instruments to examine the historical background and paths of consumption leading to current patterns, and how social change theory can be applied to modifying the trajectory towards more ecologically harmonious patterns. Political economy and its transdisciplinary nature demand sustainable living research draws from multiple academic disciplines in order to understand and describe the underlying issues of consumerism, its drivers, manifestations, impacts and also how these can be addressed towards sustainable futures. The moral perspective of political economy brings to the forefront discussions of how morality could motivate questions of consumerism and debates on how investigating such morally-motivated questions should not impede upon the objectivity of scientific research. Finally, praxis as per political economy would demand of SL research to address questions and/or provide analysis that have practical implications towards sustainable ways of living in society.

5.2 The power lens: Applying a political economy concept to sustainable living analysis

There are two perspectives commonly used to apply political economy analysis to development and societal issues: an economic perspective using rational choice-based models, and a political scientific perspective through power-based models (World Bank and The World Bank 2008; Hall 1997; Le Billon 2001). The rational choice approach assumes that individuals and other actors usually have the relevant information and necessary background to inform their options, are logical in their decision-making, and consistently favour options that suit their personal preferences and maximise their benefits (Hall and Taylor 1996). Multiple analysts and agencies are beginning to question this perspective. For example, the World Bank is, in theory, beginning to question the rational choice approach as it seeks to understand why market decisions, based on so-called "voluntary exchange" do not lead to Pareto efficient outcomes, and are rather leading to over-exploitation of land and resources. The recognition is that addressing social progress and developmental issues, wherein the need for sustainability is strongly embedded, is highly influenced by political and not only economic considerations (World Bank and The World Bank 2008). This includes issues such as lack of resources, poverty, pollution and poor health that are critical to sustainable living. Thus, a strong argument

against the rational choice approach is that current institutions and institutional approaches to sustainable development and social issues such as unsustainable living are usually created by those in power who are also benefitting from the system, while the "losers" remain in their original state or end up even worse-off. What is needed is an understanding of power dynamics and how they influence outcomes of decisions that are intended for the benefit of all, such as the sustainability of the planet and the wellbeing of all individuals and societies within it.

The dimension in this paper is the power-based approach. Succeeding from the above examination on the characteristics of political economy that make it a suitable approach for analysing consumption patterns, the next section looks at a key element of political economy that helps in understanding the practice, or lack thereof, of sustainable living: the element of power.

5.2.1 Power dynamics, stakeholder salience, and agency

Political economy as a social science comes closest to analysing power, the definition of power being yet another reflection of what Mosco (2009) refers to as the discipline's social totality. One definition that shows the raw or more coercive nature of power is that by Max Weber: power is "the probability that one actor within a social relationship would be in a position to carry out his own will despite resistance" (Weber 1947). A more contemporary definition adopted by social theorists, political scientists and social psychologists: power is "the ability of one party to move another in an intended direction" (Zartman and Rubin 2002). Although this definition does not explicitly highlight resistance on the part of the overpowered as per Weber's definition, it still maintains that the intentions of the powerful prevail. Zartman and Rubin (2002) explain that the definition implies the notion of applied and net power. In a contested or negotiation situation, although two or more parties could apply power on each other, net power in the relation is registered by the resultant movement.

Noting that power is an element of politics, and that politics deals with the exercise of power and authority, Drazen (2000) connects the two and rephrases the above definition of power as: "the ability of an individual (or group) to achieve outcomes which reflect his objectives". Drazen goes further to explain about defining power, that:

"the most important part of these definitions is what is implicit and taken for granted. Questions of power and authority are relevant only when there is heterogeneity of interests, that is, a conflict of interests between economic actors in a society. How then does a society make collective policy decisions that affect it as a whole when individual members have conflicting interests? How do individuals, classes, or groups within a larger society gain power or authority to attempt to have the societal choice reflect their preferred course of action?" (Drazen, 2000, Pg 6)

In the case of sustainable living, a "heterogeneity of interests" can be observed around those who advocate for sustainability and a change in the fundamental production-consumption system, those who are opposed to such structural changes, and the dwindling numbers of those that are yet to engage on either side of the debate. In this contested field, power becomes a strong determinant of the course of action – and prospects (or lack thereof) for sustainability – and net power determines the outcomes.

5.2.1.1 Avoidance of power in sustainable living discourse

In current approaches to sustainable consumption, dynamics of power in the production-consumption system can be seen in who sets the agenda and how, who defines the rules and narratives, selects instruments of governance and targets, and thus influences opinions, behaviours, and options for stakeholders. There is limited presence of the aspect of power dynamics in the discourse, and even more so in design of policy. In emphasizing the element of power as vital in the articulation of social

transformation, Fuchs et al. (2016) have argued that a shift towards sustainable consumption will only happen when through collective action key agents work together with established organisations and institutions to deliberately change behaviours, prevailing norms, institutional structures, the choice architecture, and the "boundaries of rational policy making". This reasoning is so far not reflected in academic research on the subject. As Fuchs et al. put it, "the dominant story of academic and policy foci on sustainable consumption is largely one of avoidance — of dodging any sustained and systemic analysis of and confrontation with power." The following paragraphs attempt to explain such avoidance of confrontation of power, and potential for application of political economy approach.

The first reason can be understood thanks to the interest of the political economy approach in the process of social transition. Looking at the history of sustainable consumption, some of the origins of the academic avoidance of power confrontation date back to the 1960s when activism in relation to the environmental impacts of consumption started dawning on the public mind. Pro-sustainable consumption movements in ascendancy at the time were led by weary activists who retreated from politics of confrontation. Examples include movements that advocated voluntary simplicity in lifestyles and adaptation of appropriate technology. The voluntary simplicity movement (Etzioni and Doherty 2003; Shaw and Newholm 2002; Maniates 2001) advocated personal sacrifice to reduce individual materialism, while the appropriate technology movement imagined technical choice as a means through which social power could be fundamentally redistributed through technical choice. This aversion to confrontation with power found its way into the academic discourse on sustainable living, which itself was emerging at the time, and also into policy discussions attempting to address unsustainable consumption. For the most part, earlier history of academic engagement in the topic of sustainable living has emphasized the role of technology (demonstrated, for example, through the prominence of eco-efficiency aspects in academic discourse and policy instruments), and the role of the individual (emphasized through awareness-raising and green consumerism).

A second plausible reason for avoidance of confrontation with power can be explained with the transdisciplinary characteristic of the political economy approach, and partly by the nature of academic disciplines that constitute or contribute towards knowledge on sustainable living. Fields such as psychology, business studies, economics which prominently contribute towards current knowledge on consumption take the individual as the primary unit of analysis. Fuchs et al. (2016) contend that to the extent that power is an analytical category for the aforementioned disciplines, "it is a narrow sense of power, one generally confined to the power of individual actions (as consumers, as citizens, as participants in commerce) and the power coming from the aggregation of these actions." However, although there is increasing realisation of the limits to individual action, research on sustainable living has not yet fully analysed or taken into consideration comparative influences of various actors in society, especially around consumer product value chains and the decision-making structure (Akenji 2014; Lorek and Spangenberg 2001).

Furthermore, the complexity of sustainable living itself makes it difficult to identify where power is being exerted. Ways of living are driven by multiple factors and the impacts of consumption occur on various stakeholders, at different scales and over a little understood timescale. This complexity diffuses the power structure, making it difficult to ascertain which single actor is driving consumption patterns. This is another argument for even more investment into scholarship on power dynamics and consumption patterns, to help breakdown the complexity and identify critical intervention points.

The third source of the sustainable living field's reluctance to engage in analysis of power relates to the moral perspective of the political economy approach and is reflected in the debate on normative approaches versus rationality, logic and positivism (Mosco 2009). Questions of power and morality are almost intractably linked to each other, thus analysis of one would need either tacit or implicit

acknowledgement of the other. In line with this, Fuchs et al. (2016) observe that scholars and practitioners often fail to make explicit and critically reflect on their informal assumptions about what drives society. This can lead to misleading conclusions about stakeholder agency and ease of diffusion of sustainable living practices; it also skews analysis towards actions that are based on rational decision-making, contained within the formal market system, and actions based on the good will of people. Discussions here again lead to the scientific realism debate over separation of science and morality, analysis and prescription, economics and moral philosophy.

Fourth, the lack of engagement with power by research on sustainable living works against the characteristic praxis of the political economy approach, undercutting the very objectives of the intended analysis by preventing the field from identifying effective strategic interventions for fundamental transformation in production-consumption systems. Consequently, Fuchs et al. (2016) argue that a retreat from understanding power dynamics, from when, how and where it occurs, diminishes the policy relevance of sustainable living scholarship. There is thus the challenging imperative for sustainable living scholars and policy makers to undertake an explicit examination of power in order to make visible its workings in the production-consumption system; to understand the sources of power, how it manifests, and how it affects other stakeholder views, options and governance of sustainability¹⁶.

5.2.2 Stakeholder theory and power

The previous section points to the need for sustainable living research to start confronting very directly the issue of power. Understanding power dynamics provides a realistic lens from which to analyse negotiations around heterogenious issues such as sustainability, and specifically sustainable living. Stakeholder theory is an example that brings the element of power dynamics within a system into focus; operations by corporations, arguably at the centre of the unsustainability problem, affect lots of stakeholders with varying degrees of power. Stakeholder theory looks at corporate operations and how much the management thereof incorporates concerns of others or internalises its impacts on broader society (Freeman 1984; Stephen Fineman and Ken Clarke 1996; Donaldson and Preston 1995). Dismantling the architecture of unsustainability would invariably lead to questioning of corporate architechture, not only because of the environmental impact of its production, but also its lock-in effect on institutions and other actors of society. By extension, understading unsustaiable consumption and approaching sustainable living has at the centre the need to address the balance — or inbalnce — in power dynamics between consumption and lifestyle patterns and corporate power.

Stakeholder theory rejects the traditional view of a business which holds that a company has a fiduciary duty to the owners and shareholders and only their interests are important in the operations and management of the company. Instead, the theory holds that a business' operations affect and are affected by multiple parties – including investors, employees, suppliers, local communities, governmental bodies, retailers, customers and trade unions – who have a "stake" in the business. An organisation or business stakeholder, as per the classic definition by Freeman, is "any group or individual who can affect or is affected by the organisation's objectives" (Freeman 1984). The views and interests of these stakeholders are important in how the business delivers value, economic or otherwise. The stakeholder concept was first popularised by Freeman starting from 1984; he then became very engaged in further developing it in academic and management literature (Freeman 1994; Freeman, Wicks, and Parmar 2004; Freeman 1984). The theory has become widely adopted as a descriptive, normative and managerial approach for business (Donaldson and Preston 1995). Freeman

¹⁶ For more specific example of this, see discussion by Fuchs (2013) on the exercise of instrumental, structural, and discursive dimensions of power by corporations, and the implications for democracy.

stated that stakeholder theory has at the core of it two key questions: what is the purpose of the business; and what responsibilities does the business and management have towards those affecting and affected by its operations (Freeman 1994; Freeman, Wicks, and Parmar 2004). The theory thus encourages businesses and managers to articulate a shared sense of the value, financial and beyond, that brings its core stakeholders together; building relationships with groups reflecting multiple issues, working towards those shared objectives. It is a theory which, even if actual full practice of it remains rather scant in empirical literature, sees the corporation as a powerful actor that is responsible for fulfilling individual and societal needs, that has the means and influence over other actors, and that can and does orientate value systems. It thus provides a vantage perspective from which to understand the types of power dynamics that shape consumption and lifestyle options in society, and prospects for sustainable living.

Given the breadth of possible interests in a business there is need to understand the importance and prioritization of heterogeneous interests by stakeholders on business operations. Review of the literature by Mitchell and colleagues (Mitchell, Agle, and Wood 1997; Mitchell et al. 2011) synthesises three key attributes that can be used to identify different categories of stakeholders for a business: the stakeholder's *power* to influence the business; the *legitimacy* of the stakeholder's relationship with the business; and the *urgency* of the stakeholders claim on the business.

5.2.2.1 The environment as a stakeholder

One example of perspectives on the responsibility of corporations can be seen in the discussion around the so-called "separation thesis", which assumes that ethics and economics (A. K. Sen 1999) can be neatly separated (Freeman, Wicks, and Parmar 2004). It propagates the neoclassical economic view that doing business and creating economic benefits should be separated from ethical concerns, and that a business decision should have no moral content and a moral decision no business content (Freeman 1994) - implicitly, that corporations should be evaluated upon their economic value creation primarily and not necessarily upon the uneconomic impacts. Discussion on stakeholder theory and the separation thesis can be seen in the debate between Sundaram and Inkpen (2004) on the one hand, and on the other hand Freeman et al. (2004). Sundaram and Inkpen contend that the only appropriate goal for managers of modern corporations is that of maximizing value for their shareholders. In this view, profit maximization for investors trumps the rights of other stakeholders as well as other issues relating to management decisions. Against the separatist thesis, Freeman, considered a pioneer of stakeholder theory, reasserts that "shareholder rights are far from absolute, regardless of how much economists talk about the corporation as being the private property of the shareholders. The rights of shareholders are prima facie at best, and cannot be used to justify limiting the freedom of others without their consent" (Freeman, Wicks, and Parmar 2004). Freeman et al. further employ a fundamental political economy perspective to their argument; they contend that the real issue with the separatists is the fear that economic freedom and therefore other freedoms such as political freedom are threatened by stakeholder theory. The fear is that having the corporation account to more than just its shareholders could open floodgates for other stakeholders (such as, for example, environmentalists) to make claims against what is considered corporate core interests and operations. However, Freeman's argument is that the freedom of a corporation to trade and make profits for its shareholders should not impede the rights, liberties and political freedoms of others including issues that they have as stakes.

Although stakeholder theory was originally developed as a managerial approach to business, it has since been broadened and is widely used to analyse situations where there are multiple stakes or heterogeneous claims around an issue, and to include non-traditional stakeholders. With this has also arisen questions as to who or what a stakeholder is and whether non-human entities can be

considered stakeholders (Mitchell, Agle, and Wood 1997), such as Earth or the natural environment (Starik 1995). Some arguments in support of nature as a stakeholder have taken a moral perspective. Orts and Strudler (2002) for example, see a difficulty if the theory is only focused on the interests of human entities and does not provide ethical principles for businesses to deal with topics such as the natural environment that do not directly engage in transactions with a business. Others see a more strategic need to broaden the stakeholder definition to include issues such as sustainability and climate change. Haigh and Griffiths (2009), for example, write that the impacts of climate change such as increasingly frequent anomalous extreme weather, can damage business infrastructure, resources, products and market. Considering such strategic implications is practical and would overshadow moral and ethical aspects of the debate.

The argument against the separation thesis is in itself an argument for why issues such as environmental justice, access to natural resources, and rights of future generations are explored using stakeholder theory. Freeman provided the significant clarifying logic that stakeholder theory can be unpacked into a number of stakeholder theories, each of which has a "normative core," which links to the way corporations should be governed and the way managers should act (Freeman 1994). He calls this a reasonable pluralism of the stakeholder theory. Freeman gives as an example that a feminist standpoint could be one normative core of a stakeholder theory, thus rethinking how corporations should restructure business and management along principles of caring and connection. Another example by Freeman and pertinent to sustainable consumption and lifestyles is a stakeholder theory with ecological normative cores. This reasonable pluralism would necessitate the reflection of ecological principles in corporate governance and that actions by managers should care for Earth (Freeman 1994). Hence, by applying reasonable pluralism, stakeholder theory is applicable to analysing sustainable living as a normative core, especially as it is largely determined by product and service consumption that is dependent on corporate operations and management decisions. As Mitchel et al. summarise, persons, groups, neighbourhoods, organisations, institutions, societies, and the natural environment qualify as potential or actual stakeholders (Mitchell, Agle, and Wood 1997).

6 Analysis of Power flows and Power Hotspots in Value Chains

One area where environmental concerns meet with the economy is in the operations of businesses and how they meet the needs of, or create wants for, individuals and society. Businesses, especially large corporations, are increasingly determining how private and social needs are met, moulding everyday living, as well as the associated environmental and social impacts from use of products and services (Dauvergne and Lister 2013). Corporations have become very powerful, in some cases overshadowing national governments and with capital of some transnational corporations larger than the gross domestic products of some countries in which they operate. When they pay taxes, provide revenue to national governments, they lobby governments and other public institutions to modify existing or create new policies and institutions that favour corporate interests¹⁷. Corporations employ large numbers of people, thus determining their livelihoods and lifestyles. They further shape appetites and cultures through, for example, advertising. Through eco-business strategies, including promotion of green consumerism, Dauvergne and Lister (2013) make the argument that corporations "are shifting the power balance within the political arena from states as central rule makers and enforcers of environmental goals toward big-brand retailers and manufacturers acting to use "sustainability" to protect their private interests". How much this power of corporations predetermines consumption choice and ways of living can be understood through how corporate global value chains operate. Value chains of products and services are the primary mechanism for provisioning needs of people in a globalised society and are thus very influential in the contemporary economic system, where priority is given to production and consumption. Analysis would show that people with an interest in sustainable ways of living are very highly challenged to act in ways other than supported by these value chains and the market.

6.1 Clarification on use of "value" for this thesis

Value as a concept has evolved, and is used differently in different disciplines. The term as applied to political economy evolves from the use by Karl Marx, especially in the distinction between use-value and exchange-value (Fine 2006). Marx (1887) argued that the use-value of a commodity is determined by the characteristic of that commodity which makes it able to satisfy a human need or a want. The use-value of a product is not decided by the producer as such but objectively determined by accepted usefulness in and by society. Use-value is a more qualitative measure, which is intrinsic to the product, and tells how much one can actually derive from using it – e.g. quenching thirst from drinking water, eating food when hungry, using a bicycle for travelling from one town to the next.

Marx distinguished use-value from exchange-value, which he saw as more quantitative. The exchange-value of a commodity is linked to how much of another product or other products it can be traded for at a given time. Exchange-value is therefore a function of the market and less about the utilitarian value of the product to the consumer or society. Thus, while some products may command a high exchange-value but little use value (e.g. art by a famous artist), others may have high use-value but

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¹⁷ For example, in their report examining corporations that are more powerful than many countries, *Foreign Policy* magazine describes how large corporations are competing with national governments for global power, and are "going stateless" – "have legal domicile in one country, corporate management in another, financial assets in a third, and administrative staff spread over several more" – in order to maximize profits. Apple, for example, has cash on hand that exceeds the gross domestic products (GDP) of two-thirds of the world's countries. ExxonMobil, Unilever, BlackRock, HSBC, DHL, Visa are examples of multinational corporations that exert more power than many national governments; to assert their interests over limitations of national policy, they choose locations for personnel, factories, executive suites, or bank accounts based on where regulations are friendly, resources abundant, and connectivity seamless. *Foreign Policy*, March/April 2016. "Rise of the Titans". Available online at: https://foreignpolicy.com/2016/03/15/these-25-companies-are-more-powerful-than-many-countries-multinational-corporate-wealth-power/. Accessed 6 July 2019

little exchange value (e.g. water). More recently, prices have come to function as a clearance mechanism for, but not to be confused with being the same as, exchange value of products in monetary terms. However, this relative proximity to price, and the central role of money facilitating exchange in the modern market has led to mainstream economists adopting price-money as a proxy for exchange value (Fine 2006). Karababa and Kjeldgaard (2014) list a variety of ways in which the notion of value is frequently used in marketing research without having an explicit conceptual understanding; examples include use value, exchange value, aesthetic value, identity value, instrumental value, economic value, social values, shareholder value, symbolic value, functional value, utilitarian value, hedonic value, perceived value, community values, emotional value, expected value, and brand value.

This thesis does not intend to get into the debate of values; it is mainly highlighted here to clarify how the term value is approached in the proceeding discussion on value chains, in a seeming departure from values as it is frequently understood in consumer studies. This use is justified by, and is one of the advantages of, the political economy approach being transdisciplinary and not having to be bound to concepts and method simply because of boundaries in academic disciplines (Mosco 2009; Lorek and Vergragt 2015; Gandy 1992) - see Section 5.1 above. It is a point emphasized in emerging perspectives on sustainable consumption studies which argue for an analytical lens that is not limited to only theories from traditional consumer and behavioural studies. Sustainable living research, as I have argued, has been hampered by lines of inquiry that are defined along disciplinary lines; but sustainable living is not an issue restricted to one discipline or one perspective across disciplines. It is a transdisciplinary issue which has narrowly been studied from single-lens perspectives and limited to consumer behaviour theories. Thus, through a political economy lens, the demarcation between consumption as a cultural phenomenon and consumption as a political statement, or between usevalue and exchange-value is only important insofar as it is relevant to analysis of the sustainability of living. In the case of this thesis examining power dynamics in the production consumption system, the political economy approach allows for inquiry into the unsustainable living from the perspective of physical, social, biological science disciplines, and a combination of two or more of such if a scientific framework can be constructed using insights from these multiple perspectives.

The use of value in the concept of value chains is not about the value of an individual product but the system, including governance, production, consumption and post-use, that together situate the product and its use within the larger context of society. In this regard, the value chain concept is closer to the "system of provision" approach by (Fine 2006), which posits that commodities produced for consumption belong to integrated chains of activities incorporating production, distribution, retailing, etc.: "the inclusive chain of activity that attaches consumption to the production that makes it possible". This integrated chain of activities does not only define the value of the product, it predetermines how it can be consumed and thus the attendant impacts.

6.2 Global value chains

The concept of global value chain (GVC), according to Gereffi et al. (2005), holds that power and hierarchy are embodied in relations between transnational companies and their powerful role in the global economy as they operate fluidly across borders. This affects not only corporations and shareholders but also areas in which they operate and the ways of living by people who consume the products and services. In other words, value chains are part or types of systems of provision (Fine 2006) – they are the mechanism through which products and services for human needs and wants are made available; they mould dominant patterns of consumption and shape the cultural and ecological practices and impacts surrounding use of the products.

Interrelations among actors in the value chain vary, and so are the degrees to which they influence the system around them. A typology by Gereffi et al. (2005) identifies five different types of governance for value chains, based on criteria such as: complexity of information and knowledge transfer required to sustain a particular transaction; the extent to which this information and knowledge can be codified and transmitted efficiently within the value chain; and the capabilities required of suppliers. The simplest form of governance, market value chains emerge around products with very simple and low complexity of information exchange among actors - these are more traditional value chains in which most stakeholders can easily participate. The second type, modular value chains emerge when product architecture is modular and technical standards reduce component variation and simplify component, product, and process specifications. The first two types, market and modular value chains, are less complex and thus more transparent to the public. The next three types of value chains get increasingly complex, more centrally controlled, and difficult for the public and consumers to understand. The third type of value chain governance, relational value chains, emerge when product specifications cannot be codified, needing highly competent suppliers and for tacit knowledge to be exchanged between buyers and sellers, and thus creating mutual dependence. The fourth, captive value chains, emerge when the ability to codify detailed instructions and the complexity of product specifications are both high but supplier capabilities are low, requiring a great deal of intervention and control from product owners and thus investments in specialised activities such as design, logistics, component purchasing, and process technology. Small suppliers become transactionally dependent on much larger buyers, and face significant switching costs, therefore becoming 'captive'. Lastly, hierarchy governance in value chains refers to vertical integration. It emerges when product specifications cannot be codified, products are complex, and highly competent suppliers cannot be found, thus businesses develop and manufacture products using in-house units. Market and modular value chains have relatively less concentration of power in one actor. On the other end, captive and hierarchy value chains show a high concentration of power in very few actors.

While the different types of value chains presented above also describe supplier-buyer relationships, they are indicative of which actors have ultimate power to determine the outcome of the system that produces for society. This distinction in value chain type links to products produced by corporations in the value chains and thus the sustainability of people who consume the end products. If more basic necessities and widely used products and services are produced in captive and hierarchy value chains, then there is more power by the producers over consumer choices and thus more power by the corporation over people's ways of living. By the same measure, if more basic necessities and widely used products and services are produced in market value chains or through out-of-market channels, then less corporate power is exerted over ways of living. Thus, in industrial economies where the market caters to most of the needs of people, there is more direct corporate power over ways of living, and in less developed economies where there is less dependence on corporate infrastructure, corporations have less direct influence over ways of living.

Global value chain (GVC) analysis examines the actors and mechanisms that shape and transform global economic processes and various types of inter-business relationships. It seeks to identify why and how an industry is globally organised, how local economic processes are conditioned by global arrangements, and where change is most likely to happen. The analysis incorporates the range of activities that firms and their suppliers undertake to bring a product from its initial conception to the consumer, activities that are spread across geographic space and yet have profound consequences at the local level. Such activities include jobs, technologies, standards, regulations, products, processes, and markets in specific industries and places (Gereffi and Christian 2010). Such an approach is useful to studies of sustainable living, where transnational companies with headquarters in one continent

and subsidiaries across the globe can easily influence household and individual choices and habits and also have impacts from as large and planetary as climate change or as local as pollution of local rivers.

The GVC framework is especially useful when applied to understanding practical, real-world issues that have both large systemic and local level dimensions. Because the framework connects the global and local levels of interlinked operations and effects, it provides opportunities for researchers, businesses, policy makers, and other reformists to "search for leverage points whereby specific business practices and development conditions can be championed or criticised, and pathways for change can be sought" (Gereffi and Christian 2010). One useful outcome of GVC analysis is that it identifies "lead firms". Lead firms are the main drivers of global value chains, or corporations that "have the market power or control over key technological or information assets that allow them to establish the parameters that other major actors in the industry must comply with" (Gereffi, Humphrey, and Sturgeon 2005).

6.3 Analysing resources flows along the value chain.

To understand sustainability of products or services, analysts construct and visualise so-called inputoutput econometric models. A basic chain includes: primary resource extraction, supplier, processing, production, distribution, retail, consumption, disposal, and waste management. An input-output model typically has a visualised mapping of supply routes for materials and how product components flow from one actor to the next in the supply chain. As noted in the description of these models by Donaldson and Preston (1995), suppliers are depicted as contributing inputs which firms transform into outputs for the benefit of customers. Such models are used to conduct lifecycle analysis, which is a quantification of environmental impacts of a product or operation, or to assess the environmental footprint, which has a focus on quantification of environmental pressure and assessment of sustainable, efficient, and equitable resource appropriation. Examples of some widely used footprint measures are carbon, material, water, and land footprints. Hoekstra and Wiedmann (2014) describe footprints as the basis for understanding environmental changes that result from pressure such as land degradation, water pollution, and climate change, and resultant impacts such as biodiversity loss or effects on human health or economy. Footprint indicators are related to the idea of planetary boundaries, the concept that environmental sustainability can be achieved when, on a global scale, total footprints are maintained below their maximum sustainable level and within certain thresholds (Hoekstra and Wiedmann 2014).

As discussed in Section 4.1.1 above, there are limitations to quantitative analysis models and relying only on their calculations for policy design and action. Hoekstra and Wiedmann (2014), for example, note that "common questions to be solved across all footprints include the difficulty of tracing along supply chains, how to avoid truncation, how to allocate to multiple products from one process, and the assessment of uncertainties". Apart from methodological issues, there is also a question of whether quantitative models are sophisticated enough to analyse something as complex as lifestyles (Rogelj et al. 2016). Even with sophisticated models, data is sometimes not enough and the models themselves not transparent to users. For example, Donaldson and Preston (1995) have observed that firms and their operations are frequently presented as a "black box" that transforms supplies into products. Lifecycle analysis depends on the traditional supply chain structure that shows movement of materials from extraction, through production, and then distribution, and consumption. However, the vast and complex supply and demand structures that characterise the current economic system, the presence of immaterial services, and the prominent roles by very influential stakeholders such as investors can hardly be identified using traditional supply chain structure. Thus, lifecycle analysis and footprints are necessary but not sufficient for understanding and tackling the problem of production and product unsustainability and the inevitable command of corporations over unsustainable living.

For a broader picture of lifestyles drivers and impacts, quantitative methods need to be complemented with normative, qualitative assessments. A more expansive view of sustainable living would address more than material consumption alone.

6.4 The need to complement resource-flow analyses with power-flow analyses

Identifying where the highest environmental impacts occur in the supply chain, as described above, is not enough for policy makers to tailor an effective intervention that addresses system-wide unsustainability. Although sometimes ancillary, application of life-cycle analysis does not often tend to show which actor is equipped and capable of taking effective remedial action where impacts occur. Thus, in addition to life-cycle assessment, also analysing value chains for power dynamics among stakeholders would be instructive; since sustainability analyses should contribute to practical solutions, understanding where power lies in the production-consumption system is a needed complement to life-cycle analysis and environmental footprints. This would highlight which stakeholder to target in order to use their influence to most effectively address the identified issues in the value chain. The approach I introduce to achieving the above is called power-flow analysis, and is firmly rooted in political economy tradition.

While the two types of flow analysis are complementary, some differences between the two approaches that can be summarised as follows: footprint analyses show the flow of resources and emissions from one stage of production and consumption to another within the supply chain; powerflow analysis shows the flow of influence from one stakeholder to the others within the value chain. While life-cycle analyses can identify ecological hotspots (where there is highest concentration of environmental impacts) in the product supply chain, value chain analysis of power dynamics can identify power hotspots (where there is the highest concentration of influence). Product life-cycle analysis is useful in solving complex technical problems; power-flow analysis is a useful complement in solving complex socio-technical problems.

To understand such power representation in the production-consumption system, in the following subsections I introduce and further develop a framework for power-flow analysis. I draw from stakeholder theory (see Section 5.2.1), features of the global value chain framework (Gereffi and Christian 2010), and apply the concepts of power dynamics and agency, which have been discussed under Section 5.2.1 above.

6.5 Introducing a framework for power-flow analysis

In order to conduct power-flow analysis in a consistent and replicable manner, a framework is needed to understand where power comes from and how it is wielded throughout the system responsible for delivering the product or service. Such an analysis would lead to identification of power hotspots and leverage points from which power can be dissipated across the value chain in order to address sustainability or the lack thereof in the system. In keeping with the objective of developing a political economy approach to the research and practice of sustainable living, I draw from theories of institutions and stakeholder theory to adapt key features of the global value chain framework and use the concepts of power dynamics and agency in order to build the In-Power framework. It is a framework for understanding power dynamics by analysing the *institutional* settings around an issue and the *interests, instruments* and *influences* of actors in the value chain. To demonstrate its application, I apply the In-Power framework to analysis of a sample product value chain. I use plastic packaging as an example of a value chain to analyse; plastic is one of the most visible artefacts of consumerism, a contemporary environmental issue (e.g. plastic in oceans and micro plastics in the food chain), and one widely ascribed to consumer choice. Yet, analysis would show why focusing on consumer choice, as is currently widely done by most government policy and corporate positioning, is

a failed strategy, given that the consumer has limited influence and agency to change the system that has driven the rise of plastics in society and firmly coupled its use to procurement logistics and functionality of most everyday products. Compared to consumers, there are far more powerful actors in the production-consumption system, with interests that sometimes conflict with sustainability actions, and with access to resources and instruments that allow them to wield decisive power on final outcomes of production and consumption patterns.

6.6 The In-Power framework

A value chain brings together multiple actors around a central idea or process that leads to an outcome being a product or service, and of which production and consumption have impacts on the environment, society and the individual. The relationship between the sustainability issue, the stakes for and actions of each actor, and the impacts are reflected in Figure 2.

Institutions
- Policy frameworks
- Principles and norms
- Systems of provision
- Path dependencies

Impacts
- Societal
- Environmental

Actors

Influenc
ents

Figure 2: In-Power framework for analysing stakeholder power dynamics and influence.

Source: Author

Actor refers to each actor or stakeholder in the system; Action refers to the behaviour or specific action by the actor; Impacts refers to the externalities of the action taken. Institutions refers to the policies, rules and bodies that provide a framework for operation within the system (North 1990) – institutional settings affecting production decisions and actions, and the institutional context that influences the production-consumption system that delivers the options of products and services which serve as consumption choices and shape ways of living. Each actor is able to act in the system, depending on their interests (which could be different and sometimes conflicting with those of other actors), the resources and instruments the actor has (which vary in strength relative to those of other actors), and how the actor can influence others. Any action resulting from this would have outcomes and impacts, including on individuals, society and the environment. The final outcome of the various actions reflects the net power within the system. That is, it shows dynamics among the various stakes of each actor (stakeholder interests) in the value chain, the tools the actor uses to relate to or negotiate with others (instruments), and the final impact achieved (influence). Institutional settings; Interests, Instruments, and Influence of stakeholders are the "Ins" which together make up key components of what I refer to as the In-Power framework. The four Ins are further developed in the

following sections. Although impacts – including social, environmental and other impacts of unsustainable production and consumption – are highlighted in Figure 2, they have already been extensively discussed in previous sections and so shall not be further elaborated on in the sections below describing the framework components.

6.6.1 Institutions

Douglas North (1991) defines institutions as "humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)". Institutions as a collective are custodians of cultures, facilitators (and constrainers) of patterns of behaviours by actors in society. Government agencies, religious bodies, education systems, private organisations, community groups, professional networks, all together provide a corpus of laws, policies, dogmas, principles, administrative processes, norms and mores that weave together to dictate or signal what is right or wrong, how we can or cannot operate. As facilitators of sustainable living, institutions put in place the various soft and often intangible aspects directing choice and behaviour and that together define the operating system of a society. Hall (1986) describes this characteristic of institutions as defining "compliance procedures, and standard operating practices that structure relationships between individuals in various units of the polity and the economy." While some institutions support sustainable living (for example, by proposing science-based minimum healthy food standards for consumer products) others act against it (for example, by lobbying governments to redefine what is considered "healthy" food that is sold to consumers). Actors are therefore in constant negotiation with institutions to represent their core mandates, to shape institutions to serve their interests, and thus to influence what are accepted rules of operation for everyone (North 1990).

Hall (1997) emphasises "the institutional mechanisms that underpin the operation of market mechanisms" as being of interest to political economists. They are inspired to analyse variations in the institutional structure of markets across nations, sectors or time, and to focus attention on how nonmarket institutions such as states and other social relationships wield influence on the efficiency of the market (Smith 2011). Thus, unlike is expected of the balancing role of Adam Smith's invisible hand (Haakonssen 2006), value chains and systems catering to societal needs are heavily skewed and not always in favour of sustainability. The power dynamics here can be easily understood from the question of who benefits from the current system and prevalent consumption patterns, and who suffers from the impacts. Sustainability transition presents an alternative paradigm to the social and development model promoted by corporatized international and national government institutions, which are highly influenced by political and economic considerations. Thus, in confronting the rational choice approach, political economy analysts ask the question of how and especially by whom institutions are created. Such an analysis has led the World Bank (2008), for example, to acknowledge that current institutions, including those for sustainability, are usually created by those in power and benefitting from the system, while there are "losers" who remain in their original state or end up even worse-off.

Combining their resources, artefacts, and rituals, institutions such as schools, courts, churches, embody strong elements of power, authority and legitimacy which direct behaviours and outcomes in society. March and Olsen (1984) refer to institutions as "collections of standard operating procedures and structures that define and defend interest". In this regard, the mandate and convening power of governments and public institutions remain some of the most important in creating the right set of "rules of the game" within which actors must operate. By deliberately or inadvertently influencing production and consumption activities, national government policies shape the conditions under

which producers and consumers act, and thus the extent to which sustainable living can be realised. This does not only include policies and laws but also the implementation mechanisms and administrative processes set up to ensure compliance and guide actions taken by stakeholders towards policy objectives.

In-Power analysis can highlight whether implementation mechanisms and institutional arrangements are suitable towards intended policy objectives, and whether they may lead to perverse or unintended consequences. For example, if a government has policies with the objective of eliminating plastic waste from consumer activities, in order to understand its impact, In-Power analysis would seek to understand whether the policy addresses upstream processes (and actors taking part in activities of) resource extraction, design and production of plastic, or whether the policy only targets downstream, post-use processes (and concerned actors) of waste separation and disposal. Policies or institutional arrangements that focus only on consumer action fail to acknowledge the origins of the plastic waste problem and the power dynamics within the system that lead consumers into use of plastics (Andrady and Neal 2009; Thompson et al. 2009). Such nuanced understanding needs to be reflected in the enforcement mechanism and the institutional arrangements meant to deliver on the policy objectives - which agency is responsible for coordinating implementation, how implementation is monitored, how compliance or lack of compliance is reported, what authority the implementation agency has, and whether or not the agency favours any one actor over another. Such administrative processes defined by institutions require certain capacities and resources to comply, some of which might be demanding to certain actors, and thus predetermining which actor can or cannot comply with the institutional demands.

Institutional analysis using the In-Power framework embody multiple concepts and approaches. One is the systems of provision approach developed by (Fine 2006). The system of provision approach uses as a starting point a commodity, or product, from which it describes aspects of the production processes, distribution and retailing, revealing how these define the characteristics of a product and how it is used. This approaches reflects on the economic aspects of the product but also perspectives of product culture and meaning. Brooks (2015) argues that the systems of provision approach lends to an understanding of how the role of the consumer has emerged, as well as the economic processes through which value is established in consumer goods and services. In drawing from the systems of provision approach, In-Power analysis for sustainable living seeks to understand design of the choice architecture for various goods and services that meet individual and social needs. It analyses the rules for public and private infrastructure for everyday living, including the default settings and the options it provides that perpetuate certain behavioural patterns and lock-ins built into systems and institutions that nudge behaviour or override individual preferences. The In-Power framework also analyses path-dependencies (North 1990) due to the historical process and momentum that has shaped or been shaped by the institution. As well as path dependencies, the In-Power framework can describe where there might be instances of institutional stickiness (Baumgartner, Jones, and Wilkerson 2011) in public institutions, where established rules and power relations cause resistance to change, sometimes by the same institutions mandated to bring about change.

6.6.2 Interests

Hall (1997) emphasises the link between power and interest in determining outcomes in society when he notes that political economists are inclined to ask: "Whose interests are being served by any given set of economic arrangements and how do the latter distribute power and resources across social groups?" Hall acknowledges that such a stance is born out of a "salutary scepticism about the distributive efficiency of markets". It is a stance that widely applies to global value chains.

Interests in the In-Power framework also draws from stakeholder theory and identifies stakes around the (sustainable consumption) issue, clarifying the specific nature of interests of the actors involved, and heterogeneity or homogeneity of those interests. Stakeholder theory (see 5.2 above) rejects the traditional view that only the interests of owners and shareholders are important in the operations and management of a company. It also rejects the separation theory that business and ethics or morals should not be addressed together (Sundaram and Inkpen 2004; Freeman, Wicks, and Parmar 2004). Proponents of the theory argue that the interests of business owners are, at least theoretically, not higher than, and should not impede on, the interests and stakes of other groups in society (Freeman 1984). A stake represents an interest in one or more corporations, their operations, and their impacts. These interests are not necessarily due to other actors proactively seeking engagement but could also come about despite their non-engagement with the business.

Clarkson (1994) offers an instructive definition of a stakeholder on the basis of whether there are interests voluntarily or involuntarily at risk: voluntary stakeholders bear some form of risk as a result of having made some form of investment in a business; involuntary stakeholders are placed at risk as a result of a business's activities – whether or not they have a direct relationship with the business. Thus, as well as investors, employees, trade unions, suppliers, retailers, customers and other traditional positions, stakeholder theory expands the view of who or what has a "stake" or interest in a business operation. Persons, groups, neighbourhoods, organisations, institutions, societies, and the natural environment qualify as potential or actual stakeholders (Mitchell, Agle, and Wood 1997). The theory provides a vantage perspective from which to understand power dynamics in a global value chain. And given the significant role and growing importance of corporations in society, power dynamics within value chains invariably shape consumption and lifestyle options, and thus prospects for sustainable living. By applying a reasonable pluralism, stakeholder theory is applicable to analysing sustainable living as a normative core (Freeman 1994), especially as it is largely determined by product and service consumption that is dependent on corporate operations and management decisions.

One limitation of understanding interests from the perspective of stakeholder theory is that, while it offers a multiple pluralism that widens interest groups to almost anyone and anything concerned, it is restricted in its starting point of interest in an organisation or project. Thus, it may be more natural to adopt the concept of stakeholder to the wider and more inclusive term of societal actors.

6.6.3 Instruments

Instruments in the In-Power framework refers to sources of power and tools available to each actor in the value chain; it also describes the institutional arrangements behind each actor and how they support its objectives. Interactions in competitive value chains, typical of those in the contemporary globalised economy, encapsulate the Weberian definition of power as "the probability that one actor within a social relationship would be in a position to carry out his own will *despite resistance*" (Weber 1947) (my emphasis). In a situation where heterogeneous interests manifest, the emphasis on "despite resistance" is important, as it also captures difficulties faced by advocates of sustainable living operating in a system where strong economic and political interests are opposed to the sustainability agenda.

There are different types of power in the literature, and different ways of how they can be instrumentalized. One typology is based on the resource type used in organisational settings to exercise power (Mitchell, Agle, and Wood 1997). It distinguishes between coercive power, utilitarian power and normative power. According to Etzioni (1964), coercive power is reflected by control based on application of physical means such as resources of force, violence or restraint. The second, utilitarian power is reflected in use of material or financial resources for control. And the third,

normative power is based on the use of normative and social symbols for control. Normative power can also be referred to as normative social, or social power. Coercive power is often illegal. Thus utilitarian and normative power can be used to distinguish between two sources of power that are legal and closely identify with the production-consumption system: material and ideational sources of power. Fuchs et al. (2016) describe the two as follows: material sources of power derive from access to and control of technological, natural or economic resources. These include infrastructure, technological patents, natural resources, etc. Material sources of power are similar to Etzioni's utilitarian power. Ideational sources of power, similar to normative power by Etzioni, derive from social constructs such as ideas, norms and values. Ideational sources are usually invisible, drawing upon convention and symbolic structures of meaning; from sustainable consumption discourse, examples include freedom of choice, consumer sovereignty, efficiency – the construct of sustainable consumption is in itself an ideational source of power (Fuchs et al. 2016).

In the product value chain, typology of power and net power can be analysed to identify sources of power and tools available to each actor. They would also describe the institutional arrangements specific to each actor group and how it support its objectives. I refer to this component of the In-Power framework as Instruments.

6.6.4 Influence

Influence in the In-Power framework refers to the ability of actors to move themselves closer to their objectives. It reflects agency, the capacity for self-determined action, opportunities to engage with and have actual or potential impacts on the behaviour of other individual stakeholders. In order to understanding power dynamics, one must understand agency, especially when it comes to seeking meaningful actions to resolve multi-stakeholder issues, as is the case with sustainability. Power and agency are invariably linked; to exercise power is to have agency, and having agency contributes to power. In the political economy of sustainable living, agency by the individual or household is the power to exercise the sustainability option through consumption and lifestyle choices. Attributes such as selfhood, motivation, will, purposiveness, intentionality, choice, initiative, freedom, and creativity affirm the definition of agency as the capacity to shape the circumstances around an issue (Emirbayer and Mische 1998).

If a product or a service and its features are seen as the final outcome of a negotiation among the various stakeholders in a production-consumption system, then the product can be seen as representing net power in a negotiation around one or several issues, such as profits, employment, sustainability, creativity, etc. The overriding characteristics of the product, or the absence of some qualities, indicates who is the winner, or at very minimum who has the most influence in the value chain. Such an analysis also includes how the actors influence the institutional setting that then moves every other actor concerned with the issue under analysis. For example, the instrument of lobbying by corporations or boycotts by consumers can influence government policy, which then influences the conditions in the production-consumption system and actions by all actors.

Together, institutional arrangements, stakeholder interests, their instruments and influence in the In-Power framework are used in describing power dynamics in a context, with a view to understanding drivers of consumption, how power is wielded by stakeholders, and potential points of effective intervention (Akenji and Bengtsson 2010) that can enable sustainable living. In summary:

- Institutions set the conditions or "rules of the game" for how actors operate in the productionconsumption system, facilitating certain actions and constraining others.
- Interests identify stakes around the (sustainable consumption) issue, clarifying the specific nature of interests of the actors involved, and heterogeneity or homogeneity of those interests.
- Instruments refer to sources of power and tools available to each actor in the value chain, and describe the institutional arrangements behind each actor and how they support its objectives.
- Influence refers to activities actors undertake; it reflects agency, the capacity for selfdetermined action, opportunities to engage with and have actual or potential impacts on the behaviour of other actors.

To compensate for the broader societal and physical context in which production and consumption take place, the *Ins* are placed against macro factors such as technology, economy, demography, and culture. A contribution of this framework is that it directs focus to resourceful and influential nodes in the value chain such that corrective responsibility can then be allocated in a manner that corresponds to agency by key stakeholders. Using the In-Power framework to analyse power structures in a value chain would reveal what I describe as the *nexus of influence* and also highlight *the lead actor* — the actor group with the most influence and the one which if targeted has potential to use their influence to cause cascading changes across the system.

Figure 3 shows the main components of the In-Power framework, and sample questions to be used for analysing each stakeholder in the value chain. To use the framework, a simplified analytical flow is proposed as follows:

- i. Identification of impacts or main issues related to the value chain that need to be analysed. At this stage the research question is clearly defined and hypothesis stated. Of immediate interest to this thesis is the prevalence of consumerism and persistence of unsustainable consumption.
- ii. Understanding the issue context. This would lead to identification of external factors under which the value chain and key issue stakeholders are operating the global economy, political environment, demography, climate, for example. This information helps to understand the external context beyond the immediate influence of those in the value chain and thus to sharpen the assumptions of the study and set the system boundaries for analysis.
- iii. Identification of relevant institutions, including the body of laws, policies, dogmas, principles, administrative processes, norms and mores developed to influence how actors operate.
- iv. Identification of relevant actors; if necessary separate into primary and secondary (or critical or non-critical) stakeholders.
- v. Mapping of power flows using In-Power framework refer to Figure 3. This would show significant influences, dominant significant influences, and balanced significant influences actors have over each other.
- vi. Identification of power hotspots: the nexus of influence, and the lead actor. The nexus of influence is a high concentration of stakeholders who act interdependently to exercise overall combined influence on the final product and the eco-system around it. The lead actor is a more focused attribute and denotes the actor with decisive influence on the product outcome. See 7.1 below.
- vii. Determination of potential interventions for addressing the issues identified or further research needs.

Figure 3: Analytical framework for stakeholder power dynamics based on In-Power concept.

'Ins'	Conceptual bases	Sample questions for empirical analysis of each actor		
Identifies the "rules of the game" for those involved in the consumption system, how they might be skewed, and the choice architecture for ways of living	Governance and policy Institutions Systems of provision /choice architecture	 What are the laws and policies affecting provision and use of related goods and services? Who is consulted or is involved in the development of these laws and policies? Does compliance with the policy or law, or related administrative processes place an unfair burden over some actors? Do these reflect contemporary socioeconomic context (e.g. are prices of eco products competitive in the current economy) and emerging knowledge on the issues it addresses? What other institutional principles and contextual factors (e.g. religious and cultural practices, employment and workplace norms) influence behaviour of actors? How do policies and norms facilitate or restrict one or more actors? Do they give any actor an advantage over another? 		
Interest Identifies stakes around the issue, interests of the actors involved, and heterogeneity or homogeneity of interests	Stakeholder theory	 Who are the main actors involved? What are the various stakes – interests? What are the needs and expectations? How urgent or critical are their needs? What are the underlying drivers and patterns? How compatible are they with other stakeholders? 		
Instruments Identifies sources of power and tools available to each actor	Typology of power	 What resources does each actor have? What are the sources of power for the actors? What instruments or tools are used? What institutional arrangements or backing does the actor have? 		
Influence Identifies influence each actor has on the issue and others involved, opportunities for meaningful activities, and potential impacts	Net power, Agency	 What is the role of each actor? What is the position of the actor relative to others? How does the actor wield their power – what activities can it or does it engage in? What legitimacy do they have? What impact does the actor have on others? What patterns and trends can be observed in their actions? 		

Source: Author

The In-Power framework can be used to analyse power dynamics around different types of sustainability issues and at different scales. Examples of aspects that could be analysed using the

framework include sustainability of different sectors (e.g. food systems, or housing or transportation), specific products (e.g. cars, or computers), practices (e.g. advertising to children, use of artificial fertilisers), issues (e.g. water pollution in a neighbourhood). The framework is especially useful when there are multiple interests and claims involved, a complexity in the system, and when an understanding of the technical and material aspects of the issue under investigation does not always result in finding effective interventions. To demonstrate its application, in the next chapter the framework is used to analyse the issue of unsustainable plastic packaging in the value chain. Outcomes of the analysis are supported by describing and identifying two other key features of power flow analysis using the In-Power framework: the nexus of influence and the lead actor.

7 Example of power-flow analysis: unsustainable plastic packaging

Recent public policy efforts to address the issue of proliferating plastic packaging and resulting waste have been somewhat typical of government approaches to the consumerism issue: focusing on citizens to change their behaviour – awareness-raising among consumers, partial or complete ban on plastic bags at points of purchase and waste segregation schemes are examples of approaches taken (Bartolotta and Hardy 2018; Willis et al. 2018). Businesses eager to show their ecological credentials have also rather transferred responsibility for the issue to consumers with examples described by Dauvergne and Lister (2013) including: introducing eco labels, packaging-free shelves at premium rates, and sale of non-plastic bags in retail shops. Occasionally, governments have addressed businesses, for example, through extended producer responsibility, which requires companies to take back post-use packaging (for reuse, recycling or final disposal). Even so, as Akenji and Bengtsson (2010) argue, treating plastic as a waste management issue rather than a resources and design issue affects the symptoms of the problem and final users of the plastic packaging rather than the cause and perpetuating system. The objective is not waste reduction or change in ways of living; its requirements from the households is to segregate the plastic from other waste types and ensure that it is collected and sent back to the producer. Similarly, bans on plastic bags recognise the environmental and social problems related to plastic waste but do not respond to why the plastic bags are proliferating and the function they are assigned in the supply chain (Andrady and Neal 2009; Thompson et al. 2009). A ban simply requires consumers to adjust their behaviour and does not always consider if and whether any alternatives and their use patterns would be sustainable (Song et al. 2009; Chu, Liu, and Ma 2005). The right technical analysis does not provide the solution to a political economy problem.

Therefore, from a political economy perspective, the example in this chapter argues that while the technical analysis of plastic packaging and related problems are well understood, its persistence despite increased policy efforts suggests that the technical understanding is not sufficient. Analysing power dynamics around the plastic packaging issue is necessary to understand why applied technical solutions and design of consumer-targeted policy have not been effective. This section does that using the In-Power framework.

Table 3 shows a breakdown of the Ins (Institutions, Interest, Instruments, Influence) for main stakeholders in the plastic packaging value chain, using the In-Power framework.

When a consumer goes to shop, he is looking for a product or service, and not necessarily packaging; Brody (2006), for example, notes that the packaging is only incidental, an enabler for the product and a differentiator across categories. As well as presentation, the consumer is also interested in convenience, price, quality, and hygiene, all of which are affected or determined by packaging. While the choice of a consumer is an expression of preference, the consumer only has as many options as are presented on the shop shelf, or all the shops and shelves he can access (Doris A Fuchs and Lorek 2001). Refusal to buy is also such an expression; saying no to the plastic shopping bag, boycotting one shop or product over the other, unpacking a product and leaving the packaging at the supermarket instead of taking it home with them, etc., are just some typical examples of dissenting by consumers (Spaargaren and Oosterveer 2010).

Table 3: In-Power analysis for product plastic packaging value chain

	Packaging designer	Brand owner (product owner)	Retailer (shop owner)	Consumer	Waste manager		
Institutions	 Packaging laws and standards, including for example those relevant to food safety, health Trade agreements, rules and policies affecting resources, production of plastic packaging and related products Waste management laws and policies, including for example, waste separation, extended producer responsibility Implementation agencies such as waste management bureaux Enforcement mechanisms and bodies, and monitoring and evaluation frameworks, Environmental and safety bodies and agencies 						
Interests	-Profits -Investments -Creativity -Costs	-Profits -Investments -Consumer satisfaction / loyalty -Product appeal -Costs -storage / preservation	-Profits -Investments -Presentation / aesthetics -Costs -Storage / preservation -Variety -Turnover	-Presentation / aesthetics -Health -Storage / preservation -Convenience -Price -Quality	-Cleanliness -Health -Profits		
Instruments	-Technical design -Materials -R&D -patents	-Capital -Planned obsolescence -R&D -Patents -Brand name -Technology and know- how -Business association -Product specification	-Access to customer -Shelfing space -Own brand/access to other brands -Economies of scale (bulk purchases) -Business association -Shelfing specification	-Purchasing power -Peerage -Do-it- yourself / alternatives -Boycotts / buycotts -Consumer organisation	-Waste management technology -Government mandates		
Influence	-Design	-Lobbying -Marketing / Advertising -Employing -Financing / paying fees -Pricing / promotion -Specification	-Purchasing power -Shelfing / presentation -Competition -Pricing / promotion	-Consumption	-Positioning of equipment		

Source: Author, based on Akenji and Bengtsson (2010)

As an interface between consumers and brand owners, retailers perform a balancing act of satisfying consumer demand and also pushing through what the producer wants to sell. The large variety of stock by major retailers attracts consumers; the fast turnover of products by retailers empowers them as customers of brand owners (Dauvergne and Lister 2013). Prices in major retail outlets tend to be cheaper due to economies of scale from centralized procurement and distribution. This cost advantage pulls even more customers to them, away from local and convenience shops (Reardon and Gulati 2008). Over the years retailers such as Walmart have become increasingly powerful. On the one hand they press producers to supply on the retailer's terms, e.g. in reduced bulk prices, packaged in specified units. On the other hand they influence consumers into ever increasing consumption that increases profitability. Research shows that supermarket acceptance of sales of plastic packaging plays a major role in the packaging decisions of manufacturers and that it may actually outweigh the demands of consumers (Reardon and Gulati 2008). Retail giants such as Carrefour and Walmart, for example, regularly refuse to sell certain products unless they meet specific pricing and packaging requirements (Dauvergne and Lister 2013). Such detailed specification is easily used as a tool for market influence.

Brand owners operate in a fiercely competitive market environment, faced with meeting consumer demands for high quality products at low costs while competing with other brands for shelf space and product recognition (B. G. Smith 2008). As such the design and packaging, being usually the first visual contact with consumers, should be distinctive and attractive in order to maximize market appeal of the product. This has provided brand owners with one of their strongest marketing tools. Packaging design for successful marketing is a booming industry of its own and, between the marketing departments of brand owners and the packaging designer, resources are dedicated to get the packaging right (Brody 2006). This has sometimes led to a situation where the product-packaging cost ratio is lopsided, the packaging costing more than the product itself. As a packaging "specifier", the brand owner communicates its packaging needs to the producer (Lewis 2003). Specification instructing packaging design could be as detailed as the dimensions, material, or sustainability criteria for the packaging. The packaging producer may sometimes act as consultant to the process of packaging development. However, ultimately, owners want to keep control over their brand image and make the final decision in process. The nature of the product and the brand owner's sales packaging design would in turn influence transport and grouped packaging used by suppliers, distributors and retailers. In line with maintaining control over packaging design and brand image, major food brand owners often operate in either capture or hierarchy value chains, exercising complete control over, or setting up their own internal packaging units (Dauvergne and Lister 2013; Gereffi and Christian 2010).

7.1 Power hotspots: Nexus of Influence, Lead Actor

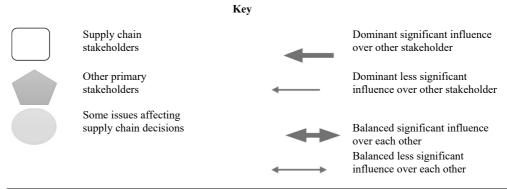
From power-flow analysis using the In-Power framework, Figure 4 below summarises the relationships and influences among stakeholders in the packaging value chain¹⁸. The degree of influence exerted by one actor over the other is indicated by the size and direction of the arrow. There are two types of relationships between actors (dominant and balanced), that are denoted by their levels of significance (significant and less significant) in the final outcome and impact of the product. A significant influence is more decisive over the overall outcome than a less significant influence; a dominant influence indicates one actor exerts more influence over another. Therefore, dominant significant influence by Actor A over Actor B indicates that A has more influence over B than B has over A, and that A has more influence over the product decisions than B. Dominant less significant influence by Actor B over C indicates that B has more influence over C, but that their relationship is less decisive in the final

¹⁸ Parts of the analysis for this subsection are modified from Akenji & Bengtsson (2010).

outcome and impact of the product. Balanced significant influence in a relationship between two actors indicates that they have influence on each other to a comparably even extent and that their relationship is significant in the final outcome and impact of the product. Balanced less significant influence indicates the two actors influence each other evenly but their relationship is less significant in the final outcome and impact of the product.

Trade Product standards Agreements **Environmental Business** groups Associations Brand Distributor owner Others... **Packaging** manufacturer Others.. **Product** Retailer standard agencies (Packaging) Technology material Laws **Employee** supplier End Waste consumer Others... collector Consumer **Policy Organisations** Investors maker Norms

Figure 4: Simplified (plastic) packaging value chain, showing power dynamics.



Source: Author

The above analysis shows the power hotspots in the packaging production-consumption system – the clusters of powerful actors around particular nodes in the value chain. The retailer predetermines variety, size and packaging and has ways of influencing consumer decisions, although ultimately it is the consumer who buys the product. As such the consumer and the retailer have a balanced significant influence over each other. Similarly, there is a balanced significant influence over the consumer and the brand owner. However, because the retailer and brand owner double their influence over the consumer, the consumer ends up with little influence over both of these actors and thus, at least in

the area of packaging, can hardly drive change along the entire value chain. By implication, consumer awareness programs alone or banning of plastic bags is not sufficient, nor should they be the primary focus of addressing plastic packaging waste. These limited measures target the more visible actor who is however less powerful in the packaging value chain – an example of consumer scapegoatism.

In order understand even specific roles by the most influential stakeholder, using the In-Power framework can highlight two further attributes in the power hotspots: the nexus of influence and the lead actor.

7.2 The nexus of influence

The nexus of influence denotes the area in the value chain with a high concentration of stakeholders who act interdependently and who have a combined decisive influence on the final product and also on the eco-system around it. This usually involves financiers, producers, retails channels and manufacturers/suppliers of key accessories (B. G. Smith 2008). Together these have overriding command over not only single products but product categories and the market. The issue of plastic packaging shows the complexity and power of a nexus of influence. Finding alternatives to plastic packaging, for example, is not just a matter of changing the packaging of one product; the conceptualisation and perception of plastic packaging needs to change for entire industries (Song et al. 2009). For this to succeed, the nexus of influence around household consumer goods – global brand owners such as Unilever and Coca Cola; large retail channels such as Walmart, Lidl, and Amazon; and investment firms such as Berkshire Hathaway and Dan Loeb – needs to tacitly or implicitly approve of such a change (Dauvergne and Lister 2013). This partially explains why it is ineffective, albeit common, for government agencies to talk of changing consumer behaviour and proper waste disposal rather than engaging with the powerful nexus of influence around investors, brand owners, and retailers to change the upstream stages of design and production (Fuchs 2013). Government policy that ignores such a strong interlinked superstructure and targets consumers to switch to alternative packaging will not be effective. In this regard, Power-flow analysis to identify the nexus of influence can be used to demonstrate even broader systemic issues. It can, for example, help in revealing the increasing weakening of national governments and the growing power of transnational corporations, including influence over traditional national government areas such as shelter, education, health, safety, and the impacts on sustainable living.

7.3 The lead actor

Getting even more specific in terms of power and influence, power-flow analysis can lead to identifying a lead actor among the various stakeholders in the value. The concept of the lead actor is similar to and borrows from "lead firm" described in the global value chain (Gereffi, Humphrey, and Sturgeon 2005). Recognising that influence in and on the value chain is not limited to firms or businesses, the In-Power framework broadens the concept and its related characteristics into a "lead actor". Since the notion of the value chain goes beyond just business interests to include all others that are affected by the operations (Vurro, Russo, and Perrini 2009), in order to understand issues such as the environment and ways of living, it is important to also analyse non-corporate actors. Power-flow analysis includes citizens, consumer groups, NGOS, neighbourhoods, municipalities, forests, etc.

Although in a complex, globalised market environment it is challenging for a single actor to act completely indifferently of other actors, narrowing down to the lead actor offers a more specific focus than the nexus of influence and allows for a clear entry point which if targeted can propagate influence across the entire value chain, potentially leading to a change towards sustainability.

The lead actor can be identified through analysis using the In-Power framework. It would reveal the following characteristics:

- a) has majority ownership or legal rights (such as patents, copyrights, court registration) over the final product or brand
- b) has a critical marketing, technological, or financial edge that permits it to set the standards or specifications for other actors in the value chain; defines the product and choice of market route, including production, presentation (e.g. packaging) and distribution
- c) has agency the ability to find a meaningful response to the situation, and the resources to change its own behaviour hence pulling others along.

Lead actors often derive their status from what Dauvergne and Lister (2013) describe as "the sheer size of their purchases, revenue and increasing market concentration". Their strength also comes from having direct and/or indirect control of key stages in the supply chain, product or process standards, brand recognition, and technological innovation (Gereffi, Humphrey, and Sturgeon 2005; Dauvergne and Lister 2013). This is in line with Hill and Jones (1992) who argue that according to agency theory, the principal – in this case the lead actor – "can limit divergence from his/her interests by establishing appropriate incentives for the agent, and by incurring monitoring costs designed to limit opportunistic action by the agent." Analysis of the plastic packaging value chain offers the opportunity to observe such power dynamics. From the power-flow analysis, the nexus of influence in the packaging value chain is around the major retailer and brand owner. The specification of packaging is done by these two actors; they are engaged in production and distribution; they have influence over suppliers and availability of retail outlets, hence consumers; and they have the financial leverage and are well organised into assertive self-interest groups. By targeting the brand owner to change practices within the value chain the major retailer would be included as well, thus engaging every actor in the nexus of influence. A good way to further understand the potential of the brand owner as a change agent in the value chain is to place it against the characteristics of the lead actor as listed above. Nestle, for example, as a lead actor is the world's largest food company with control over key technological or information assets that allows it to establish the parameters that other major actors in the processed and semi-processed food industry must comply with (Dauvergne and Lister 2013; Kearney 2010). Nestle has direct control of key stages in the supply chain, product and process standards for its star brands like Nescafe, Perrier, Maggie, and it is technologically innovative to come up with and push through new products that redefine the market, such as the Nespresso coffee machine and capsules.

Dauvergne and Lister (2013) provide a few examples that show the dominance of the lead firm over others in the value chin, including consumer behaviour. For example, they can "roll back" consumer prices by shifting costs upstream to less powerful suppliers and low-paid labour that depend on contracts from the lead firm. They have at their disposal instruments with which they easily "sway non-profit organisations, shape international codes and standards, and influence state regulations and institutions toward market interests." The authors conclude that with such power, "governments, environmental groups and consumers have no choice but to engage" with major brands that are lead firms in their value chains. Gereffi and Christian (2010) similarly observe that frequently lead actors exhibit more power in influencing behaviour in an industry than government laws and regulations. The latter are typically hindered by enforcement difficulties, whereas if suppliers do not comply with lead firm standards, they face harsh penalties or can be dropped from the chain.

8 Avoiding Consumer Scapegoatism

Earlier parts of this thesis have established the need for research, practice and policy towards sustainable living to recognise the broader context within which consumption takes places, and the limited agency consumers and citizens have in shifting the broader consumption-production system towards sustainability. This chapter attempts to reflect those arguments in the design of effective policies that avoid promoting green consumerism and consumer scapegoatism. The first part elaborates on consumer scapegoatism, and how it links power asymmetries in an overriding economy-centric system to the manipulation of sustainable living as green consumerism. Highlighting limitations of individualised consumer-focus approaches, the second part of this chapter discusses three key determinants of sustainable consumption – attitudes, facilitators, and infrastructure – and elaborates on them as main components of a framework that accounts for limitations in individual agency in setting the preconditions for a transition to sustainable living.

8.1 Consumer scapegoatism

Fuchs and Lorek (2005) have made a distinction between weak sustainable consumption and strong sustainable consumption in order to explain the failure of predominant governance approaches to deliver on the widely accepted scientific assessments of the urgency of sustainability. Weak sustainable consumption is rooted in market approaches and technological optimism — a reliance on growth, innovation and technological solutions, which build a lock-in in the system, thus hindering an effective targeting of unsustainability problems, if not contributing to them (Lorek and Fuchs 2013). Examples of weak sustainable consumption approaches include driving a more efficient or electric private car, or buying organically raised meat. A strong sustainable consumption approach on the other hand focuses on the question of appropriate levels¹⁹ and patterns of consumption, paying attention to the social dimension of wellbeing, and assessing the need for changes based on a risk-averse perspective. Examples of strong sustainable consumption approaches include switching from private car use to use of mass transportation or bicycling, or reducing the amount of meat consumption.

Developing further the distinction between weak and strong sustainable consumption, I have drawn on the confusion over discourse and practice in order to clarify the differences between green consumerism and sustainable consumption. By analysing research, policy design and practice of weak sustainable consumption, I introduce the concept of consumer scapegoatism - government and market promotion of green consumerism that at once lays the responsibility on consumers to undertake the function of maintaining economic growth while, simultaneously, contradictorily, and with limited agency, bearing the burden to drive the socio-economic system towards ecological sustainability (Akenji 2014). Consumer scapegoatism challenges the prevalent market-driven axiom that if more consumers understand the environmental consequences of their consumption patterns, then through their market choices they would invariably pressure retailers and producers to shift towards more sustainable modes. Seyfang (2009) observes that, "The burden of managing [social and environmental] impacts rests on the shoulders of individual citizens, to be weighed up and counted alongside the many other...concerns" of everyday living and functioning in society. Burgess et al. (2003) also note the futility of consumer scapegoatism through their assertion that "an individual cannot be expected to take responsibility for uncertain environmental risks in a captured market. It is asking too much of the consumer to adopt green lifestyles unless there is a social context which gives green consumerism greater meaning."

¹⁹ See also discussions on efficiency versus sufficiency (Alcott 2008; Di Giulio and Fuchs 2014; O'Neill et al. 2018)

Green consumerism is the production, promotion and preferential consumption of goods and services on the basis of their pro-environment claims (Akenji 2014). In their review of green consumerism literature, Sachdeva et al. (2015) argue that "an operational definition of green consumerism subsumes a list of behaviours that are undertaken with the intention of promoting positive environmental effects. Some prototypical behaviours that fall within this rather vague definition are purchasing appliances with energy star labels, buying organic products, or turning off electrical appliances when not in use, and taking shorter showers" (Sachdeva, Jordan, and Mazar 2015). In analysing contemporary narratives of green consumption by Finnish youths, for example, Autio et al. (2009) present "green consumerism as a socially constructed concept – both in terms of what counts as 'green' and what responsibilities are assigned to consumers". The authors "discern the dominance of the individualistic moral discourse or the 'rationalisation of lifestyles'" in narratives by young green consumers who are subjected to a larger discourse on environmental issues. It is this idea of a construct, and the role played by dominant actors (e.g. corporations) in determining consumer behaviour, that makes green consumerism an increasingly contested concept, especially as regards the objective of realising sustainable society. This has led, for example, to the observation by Moisander (2007) that "as a private lifestyle project of a single individual, 'green consumerism' is much too heavy a responsibility to bear."

In order to establish differences between green consumerism and sustainable consumption, earlier in Akenji (2014) I present a summary of the historical development of environmentally related consumption, some of the main approaches to promote sustainable consumption, and the perceived role of the consumer. For this thesis, I have extended this analysis – I make the distinction between green consumerism (that perpetuates consumer scapegoatism) and sustainable living. This preference for sustainable living as an expanded view of sustainable consumption is in keeping with the discussion on sustainable consumption and sustainable living provided under Chapter 2 above (**Definitions and Clarification of Concepts**).

The choice of sustainable living over sustainable consumption also fits into what other analysts are beginning to observe, namely: that the terminology and keywords that form "sustainable consumption" sit uncomfortably next to the objectives of the concept (Miles 1998; Gabriel and Lang 2006). Taking this further, Fuchs and Lorek (2005) and Lorek and Fuchs (2013) make a distinction between weak and strong sustainable consumption, with a view to emphasizing the systemic nature of the problem rather than the individualistic approach. Seyfang (2009) compares "mainstream and New Economics models of sustainable consumption" and highlights that related objectives, indicators, examples, are poorly understood by groups which miscommunicate sustainable consumption as a green marketing and eco-efficiency approach.

Summarily, sustainable consumption as a social science concept communicates poorly to stakeholder groups and practitioners such as households and NGOs, seeming to suggest that all consumption is bad, even when it aims to meet basic needs; it has been easily appropriated by corporate marketing and confused with green consumerism; and it needs further clarification from other close concepts such as sustainable lifestyles and green consumption (see Section 2.2 above). Sustainable living embodies these notions and can be located as the everyday-living dimension of the broader sustainability discourse.

Table 4: Comparison of green consumerism and sustainable consumption

	Green Consumerism	Sustainable Living
Definition	Production, promotion, and	Equitable consumption and
	preferential consumption of	lifestyles that contribute to
	goods and services on basis of	wellbeing within ecological limits.
	their pro-environment claims	
Indicators/key	Eco-efficiency, market options,	Living within ecological limits,
principles	and freedom of choice	equitable consumption, and
		wellbeing of individuals and society
Perspective on the	Individuated buyers of goods	Individuals and collectives enabled
consumer	and services, making rational	or constrained by institutions and
	choices	systems of provision
Intervention node	Micro level – individual and	Micro, meso, and macro levels –
	household product shopping,	individual and household behaviour,
	use and waste	entire product value chains,
	disposal/recycling	provision systems, and related
		institutions
Sample policy	Eco label, awareness	Ecological and progressive charges
instruments	campaigns, recycling	for services and taxes, choice
		editing, promotion of out-of-market
		and non-economic opportunities
Key advocates	Businesses, governments,	Researchers, Communities, civil
	consumers	society groups, governments

Source: Author, based on Akenji (2014)

By analysing power dynamics among groups with heterogeneous interests, political economy can provide a better understanding of why green consumerism remains dominant in policy design and practice, despite the well-documented environmental challenges, social inadequacies and the urgency for change. One of the main reasons is that continuous economic growth remains central to government legitimacy. On the one hand, sustainable living needs people to consume less in order to reduce the environmental burden of materialism and to allow for equity in distribution of limited resources; in contradiction, market-economy systems need to constantly increase consumption in order to sustain the economy - consumption drives economic growth, upon which government legitimacy rests. Government- and market-promoted green consumerism is thus carefully calibrated to not slow down the economy but to operate as a peripheral activity that safeguards only against the most visible, damaging and immediate environmental and social problems (Akenji 2014). Consequently, the increased emphasis in more efficient production and green consumerism allows governments to walk a fine line that seems to promote sustainable consumption while allowing consumer sovereignty but tacitly or explicitly encouraging continuous consumerism. The (green) consumer has demonstrably little influence over more powerful actors in product value chains or decision-making institutions, and is already overwhelmed by complex choice criteria and everyday decisions. Thus expecting the green consumer to overcome these systemic barriers and be a primary driver of something as complex as sustainable consumption is consumer scapegoatism.

Consumer scapegoatism acknowledges that the consumer is easily the most visible actor in the production-consumption actor constellation, but is not necessarily the most powerful – the consumer is not king. This is not to suggest that people should not take any responsibility for the social and ecological consequences of their lifestyles, but rather to highlight the oft carpeted-over understanding that viable solutions would need to address underlying reasons for, drivers of and motivations for particular consumption patterns. Understanding and identifying consumer scapegoatism supports

design for more effective interventions to break the self-perpetuating system of unsustainable consumption — or in other words, weak sustainable consumption. This aligns with arguments that transformation to sustainable living will only occur when "fundamental issues and the wider context of consumption is included within policy-makers' frames of reference" (Davies, Fahy, and Rau 2014). Research supporting transition to sustainable living would seek to understand the path dependencies that shape consumerism, the socio-economic frameworks and accounting indicators that perpetuate physical economic growth, the choice architecture and systems of provision that have lock-ins to unsustainable patterns of consumption, and the power dynamics among the actors invested in the status quo and those advocating sustainable living.

8.2 Policy design: Using determinants of consumption to avoid consumer scapegoatism

The web of factors affecting consumption and lifestyles are varied, inter-linked, and sometimes contradictory, as argued in 4.3 above. Examples include: income level, technology, market prices, physical infrastructure, cognitive and physical abilities, values, social norms, peers, media, awareness, and institutional frameworks. Section 4.3 above has grouped and then distinguish between three interlinked and often confused types of factors: motivators, drivers, and determinants. This emphasizes differences between the intrinsic and extrinsic factors, the personal and contextual factors, and thus what an individual can control and what is beyond individual control. Such a typology is important in a political economy analysis in order to understand the limits of individual agency and the role of factors beyond control of a person or community. While motivations and driving factors explain the need or desire for a particular way of living, they can only be actualised when there are key determinants in place. Determinants are aggregating factors that play a decisive role; their presence (or absence) can make the difference between whether a consumption choice or way of living is actualised or not. Akenji (2014) has identified three key determinants from academic literature and evidence from practice: i) the attitudes of people and communities, reflecting the propensity to consume; ii) facilitators, reflecting agency or access to consumption opportunities; and iii) physical and social infrastructure, including products and services that are actually consumed or the infrastructure that locks people into particular patterns of consumption.

Determinants can be used as a framework to support design of policy and other interventions that go beyond green consumerism and avoid consumer scapegoatism — by recognising what actions would be most effective if targeted at the individual and what actions have better impact by addressing other actors and the broader context that shapes behaviour. Viewed from a policy and practice perspective, the three determinants can be reframed as enabling conditions for sustainable living using a systems approach: engendering pro-sustainability *attitudes* in actors; establishing *facilitators* of access to sustainable options and constraints on unsustainable ones; and the appropriate *infrastructure* and product options for sustainable living. This is referred to as the attitude-facilitator-infrastructure framework. The three constituents of the framework, operating in concert with each other, would address different motivations and drivers of behaviour, shape the role of other key stakeholders involved, and design of products and services that fulfil individual and societal needs. This suggests that a formulation of combination of interventions using the attitudes-facilitators-infrastructure framework would address: the attitude/knowledge-behaviour gap; behaviour restrained by lock-in to prevailing systems and infrastructure; and macro-level social and physical factors that determine behaviour patterns.

Attitudes Value orientation and propensity to consume. **Facilitators** Agency; access and ability to meet needs and Infrastructure wants. Available product options, and physical architecture for meeting needs and wants

Figure 5: Key determinants of sustainable living.

Source: Author, adapted from Akenji (2014)

Attitudes are determined by a cluster of factors that contribute to the value orientation of a person and, in the case of sustainable living, the propensity for consumerism (see Shaw and Newholm (2002; Stolle and Micheletti (2006; Guagnano, Stern, and Dietz (1995)). There is extensive research on attitudes towards consumption. For example, Stolle and Micheletti (2006), Trentmann (2016), and Gabriel and Lang (2006) all describe a litany of factors and show that attitudes are influenced by the media, belief systems, personal values, legal systems, social norms and mores, knowledge, profession, etc. A pro-sustainability attitude refers to having a (positive) predisposition to engage in seeking solutions towards sustainable development (Guagnano, Stern, and Dietz 1995), accept necessary paradigm changes that might in some cases be difficult for individual actors but beneficial at a broader societal level, and make it easier to facilitate a transition towards the desired outcomes (Cohen 2013; Kasser 2002). Attitudes can refer to both individual orientation and collective social values; thus attitudes here refers not just to that of consumers but to attitudes of all stakeholders involved in the production-consumption system, as well as those influencing or being influenced by it: entrepreneurs, policy makers, legal practitioners, farmers, community leaders, politicians, and teachers. By implication, all institutions responsible for these factors would need to be engaged in engendering sustainable living (Fine 2006).

With the "right" attitudes, for example: consumers would be more conscious of the effect of their lifestyle and product choices on the environment (Cohen 2010); investors would be more socially and environmentally responsible, avoiding supply of capital to businesses that wantonly exploit natural resources and pollute the environment (Schmidt-Traub 2015); producers would conduct life-cycle analysis of their products, shift to use of renewable raw materials, or switch to providing value instead of material products (Deutsch 2010). Beyond the technical fixes in production and marginal changes

in consumer behaviour, an appropriate attitude for sustainable living requires that consumers, producers and policy makers learn to imagine a world in which we consume less (for over-consumers), or differently (for under-consumers) (Akenji 2014), including nonpurchase or out-of-market ways of meeting needs (Princen, Michael, and Conca 2002).

Notably, there is an attitude-behaviour gap (Guagnano, Stern, and Dietz 1995). This is demonstrated with examples from studies in Canada on energy use for transport and in households, as well as studies in the US on behavioural adaptations to energy conservation. It was observed in these studies that attitudes, values, and awareness are of minor importance in determining environmentally responsible behaviour. Physical home characteristics, such as insulation and wind orientation, and structural household variables, such as dwelling and vehicle descriptors, were found to be the major determinants of energy use. Only price consciousness appeared to be of some relevance, but social, environmental, or energy consciousness was not related to energy use (Heiskanen and Pantzar 1997). The Theory of Planned Behaviour from the field of psychology, specifically the aspect of Perceived Behavioural Control, represents the gap between intention and behaviour, focusing on the difficulty or ease of following through on intentions or attitudes (Ajzen 1991). Therefore, attitudes are not necessarily always acted upon, and depend on other factors to be actualised, i.e. having a propensity to lead a consumerist lifestyle is not enough, one must have access to the consumer goods and services, and social networks that make up or accommodate that lifestyle. Recognising this, the attitude-facilitators-infrastructure framework emphasizes the importance of exogenous key determinants - Facilitators and Infrastructure (below) - which shape the environment in which consumption and lifestyles are articulated.

Facilitators refers to a set of factors that grant access to sustainable products and services; they contribute towards opportunities for sustainable behavioural patterns or actualisation of sustainable ways of living. Access reflects agency, or the ability to take personally meaningful responses to situations. This corresponds to what Emirbayer and Mische (1998) describe as the practical-evaluative element of human agency, which "entails the capacity of actors to make practical and normative judgments among alternative possible trajectories of action, in response to the emerging demands, dilemmas, and ambiguities of presently evolving situations". According to Emirbayer and Mische (1998), the conception of agency affirms "the capacity of human beings to shape the circumstances in which they live". For sustainable living this manifests through the availability of and access to options or choices that allow for sustainable living. Purchasing power (e.g. through income), availability of time, social networks, and cognitive and physical abilities can all contribute towards agency (see, for example: Sen 1999; Easterlin 2003; Kharas 2011). Important to enabling access are the types and power of institutions, and the design of systems of provision that support sustainable living (Fine 2006; Knoeri, Steinberger, and Roelich 2016).

The most widely recognised facilitators are institutional elements (North 1991; Hall 1986), the various soft and often intangible aspects directing choices and behaviour and that together define the operating system of a society. Examples of such facilitators include laws and regulations, administrative procedures, culture and norms, and markets. Facilitators provide agency to those with an inclination to sustainable living; a crucial characteristic of an effective facilitator is that it recognises the limitations of individual consumer agency to shift the production-consumption system. The response to this understood limitation of individual agency could take the form of hard government regulations (e.g. pricing cigarettes to reflect financial and social health costs) or soft community norms (e.g. where open display of accumulated individual material wealth is frowned upon). Facilitators could also work counter to sustainability – e.g. use of perverse subsidies (on fossil fuels) (Kiss, Castro,

and Newcombe 2002) or a patent restriction that prevents large scale deployment of transformative sustainability ideas or practices (Ménard 2011). Weak sustainability institutions, or systems of provision that have lock-ins to consumerism are unable to operate on the urgency and magnitude of the sustainability challenge and thus only promote weak sustainable consumption and sustainable living.

Infrastructure refers to user platforms and socio-ecological interfaces that support consumption and other activities. They include physical infrastructure for everyday-living domains (e.g. houses, public transportation, and sustainable products), systems of provision (e.g. design of utilities like water and energy), and also products available to consumers and citizens. As the theories of practice, and systems of provision framework recognise, for people to act sustainably the product and infrastructure that they depend on must in itself be sustainable and also foster sustainable behaviour patterns (Shove 2004; Spaargaren 2004). Hypothetically, even if an entire population was inclined to adopt the more sustainable option of public transportation over private car use, an inaccessible, expensive and unsafe system would be a deterrent to sustainable behaviour (Lehner, Mont, and Heiskanen 2015; Christensen et al. 2007).

Part of the importance of infrastructure such as for transportation and housing is how it rail-roads behaviour, creating lock-ins and for over a long period of time. To avoid consumer scapegoatism, infrastructure for sustainable living should remove the lock-ins to unsustainable behaviour patterns (Sahakian and Steinberger 2011); design of systems of provision and default settings should reflect sustainability concerns (UNEP 2012); and configuration of infrastructure for key domains of everyday living should encourage overall low ecological impact. An example is a combination of passive housing (constructed with sustainable material and with low-energy consumption), set in an urban planning zone that is in close proximity to work (in order to reduce commuting costs) (Dominik Wiedenhofer, Lenzen, and Steinberger 2013), and where local crafts and community supported agriculture is practiced.

The three key determinants, attitudes, facilitators and infrastructure should operate in concert when designing policy. Notably, not all determinants have equal weight on final impact. For example, a government law might not necessarily affect someone's attitude but would prevent access to opportunities for such attitudes to manifest. Similarly, lock-in characteristics of infrastructure (e.g. city roads with no bicycle lanes) can override individual attitudes and preferences (e.g. riding a bicycle to work). Together, access and infrastructure determine agency — opportunities and ability for meaningful participation. Where access and infrastructure are strong enough to determine a pattern, individual attitudes or values do not have such practical influence. This accounts for the oft observed attitude-behaviour gap — the observed phenomenon where pro-sustainability intentions are not expressed in practice owing to lock-in effects and institutional impediments to access.

9 Conclusion: Towards a political economy approach for sustainable living

This thesis has analysed sustainable living as a concept in academic literature and policy to demonstrate the need for an explicit political economy approach to research and design of practice. It highlighted the foundation principles, including living within ecological limits, equitable consumption, and support for wellbeing of individuals and society. Such principles form the foundation upon which to develop design for research on sustainable living. They are also important to policy and practice. Outlining them ensures that policies and actions claiming to support sustainable living reflect these principles, and as such they guard against, for example, consumer scapegoatism and greenwashing.

Conceptualising and researching transitions to sustainable living is challenging; the research field is not yet well structured and its boundaries are still fluid. Looking through contemporary literature, my colleagues and I (Vergragt, Akenji, and Dewick 2014) have made the observation that it often remains unclear where research ends and practices and policies begin. A number of clarifications also need to be made among scholars on what constitutes sustainable living research, including: a distinction between research on *present* patterns and practices of consumption and studies reflecting the *aspiration* of sustainable living; a distinction between *individual* production and consumption practices and the *collective* practices, reflecting the cultural notion of a consumer society and consumerism lifestyles; a distinction between *material* aspects of consumption (e.g. food and housing), *economic* aspects (e.g. buying and selling), and *cultural* notions (e.g. norms and habits).

To further avoid consumer scapegoatism, in this thesis a critical distinction is also made between motivators, drivers and determinants of consumption and ways of living. This is done in order to recognise intrinsic and extrinsic factors, and what is within and without control of individuals and communities aspiring to live sustainably. One innovation developed in this thesis is the In-Power framework; it is used to conduct power-flow analysis in value chains and provision systems of products and services upon which people depend for meeting needs and wants. Power-flow analysis complements the more technical and quantitative approaches such as life-cycle analysis, by analysing power dynamics among heterogeneous actors in a system. This would help to identify power hotspots and lead actors, who can be targeted to then dissipate their power across the system to make sustainability changes.

This thesis highlights a number of limitations to sustainable living research which are however also not yet addressed within the scope of the In-Power framework, and which are relevant to avoiding consumer scapegoatism. Among them are two key recommendations:

- Defining parameters for a sustainable consumption space.
- Moving research on sustainable living out of the shadows of economics.

The above two are briefly introduced below, and can be seen as laying the foundation for further research.

9.1 Sustainable consumption space

Although the unsustainability crisis and its impacts are global, access to and consumption of resources vary widely from one place to the next. There is a dichotomy of social existence where on the one hand some individuals and societies live in excess of material wealth while on the other hand large parts of the global population are living below the poverty line, with significant numbers barely able

to meet their basic needs. In a world of finite resources and where everyone has needs²⁰ and desires, a lack of balance in the system means that overconsumption by one group comes at the expense of opportunities by others to meet their own needs. Consumerism by some can only exist if others are deprived of their own livelihoods. Political economy analysis of the current economic climate points to the growing extremes in poverty and wealth being easily correlated to vast differences in power (Oxfam 2015; Ravallion 2010), as well as to impacts on the environment. Perversely, but not surprisingly from political economy analysis, it is the poor, those at a power disadvantage and with limited agency, that experience the most dire impacts of climate change and unsustainability (Oxfam 2015; Hall 2008; IPCC et al. 2012). Thus, there is a need for a system that takes into account the limits of resources, the needs of everyone, and a balance in opportunities to meet those needs. This system is articulated by what I propose as a sustainable consumption space.

The notion of establishing science-based limits and equitable distribution is central to setting a "space"; sustainable consumption space is borrowed and adapted from a similar and broader notion of environmental space coined by Hans Opschoor in the early 1990s (Opschoor and Reijnders 1991) and related to the political economy of natural resource use. Spangenberg (2002) describes the environmental space as having an upper limit to resource consumption (the 'ceiling') based on carrying capacity and equity arguments, and a lower limit (the 'floor') which is socially motivated and defines the minimum resource accessibility that permits people to lead a dignified life in society. More recently, some researchers (Blättel-Mink et al. 2013) exploring this topic have proposed the idea of consumption corridors. Accordingly, a definition of sustainable consumption should extend to both a minimum level of natural and social resources and a maximum level of natural and social resources that individuals are entitled to have access to" (Di Giulio and Fuchs 2014).

Spangenberg (2002) has explored how the concept of environmental space can contribute to developing indicators for sustainable development. While the concept of environmental space is much broader and Spangenberg uses it to analyse options for measuring institutional dimensions for sustainable development, the exercise reveals some considerations that are relevant to political economy and research on sustainable consumption space. One is the need to develop a comprehensive framework for establishing sustainable consumption space. This should include indicators based on standardized, transparent and methodologically sound basis (Spangenberg 2002). Such a framework and indicators should also reflect sustainability principles, including equity, ecological justice, planetary boundaries, life of dignity, etc., upon which the concept of sustainable consumption space is based. Another is the need to establish policy targets in order to guide the direction of implementation and monitoring of progress. Such targets should respond to the following: reflect the social and environmental concerns addressed by the sustainable consumption space; be adjusted to a timeframe that reflects the urgency of the unsustainability issue; be applicable at different levels such as meta, meso, macro and miso – e.g. national, regional, city, community, business, households, individuals – levels; and where possible the targets should be quantified.

It will indeed require the moral perspective, transdisciplinary, social transition, and praxis characteristics of the political economy approach to pull together a sustainable consumption space framework, covering: human needs (humanities field), material and greenhouse gas emissions targets (bio-physical and material sciences), and allocation of use rights (humanities and social sciences).

9.2 Move sustainable living research out of the shadows of economics

Fine (2006) has characterised research on consumption – and by extension sustainable living – as "coming under economics imperialism, signifying the colonisation of other social sciences by

²⁰

economics". Similar observations are made by Seyfang (2009), Jackson and Victor (2011), and Princen, Michael, and Conca (2002). One practical consequence of this can be seen when research is used to support policy. An example is what Princen (2002) has described in the design of policy for sustainable living as having "a dominance of economistic reasoning and a pragmatism of growth politics", seeing consumers as "individual black boxes" coming from analysis with methods that have as a goal to "better estimate demand curves". The language used in the assessment by the above scholars is noticeably tough, but it reflects a situation that has led to consumer scapegoatism. It has also shaped research whose findings and recommendations lead to green consumerism or incremental changes in the face of a large-scale and urgent ecological crises – at the centre of which are current ways of living (Akenji et al. 2016). Therefore, if the social sciences are to make a contribution commensurate with the severity of biophysical trends, they must go beyond the economic science methods whose economic growth perspectives embody causes of the current sustainability crisis. Princen (2002) writes that social scientists need to develop analytic tools for the analyst (biophysical and social alike) and effective vocabulary for the policy maker and activist that allow, indeed encourage, an escape from well-worn prescriptions that result in marginal change at best. Political economy, as discussed in this thesis, is one field that provides opportunity for such a transdisciplinary, heterogeneous and contested area of interest.

This thesis leads to three recommendations for investigation using a political economy approach with tools and methods other than from economics. The first is to understand the increasing role of markets in creating and then satisfying needs and wants; this also applies to businesses undertaking traditional functions of government towards citizens, such as healthcare, security, education and training. From a sustainable living perspective, it is important to understand how these traditional roles of business and government are changing, and what their implications are, for example, on equitable distribution and meeting of needs, achieving wellbeing, and prioritizing the broader transition to sustainability.

The second is the need to investigate opportunities for meaningful and sustainable ways of living that are not pre-determined by or dependent on the market and the formal economic system. Examples include growing of food in collectives instead of buying, walking instead of driving, caring for the elderly at home, and building neighbourhood playgrounds. Availability and pursuit of out-of-market options are important aspects of agency by citizens aspiring for sustainable living. This delinking of needs from the marketplace has also been referred to as "nonpurchase" (Princen 2002). Princen notes that little research has been done on nonpurchase, partly because of the research challenge of studying something that is not done, but also because of the dominant association of value with market transactions.

Finally, sustainable living research would need to study individuals and communities that are already living well and within planetary boundaries. Besides describing how such communities live, a political economy approach to it can analyse power dynamics within the group, provision systems, and mechanisms for balancing consumption with biophysical limits. Understanding all these would draw lessons that can be adopted to other groups and areas. It could also lead to measures that recognise and protect alternatives ways of living, including still existing rich varieties of traditional ways of living that are not yet exposed to consumerist lifestyles, non- or limited technological ways of meeting needs, or non-market approaches to everyday provisioning.

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