Transition through 'sustainable wellbeing,' an approach to overcome what consumes us

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Abstracts

Non-Technical Summary

Human consumption of natural resources grows so rapidly that we are now at a critical point in Earth's history. Forging a viable future for humanity and environment requires transformation of our consumption practices. Growth in income and consumption, often synonymous as 'economic goods' that deliver happiness and wellbeing, also drive 'economic bads,' in damage to the natural environment and to human wellbeing. Yet reversing this trend has proved beyond our grasp. A new approach of 'sustainable wellbeing', seeks to fundamentally re-balance wellbeing across life domains. It could deliver win-wins that increase human wellbeing while reducing damaging consumption at the same time.

Technical Summary

Rising material consumption and associated greenhouse gas emissions (GHG) are becoming an entrenched stumbling block in the quest for low carbon transition worldwide. Consumption performs various functions in human wellbeing but the relationships are neither static nor inevitable, and consumption can be damaging. The '*double dividend*' of enhanced wellbeing and reduced material consumption and emissions has been identified as an approach to address this challenge. Rather than the global expansion of increasing consumption as the means of achieving wellbeing, this could be implemented through enabling balanced multidimensional human wellbeing. Multiple independent lines of theory and evidence support a multidimensional concept of wellbeing. Changing the focus to more balanced '*sustainable wellbeing*' would place higher priority on other key life domains. The advantage of such an approach is in the potential win-win of lowering the emissions trajectory while actually enhancing human wellbeing. Offering 'the good life' or indeed a more balanced life, is a more enticing policy prospect than measures which give a perception of sacrifice or loss.

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Social Media summary

In search of our 'wellbeing' we are destroying our planet. Can we come into balance and live better? This paper may show us how.

Keywords
Climate change, consumption, wellbeing, low carbon transition, sustainable.

1.0 Introduction

The Paris agreement of December 2015, under the United Nations Framework Convention on Climate Change (UNFCCC), set in train an international commitment for all nations to achieve significant global reductions in greenhouse gas (GHG) emissions through the 21st century. Low carbon development is now a global goal, with a necessity to continually re-invent and ramp up measures to reduce emissions, as required cuts deepen. Yet this critical policy priority is continually overwhelmed by the global megatrend of escalating material consumption. Increases in affluence and population are driving consumption and associated GHG emissions. This is a continual drag on efforts for low carbon transition, while also pushing resource exploitation and the continued viability of natural systems to planetary limits.

Fundamental to this 'societal metabolism' of consumption are the approaches to meeting the demands of human wellbeing. The pursuit of global human wellbeing, fundamentally underpinned by burgeoning consumption, puts both human and natural wellbeing at significant risk of collapse, and renders pretence of 'sustainability' a hazardous fantasy. The flip-side is that there is also conceptual recognition of fundamental links between human wellbeing and sustainable development (1, 2). Consequently, there is a potential opportunity to renew development efforts, as described by Jackson and Marks (3), that advance both of these interdependent goals in tandem. This is a critical issue for sustainability and low carbon transition (4). The essential distinctions offer rich opportunity for transdisciplinary sustainability scholarship, and ultimately a substantial transformation to win-wins for society and nature.

The approaches to sustainability in the field of sustainable consumption and production (SCP) have relied predominantly on efficiency and consumer behaviour. While these are useful tools, they do not appear sufficient to address the systemic challenges according to the Intergovernmental Panel on Climate Change (IPCC) fifth assessment report (5). In countries and contexts where '*over-consumption*' is problematic, shifting from a priority on consumption to a

priority on multidimensional wellbeing, could prove key to unlocking the 'double dividend'. Achieving wellbeing is predominantly a concern for more affluent populations, where basic needs are already met and 'over-consumption' continues. However, it also has relevance even for those that are less affluent countries or in poverty. The ability to be happy and contented with life is a central criterion of psychological adaptation and positive mental health (6). The middle classes and elites in developing countries are also in the process of developing high consumption lifestyles (7). A the same time, global inequality of consumption also affects the ability of those in poverty to meet their basic human needs. Despite the growing problems of over-consumption and the related cultural phenomena of 'consumerism,' the potential significance of a multidimensional 'sustainable wellbeing' has scarcely surfaced in thinking on the low carbon transition.

This paper seeks to explore key conceptual and analytical literature on the relationships between consumption and wellbeing, and to synthesise this with current understanding of the human drivers of climate change. Further, it offers a critique of current approaches to change the sustainability outcomes of consumption, and develops a conceptual frame for improving human wellbeing and sustainability at the same time.

After the introduction in section 1.0 the paper structure is as follows; section 2.0 places consumption in context of the climate change challenge, section 3.0 discusses the different functions of consumption and section 4.0 reviews sustainable consumption and production. Section 5.0 discusses three approaches to delivering a sustainable consumption; shifting behaviour, shifting consumption structure and shifting the priority on life domains. Section 6.0 offers concluding remarks to synthesise the outcomes of the paper, and its implications.

2.0 The place of consumption in problem of climate change

It is recognised that the physical consumption of material resources and related GHG emissions show strong historical trends, driven primarily by economic development in industrialised and emerging countries (5). As resource use has grown more slowly than Gross Domestic Product (GDP), some decoupling by '*dematerialisation*[2]' has occurred, but this efficiency has been overwhelmed by growth in demand, leading to an inexorable rise in material consumption and associated GHG emissions. Two of the defining issues of this consumption; are major global

[2] Where the system becomes more efficient in generating GDP with less material resource inputs.

inequalities, and the pressure this is placing on emissions and sustainability. It will be extremely difficult and expensive, if not entirely infeasible, to sufficiently reduce emissions through technology and efficiency alone. An optimal approach would consider the underlying development path and consumption.

An amplified focus on consumption is now emerging globally. In IPCC fifth assessment report, Fleurbaey *et al.* (5) highlight the centrality of these issues in mitigation by stating that; "…*overcoming under-consumption and reversing over-consumption, while maintaining and advancing human well-being, are fundamental dimensions of sustainable development, and are equally critical to resolving the climate problem*." The challenge of unsustainable consumption patterns place climate goals at risk. 'Consumerism' has been identified as a growing global cultural paradigm since the IPCC third assessment report (8). While the consumption of those in poverty is driven mainly by meeting basic human needs, it is increasingly common across cultures that people seek meaning, contentment and acceptance in consumption. The spread of consumerism means that a large share of goods and services produced are 'luxuries' that only the wealthy can afford, while those in poverty are deprived of even basic goods and services (9). While the relationship between income and wellbeing has been investigated for a number of decades, and a positive relationship is dubious beyond a certain point, the relationship of consumption to wellbeing is less subject to investigation. Recent efforts show that the impacts of consumption on life satisfaction are diverse; across individuals, levels of development and types of consumption, including negative impacts with some categories (10, 11, 12, 13). In societies that are more strongly tied to consumerism[3] (8, 14, 5) other dimensions of wellbeing can be ignored or demoted to the detriment of overall individual wellbeing. Meanwhile, the focus on the individual appears unsuitable to capture critical systemic priorities, including the wellbeing of society and nature.

3.0 The different functions of consumption

The place of 'needs' in understanding consumption as a driver of climate change took prominence in the IPCC Special Report on Emission Scenarios (SRES) (15), using Maslow´s hierarchy of needs (16), where choices are only possible once basic human needs have been met such as; food, shelter, health care, safety and education. The needs approach has proven controversial, but if we accept that consumption can indeed be problematic, or indeed that wellbeing is acknowledged as multidimensional (17, 18 19) then a critique of the place of

[3] A cultural paradigm noted in wealthier countries that is spreading globally, where people seek meaning, contentment and acceptance in consumption.

consumption is patently necessary. In a large multi-country study in 2011, Tay and Diener (20) examined the association of needs fulfillment and subjective wellbeing, finding that needs are indeed universal, with life evaluation most associated with fulfilling basic needs, and positive feelings associated with social and respect needs. Once people's basic needs are met, factors such as luxury consumption, status and comparisons are more significant in determining subjective well-being, in countries with higher levels of development (21, 22). Kasser (23) showed that materialism has a cost in terms of individual wellbeing. As material commodities are poor satisfiers of social and psychological needs, materialism therefore can directly hinder wellbeing.

Aside from meeting basic needs, it must be recognised that consumption can perform various functions; assisting in the creation of meaning (24) and social positioning as conspicuous consumption (25). Gronow and Warde (26) point to factors in inconspicuous consumption of convenience, habit and responses to social norms and institutional contexts. In a seminal text, Jackson (27) has placed an important emphasis on sacred aspects of money, consumption and material goods as embodying meaning, cautioning simplistic assumptions about the contribution of material goods to our wellbeing. However, in the useful examples of both food and happiness, Gruber *et al.* (28) highlighted that in both cases we can have too much, at the wrong time, of the wrong type or pursue in the wrong way. The different functions of consumption, and its implications, have led to research on steering consumption towards a more sustainable path.

4.0 Sustainable Consumption and Production

The transition towards sustainable development has often been described by two different types of decoupling; *dematerialisation* and *immaterialisation*. Dematerialisation involves the decoupling of material resource consumption (including fossil fuels) and environmental impact (including climate change) from economic growth (5). Much of the focus occurs on the production side through improving production efficiency, and 'eco-efficiency' to reduce the environmental impact of activities. Sustainable consumption and production (SCP) arrived on the international policy agenda through UN Conference on Environment and Development (UNCED) in 1992. On the consumption side, its key aim was to foster the diffusion of sustainable consumer behaviour, through raising awareness of the impacts of consumption choices. Yet. while efficiency on the production side has improved, it has been overwhelmed by the absolute growth in consumption demand, and GHG emissions have continued to increase. A new perspective on consumption patterns is therefore essential to enable sustainable development according to Tukker (29).

This moves attention more towards the second type of decoupling, by *immaterialisation*, where human wellbeing is decoupled from economic growth, or from material consumption. Moving towards immaterialisation recognises that consumption, and its proxy income, cannot be described as more than contributory to human wellbeing. The importance of income and consumption is indisputable, particularly for those in poverty, and when recognising problems with inequality, but they are neither the sole means nor the ends of human wellbeing, as noted by Sen (30). While necessary they are not sufficient for a '*sustainable wellbeing*'. Dependent on the levels, types and context, consumption can deliver very different wellbeing outcomes. In addition, consumption cannot meet all dimensions of wellbeing, and can readily lead to damage in some domains (28). This position is in-line with what is accepted in theory and evidence from multiple independent lines of enquiry, from the multidimensional concepts of wellbeing in development studies, economic performance and social progress (17, 18, 30, 31) to sustainable development (32) and human health and psychology (19, 33, 34).

5.0 Approaches to delivering sustainable consumption

Demand for consumer goods is not a simple consequence of income levels, populations at the same income levels consume different bundles of resources, emit widely varying amounts of greenhouse gases, and experience varying levels of 'wellbeing'. This raises the feasibility of changing consumption patterns by level and type. As production side efficiency is inadequate, as stated by Tukker *et al.* (29), the focus must now be directed towards the consumption or 'demand side'. The question that arises is how can demand for material consumption be reduced, and can this be achieved while human wellbeing is maintained or improved?

5.1 Shifting behaviour critiqued

In seeking to understand the intractable elements of changing consumer behaviour, the IPCC fifth assessment report offered systemic transdisciplinary conclusions (5). In contrast to rigid neoclassical assumptions on the rational choice of individuals, and utility maximisation measured in market prices and opportunity costs, this allows some of the sticking points to be more fully understood. Research in psychology, sociology, and marketing science shows that consumer behaviour is far more complicated than just a rational response to price signals (35). Consumption is influenced by a range of economic, informational, psychological, sociological, and cultural factors that operate at different levels or spheres in society — including the individual, the family, the locality, the market, and the work place (36). There are structural issues

beyond the individual, family or community, which lead to consumer lock-in to unsustainable patterns. These range from product availability and cultural norms and beliefs, to working conditions that favour a 'work-and-spend' lifestyle (37). The capacity of the 'green consumer' to enable sustainable consumption appears limited when recognising not only the structural factors, but the 'value-action' gap between 'green' attitudes and consumption patterns and lifestyles (38, 39, 40), and also the disenabling influence of specific factors such as habit and cost (39)[4]. According to Fleurbaey *et al.* (5), the strength of the political economy factors, and the inadequate attention to them by policy, is an important cause of the lack progress towards sustainable consumption patterns.

5.2 Shifting the structure of consumption

Pogutz and Micale (41) suggest that demand can be shifted to lower impact consumption through environmentally friendly products and services and green shopping. There is an important distinction to be made here in that lowering material demand does not necessarily mean lowering expenditures, or indeed incomes, as highlighted by Pogutz and Micale. Consumption expenditures can theoretically be shifted towards consumption bundles that are inherently less emissions intensive, and from material consumption to services and experiential goods. Three strands could lead to lower emissions intensity of consumption by shifting structure; i) lower emissions alternative goods, ii) shifting the structure of consumption to other branches and iii) seeking quality over quantity. Shifting expenditures to consumption bundles of lower emissions intensity, can lead to win-wins, where these changes are associated with improved human wellbeing. This is illustrated by public health guidelines which recommend reductions in consumption of animal products. Value change in society is often described as a prerequisite towards higher concern for the environment and changes in lifestyle and behaviours (42). Yet, there is also self-interest motivation for making such changes as they can enhance individual wellbeing, as one of the gateways to the 'double-dividend'. This approach relies on an understanding of the contribution of alternative bundles of consumption to both wellbeing and emissions. It would require enabling structures and policy levers that direct and empower changes in consumption choice.

5.3 Shifting the priority of life domains

[4] Young *et al.* (39) note factors including; habit, high transactions costs, availability, affordability, and non-green criteria such as quality, size, brand, and discounts.

An alternative approach to reducing the impacts of consumption is to seek an absolute reduction in material consumption levels on the demand side. This is frequently connected with lifestyle and behaviour change but has failed to gain much traction. A perception exists that moving to less materially intensive lifestyles is one of cost and loss, sacrifice of quality of life (43). This perception is peculiar when acknowledging the preceding evidence, such as Grubler et al. (28), that not all types of consumption are equal, and some are damaging. Wellbeing is multidimensional and cannot be fully met through consumption. Consumption can even compete with or damage an array of other l life domains that are potentially more beneficial, from individual physical health and creativity to relational wellbeing with society and nature.

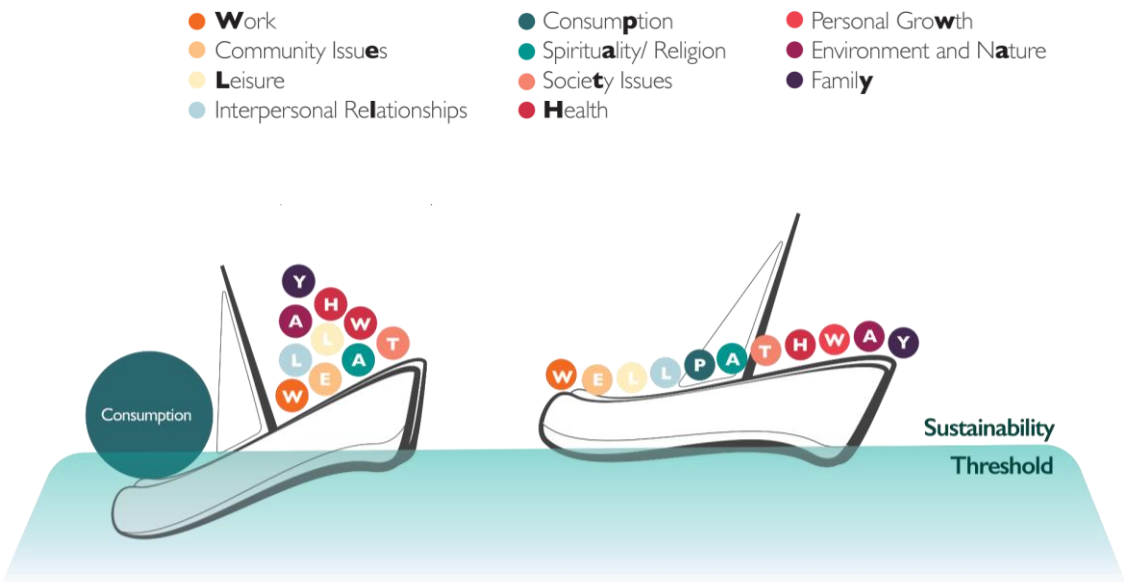
Jackson (27) described the *´double dividend´* as an approach of reduced consumption and improved wellbeing. It is described by SEPA (43) as the '*third way,*' focussing on human welfare and change that is beneficial to quality of life, while also reducing emissions at source. A growing if nascent literature has sought to explain and explore this concept as a promising double, triple or even quadruple dividend (44, 45, 27, 46, 47, 48, 49, 50, 51, 52, 53). Yet, there remain significant gaps in knowledge in how this is conceived and implemented. Approaches framed as alternative lifestyles have been elaborated as 'sufficiency'[5] (54), 'voluntary simplicity' (55) and 'ecologically conscious' or 'frugal lifestyles' (56). Such lifestyles are useful but may have limitations in what they can achieve in the general population. If they play into an austere narrative of reduction of 'quality of life,' they may not have wide appeal, and would require long-term value change in society to accept less. Given the variety of limitations on many demand side measures, it may be that achieving sustainable consumption requires a return to the fundamental concept of human wellbeing, and achieving balance across its many dimensions.

A promising approach to improved human wellbeing that balances the different life domains is offered by '*wellbeing pathways*' of Henderson and Knight (57) and Huta and Ryan (58) and '*full-life*' or *'integrated pathways*' of Waterman (59) Seligman *et al.*, 2004 (60) Peterson *et al.*, (61) and Huppert and So (62). Among the life domains, the social and relational feature prominently, with the key to wellbeing in achievement of balance and not necessarily 'more' as proposed by Delle Fave *et al.* (63). Wellbeing needs to be defined individually and by different cultures[6], yet there are clear

[5] A sufficient life is associated with moderation and prudence.
[6] Recognising the importance of freedom and the cultural context as described in the capability approach of Amartya Sen (30).

overlaps in the eight dimensions of wellbeing in development of Stiglitz *et al.* (18)[7], the ten central capabilities of Nussbaum (31), and the six dimension model of psychological wellbeing of Keyes and Ryff (34). In defining wellbeing pathways, the 2011 study of Delle Fave *et al.* (63), of seven different countries[8], outlined eleven different life domains from wellbeing research (i.e. Work, Family, Standard of Living, Interpersonal Relationships, Health, Personal Growth, Spirituality/Religion, Society issues, Community issues, Leisure, and Life in general). They found concordance with what citizens referred to when they speak of wellbeing and happiness. Interestingly, balance, family, health and interpersonal relationships were once more ranked highest, and Henderson and Knight (57) have recommended such a categorisation of life domains for future wellbeing research. In Fig. 1, the contrast of approaches to wellbeing that place a priority on consumption, verses balanced wellbeing pathways, are adapted from Delle Fave *et al.* (63). They are illustrated with reference to a social and environmental sustainability threshold. For the purposes of illustration, the 'standard of living' domain of Delle Fave *et al.* (63) is replaced with 'consumption.'

Fig. 1 Contrasting approaches to wellbeing through a priority on consumption and balanced wellbeing pathways adapted from Delle Fave *et al.* (63)



[7] The eight dimensions of Stiglitz *et al.* (18) are listed as; i) Material living standards (income, consumption and wealth); ii) Health; iii) Education; iv) Personal activities including work; v) Political voice and governance; vi) Social connections and relationships; vii) Environment (present and future conditions); viii) Insecurity, of an economic as well as a physical nature.
[8] Australia, Croatia, Germany, Italy, Portugal, Spain, and South Africa.

While Stiglitz *et al.* (18), Nussbaum (31) and others (64, 65, 51) have noted the importance of the 'environment,' 'nature' and 'other species,' much of applied wellbeing research has tended not to include such categories. For alignment with development studies and sustainability literature this category has been added to the domains of Delle Fave *et al.* (63) in Fig. 1. Where the '*sustainable wellbeing*' pathways approach (66) becomes promising in transition, is when it is recognised that societies that are directed towards multidimensional wellbeing could be causally linked to lower material consumption and emissions. As discussed above, it is known that the life domains most beneficial for human wellbeing are not income or consumption (67, 63), but are domains such as the social and relational. With potential policy synergies and win-wins, the 'double-dividend' becomes a highly desirable pursuit in its function to reduce emissions. In line with a lower emissions development path, 'sustainable wellbeing' could be used to facilitate and empower citizens in all nations to pursue 'the good life,' in a world where sustainability materialises as reality.

6.0 Conclusion

The troubling issue of material consumption patterns has been prominent since the 1990's, when the debate on intergovernmental treaties on global heating accelerated. Increasing material consumption levels have continued to drive GHG emissions, placing a significant barrier in the pathway of low carbon transition, and achieving global equality and sustainable development. While acknowledging the role of income and consumption in reducing poverty, the role in delivering human wellbeing can be questioned.

Recent studies that seek to explore the relationship of consumption to individual human wellbeing document a heterogeneous picture. Some some consumption bundles contribute more to wellbeing than others, and some categories can even be damaging, particularly in over-consumption. From development studies to health, and from psychology to wellbeing science, a multidimensional model of wellbeing is now accepted, both by a long philosophical tradition and emerging empirical results. At the systems level, the aggregate of global wellbeing and consumption are driving environmental destruction and societal inequality. Yet, development pathways that balance high levels of wellbeing and low emissions are a largely unexplored in modern history. Economic development and industrialisation have inherently favoured growth in consumption growth as the pathway to 'the good life,' status and national prestige.

The field of sustainable consumption and production has sought to address this paradox. The response that has emerged has centred on approaches such as efficiency on the production side and the 'green consumer' and behaviour on the consumption side. While efficiency has improved, material consumption and emissions have continued to increase. It has become increasingly evident that efficiency and technological change are not sufficient to facilitate sustainable development pathways (68). A more fundamental focus looks at immaterialisation, through the decoupling of income or consumption from human wellbeing. A focus on multidimensional wellbeing, with consumption as only one of the contributors, is supported by both theory and evidence.

A more fundamental change involves a shift in the priority on life domains and a focus on balanced *multidimensional wellbeing pathways* or '*sustainable wellbeing*' (66). This could lead to higher levels of wellbeing while reducing emissions, the essence of Jackson's '*double dividend*' (27). Balanced wellbeing would address all of the dimensions of human wellbeing, rather than relying on income and material consumption as the utilitarian route to living 'the good life'. Recent research in wellbeing science and psychology has outlined '*wellbeing pathways*' as a unifying conception that allows a '*full-life*' '*flourishing*' concept to emerge in individuals and society. This could be used to facilitate the emergence of synergies and win-win outcomes, particularly advancement of human wellbeing, in parallel to low carbon transition and reduced environmental pressures. Engaging with this opportunity will require more conceptual and analytical scholarship that integrates wellbeing research with sustainability science, and the transformation of systemic structures from those that constrain to those that enable 'sustainable wellbeing'.

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