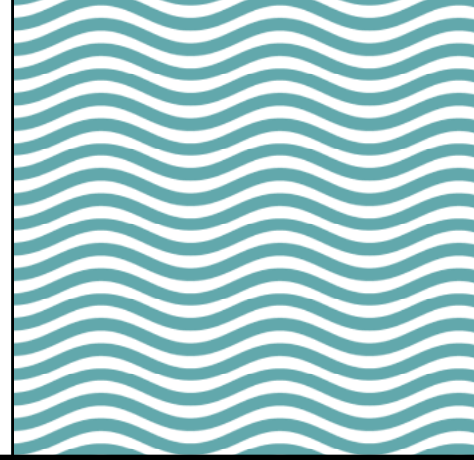




Towards sustainable wellbeing: Integrated policies and transformative indicators.



Deliverable D1.2

*Sufficiency as a confluence for
post-growth streams -
Report on the integrated
analysis of the different schools
of thought*

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Towards sustainable wellbeing: Integrated policies
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1. Executive Summary

Within WP 1, Task 3 (March 2023-February 2024) has two objectives:

- To map post-growth studies based on their key insights and contributions to the post-growth agenda;
- To design analytical and institutional paths of convergence between them in order to nourish ToBe shared visions for a new sustainability paradigm.

This report identifies three main contemporary “post-growth streams”: degrowth, Doughnut economy and the Well-being economy;

- It argues that sufficiency is their point of convergence (or “confluence”);
- It retraces the history of the notion of sufficiency from the Greek philosophy up until the IPCC definition in 2023;
- It offers a refined definition of sufficiency and outlines features of “sufficiency policies”;
- It proposes a visual design for sufficiency, the “social equator”.

2. About ToBe

ToBe is a 3-year project funded by the European Union through the Horizon Europe framework programme. Tampere University (Finland) acts as a coordinator for the project.

The ToBe project aims at studying the way in which mindsets, indicators, innovations, and policies could better work together towards a sustainability paradigm. The need for moving toward a sustainability paradigm has been widely called for, yet the path to achieving that is not clear. ToBe aims to contribute to filling this gap and create an understanding of a sustainable wellbeing economy through integrated policies and transformative indicators.

The ToBe consortium brings together acknowledged scholars with previous high-quality research on the topic and with diverse backgrounds from social sciences, ecological and political economy, environmental and innovation studies, science and technology, data science, AI and machine learning. All partners represent well-known and established universities, other research institutions and non-governmental organisations (NGOs). Table 1 lists the members of the consortium, which consists of 14 beneficiaries and one associated partner.

Table 1. ToBe Consortium Members

No	Role	Short Name	Legal Name	Country
1	COO	TAU	TAMPEREEN KORKEAKOULUSAATIO SR	FI

2	BEN	SU	STOCKHOLMS UNIVERSITET	SE
3	BEN	VTT	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY	FI
4	BEN	EURADA	ASSOCIATION EUROPEENNE DES AGENCESDE DEVELOPPEMENT	BE
5	BEN	Sciences Po	FONDATION NATIONALE DES SCIENCES POLITIQUES	FR
6	BEN	ICHEC	HAUTE ECOLE ICHEC - ECAM - ISFSC	BE
7	BEN	IPE	INSTITUT ZA POLITICKU EKOLOGIJU	HR
8	BEN	UB	UNIVERSITAT DE BARCELONA	ES
9	BEN	Ugent	UNIVERSITEIT GENT	BE
10	BEN	EPC	EUROPEAN POLICY CENTRE	BE
11	BEN	UAB	UNIVERSIDAD AUTONOMA DE BARCELONA	ES
12	BEN	EPN Ecuador	ESCUELA POLITECNICA NACIONAL	EC
13	BEN	CHAL	CHALMERS TEKNISKA HOGSKOLA AB	SE
14	Associated partner	UnivLeeds	UNIVERSITY OF LEEDS	UK
15	BEN	CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA

The main objective of ToBe is to contribute to a clearer understanding of how to move to a sustainability paradigm. More specifically, ToBe aims at achieving the following objectives:

- Construct a theoretical framework for a sustainable wellbeing economy by providing a systemic and dynamic understanding of how changing policy goals, mindsets, indicators, innovations and policies work together towards a sustainability paradigm.
- Identify different processes of economic growth by analysing their social and environmental implications.
- Evaluate and compare alternative growth initiatives as systemic innovations with a focus on drivers and barriers to implementation and impacts.
- Develop an ecological macroeconomic model combining conventional macroeconomic variables with indicators of wellbeing and sustainability to assess policies from a multidimensional perspective, and to reveal the synergies and trade-offs inherent in the transition to sustainability.
- Co-create policy solutions together with stakeholders to help institutionalise the new policies and indicators in Europe and beyond (potentially including South American and African countries).

3. An emerging space for post-growth within the European Union

The post-growth agenda is decades if not centuries old and can be said to have preceded the invention of modern economic growth measurement by Simon Kuznets in 1934¹. Currently, the expression “post-growth” is used as an umbrella term gathering different alternatives to standard growth focused economic visions (Büchs and Koch, 2017) and indicators (Laurent, 2018). In this respect, it is important to note from the onset that “Beyond GDP” and “post-growth” agendas, while overlapping, are not synonymous. Post-growth, understood as an intellectual movement, can be broadly defined as “an era in which the societal project is redefined beyond the pursuit of growth”². But it was preceded by the “Beyond GDP” agenda, which tentative starting point in the contemporary period is November 2007, when the European Union (EU) co-organized the first institutional international conference on the matter³.

At this event (attended by around 600 participants), the goal was to map the field of alternative indicators to Gross Domestic Product (GDP) and showcase attempts to complement EU governance metrics with those indicators, but it was not to offer alternative visions stemming from consolidated academic communities. Then EU Commission President Barroso outlined his expectations for the outcome of the conference in clear terms: “adapt GDP, or complement it with indicators that are better suited to our needs today, and the challenges we face today”. In his closing argument, Stavros Dimas, then Commissioner for Environment and initiator of the conference, remarked that “the main achievement of this conference has been to clearly demonstrate the political consensus on the need to go beyond GDP”.

The communication “GDP and Beyond: Measuring Progress in a Changing World,”⁴ released in 2009 by the European Commission (EC, 2009) was intended as a follow up to the 2007 Conference. It described ways to improve indicators in order to better reflect societal concerns of Europeans, but it is fair to say that very little happened since then in EU policymaking. In short, the 2007 conference was about

¹ A possible origin being chapter 6 of Book IV of John Stuart Mill’s Principles of Political Economy where he envisions a “steady-state” economy.

² Cassiers et al. 2019, p. 2

³ With the sub-title “Measuring progress, true wealth and well-being”, the international conference took place on November 19 and 20 2007 in Brussels, co-organized by the European Commission, the European Parliament, the Club of Rome, the OECD and the WWF ; notes from the event are available at https://wayback.archive-it.org/org-1495/20230414094735/https://ec.europa.eu/environment/beyond_gdp/download/bgdp-summary-notes.pdf

⁴ [https://ec.europa.eu/transparency/documents-register/detail?ref=COM\(2009\)433&lang=en](https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2009)433&lang=en)

adapting indicators to new economic realities but not about shifting paradigms and it fell short on its limited objectives.

About fifteen years later, the landscape looks quite different academically and the policy space created within the EU appears much larger, as reflected by the May 2023 Conference organized by the European Parliament and dozens of NGOs and attended by thousands of participants, aptly titled “Beyond Growth-Pathways towards Sustainable Prosperity in the EU”. The focus was explicitly put on superseding growth as a social paradigm rather than just perfecting or completing GDP as an indicator and on policy reforms rather than technical adjustments¹.

This event showcased post-growth scholar communities and their policy allies (trade unions, activists, politicians, NGOs) coming together at the call of the key democratic EU institution, the European Parliament. It coincided with an unprecedented effort by the EU to support post-growth studies with half a dozen new projects funded by ERC and EU Horizon programs in 2023 alone. It was the moment when three major consolidated post-growth streams emerged together on the European and international scene – degrowth, Doughnut economy and Wellbeing economy – displaying their academic credentials (visible publications and well-funded research projects) and policymaking achievements (tangible influence on international and national debates and policies).

This report argues that those three post-growth streams stem from a common source (the “great recession”) and converge toward a common goal (or confluence): **sufficiency**, defined positively as a situation in which limited resources are used to satisfy reasoned needs and normatively as a situation in which universal decent living standards are compatible with planetary boundaries. It will first review the main insights from these three schools of thoughts and then retrace the history of the notion of sufficiency from the Greek philosophy up until the IPCC definition in 2023. It will then offer a refined definition of sufficiency informed by post-growth streams and outlines features of “sufficiency policies” attached to it. It finally proposes a visual design of sufficiency and sufficiency policies in the form of the “social equator”.

¹ The stated goals of the conference were: “to Shift the discourse towards future-oriented economic policymaking and the benefits of beyond-growth indicators for a well-being European economy.”; “to shape the EU’s path to a more resilient economic agenda in line the European Green Deal objectives and the Sustainable Development Goals.”; to “create real policy impact with new proposals to establish a new social, economic and environmental contract.” and to “create new and unusual alliances between a great diversity of stakeholders.” The follow up event of the Conference organized in early December 2023 was devoted to transforming the EU Green Deal into a Social and Green Deal <https://www.beyond-growth-2023.eu/blueprint-for-a-social-and-green-deal-livestream/> ; these goals were also reflected by the comprehensive companion Joint research Center publication “Beyond growth – Pathways towards sustainable prosperity in the EU” (European Parliament, 2023).

4. Three post-growth streams: common source and key insight

A basic bibliometric review of the occurrences of “degrowth”, “Doughnut economy” and “Wellbeing economy” in English-language works from 2000-2019 using Books Ngram Viewer suggests that all three have emerged in the aftermath of the “great recession”. Unlike other previous recessions, the “great recession” was not just a moment when economic policymaking was questioned (as with the 1993 recession and of course the great depression of the 1930s which engendered Keynesianism). It was also a time when economic analysis itself was scrutinized and core assumptions of economic models criticized (most famously by the British monarch¹). The great recession was also a social event marked by protests and revolts where the issue of excessive inequality and unsustainable lifestyles by the “top 1%” became salient². From this time of intense doubt on the fairness and sustainability of contemporary economic systems, three post-growth streams emerged or re-emerged (the term stream is chosen here to refer to a mix of academic research, social movements and policy initiatives).

The degrowth stream originated in the early 1970s with the work of Nicholas Georgescu-Roegen and regained momentum with the organization of the “First International Degrowth Conference for Ecological Sustainability and Social Equity” in Paris in April 2008. Since then, hundreds of academic papers have been published in some of the most influential journals³ and a wide international network has been consolidated organizing dozens of well-attended events, including some peripheral zones of Europe and in the Global South⁴.

Definitions of degrowth now abound, and one recent one is especially interesting for the purpose of this report: “Degrowth may be understood as a concept, research field, social movement or an ‘activist-led science’ that has for decades discussed what it would entail to place the pursuit of a reduction in throughput or resource ‘metabolism’ front and centre of a vision for the future, rather than as a supplement to the technology- and efficiency-oriented policies that dominate the established ‘green growth’ paradigm” (Kongshøj, 2023). Here is clearly delineated the opposition between the efficiency-focused green growth paradigm and the sufficiency-focused degrowth paradigm, an opposition to which we will come back later.

¹ On a visit to the London School of Economics in November 2008, Queen Elizabeth candidly asked: “Why did no one see it coming?”

² The Occupy Wall street movement most famous slogan was “We are the 99%”.

³ Degrowth scholar Timoth  e Parrique has counted 6 publications for 2008 but more than 80 for 2021 with almost 1 000 articles in all, for a comprehensive review of the field see Parrique, 2019 and Schmelzer et al. 2022.

⁴ Most recently the 9th International Degrowth Conference “Planet, People, Care: It Spells Degrowth!” on Aug 29 – Sep 2 2023 in Zagreb.

While degrowth studies were focused on criticism of technological progress and advocacy for lifestyle alternatives in the 1970s, 1980s and 1990s (Gorz, 1994; Latouche 1995), a new generation of works has engaged in a dual effort focused on the key concept of decoupling. On the one hand, studies have convincingly attempted to show that absolute decoupling at the core of green growth is a “myth” to be “debunked” (Parrique et al. 2019; Wiedmann et al., 2020; Keyßer et al., 2021); on the other hand, papers have empirically demonstrated that fulfilling essential needs within planetary boundaries is possible without additional economic growth (Vogel et al. 2021, D’Alessandro et al., 2020; Hickel, 2019). Hence a “dialectic of degrowth”: to the incompatibility between the pursuit of GDP growth and the preservation of the biosphere corresponds the possibility of satisfying essential human needs with reduced consumption of energy and natural resources on the condition of a massive redistribution between and within countries (Vogel et al., 2021; Millward-Hopkins et al., 2023). Those two insights are closely related to the notion of sufficiency (cf. infra). In the view of this report, degrowth is understood as a variant of post-growth (or a variation on post-growth), but other points of view should be acknowledged. Another perspective insists on the compatibility of post-growth and degrowth which nevertheless differ in nature: Parrique (2022) argues that degrowth is the method/means to reach a post-growth economy (conceived as an end/goal).

Considering both ecological and social limits is at the core of the “Doughnut economy” (Raworth, 2012). Building on the concept of “environmental space” (Spangenberg, 2002) and inspired from multiple sources¹, economist Kate Raworth combined studies on social minimum to be achieved with contemporary research on planetary biophysical boundaries not to be trespassed (Rockström et al., 2009). The key insight here is to articulate a socially desirable threshold to a perilous ecological overshoot². In doing so, the Doughnut economy explicitly embraces post-growth, Raworth stressing “the need for a deep renewal of economic theory and policymaking so that the continued widespread political prioritisation of gross domestic product growth is replaced by an economic vision that seeks to transform economies, from local to global, so that they become regenerative and distributive by design” (Raworth, 2017). The relation to sufficiency thinking is even more clear than for degrowth.

More recently, in 2018, the Well-being Economy stream emerged through the creation of the Wellbeing Economy Alliance (WEAll) whose focus is both on root causes of social and ecological unsustainability

¹ For instance the Cocoyoc Declaration (1975) which states: “It has proved impossible to meet the "inner limit" of satisfying fundamental human needs...At the same time...environmental degradation and the rising pressure on resources raise the question whether the "outer limits" of the planet's physical integrity may not be at risk”

² In her original vision, Raworth intended to add a “social foundation” (made up of 11 societal variables such as food security, water and sanitation or health care) to the “environmental ceiling” (made up of 9 planetary boundaries, including biodiversity and climate change) to design a “safe and just space for humanity – shaped like a doughnut” ...“where both human well-being and planetary well-being are assured, and their interdependence is respected” (Raworth, 2012).

and policy change. The Well-being economy aims at fostering built-in measures that promote well-being rather than targeting “downstream” symptoms” (Janoo, 2021). It is also concerned with feasible and actionable policy change “The Wellbeing Economy is about actively co-creating, through participatory processes, the better world we envision” (Janoo, 2021). Working directly with governments and localities to build well-being policies, the Well-being economy has engaged several countries (currently Scotland, New Zealand, Iceland, Wales, Finland, and Canada) in its Wellbeing Economy Governments (WEGos) initiative (Abrar, 2021).

While some wellbeing economy scholars have expressed skepticism at the global persuasion power of degrowth studies (Fioramonti et al., 2022), they fundamentally share the same post-growth positioning and agree on the need to invent new visions articulating social and ecological systems working on two key nodes, inequality, and health (Laurent, 2021). Laurent et al. (2022) have developed in this respect a “co-beneficial” approach in which ecosystems and social systems are treated as “interdependent and mutually reinforcing”, with social and ecological systems inextricably linked by nexuses (“just transition” and “full health”) within a “social-ecological feedback loop” (Laurent, 2023).

From this brief review of post-growth streams’ key insights, it appears clearly that they converge in many respects, so much so that one might not feel the need to distinguish them. The post-growth convergence is both conceptual and empirical: while degrowth scholars demand that a transformation must be such to guarantee essential human needs, doughnut economy and wellbeing economy scholars have worked to better characterize these needs and the practical policies that could satisfy them. The post-growth convergence is also personal: prominent post-growth scholars have contributed to several streams of literature, and they are in regular interaction through various networks and research projects. Post-growth streams are fundamentally complementary: together, they have managed to advance on theoretical, empirical, and institutional fronts in the last five years where they have co-existed (Laurent, 2023). The remainder of this report is devoted to exploring further post-growth convergence using a very old idea that enjoys a current revival: sufficiency.

5. Sufficiency as confluence: analysis and policies

A brief retrospective: the three ages of sufficiency

Aristotle, arguably the Western founding thinker of economic discipline together with Xenophon, inaugurated the *first age of sufficiency*. He first made a clear distinction between economics (the goal of economic activity) and chrematistics (the means of acquiring resources to achieve economic goals) and, further, between good and bad chrematistics from an ethical perspective. Good chrematistics, Aristotle argues, is subordinated to economics and thus limited to acquiring resources necessary for the household to “live well” (in line with the contemporary Delphic maxim “nothing in excess” inscribed on the Temple of Apollo). The bad chrematistics on the other end, that Aristotle labels “unnatural”, escapes the law of need and morphs into a perilous appetite for unlimited resources, including monetary operations such as credit and interest (Laurent, 2022). But Aristotle also introduced the concept of “*médiété*” as a middle ground between contrary moral excesses (courage being defined as a middle ground between temerity and cowardice)¹. Aristotle thus not only embed economic activity in sufficiency reasoning but also argues for the need of sufficiency attitudes in human behaviors.

Echoing and prolonging Aristotle in his Letter to Menoeceus, Epicurus (2024) classifies human desires in three categories: “Natural and necessary desires” (for the well-being of the body: protecting the body against bad weather by means of fire, clothing and shelter; for happiness; for life itself: “vital needs”: hunger, thirst, rest): those are essential human needs according to Epicurus. Then come “natural and unnecessary desires” such as sexual desire and aesthetic desires; and finally, “vain/empty desires”: those who go beyond the limit inherent to nature such as the thirst for possession, power and honors. “He who has a clear and certain understanding of these things” writes Epicurus, “will direct every preference and aversion toward securing health of body and tranquility of mind, seeing that this is the sum and end of a happy life.”

The second age of sufficiency focused not on personal restraint but on collective moderation. In the early 2000s, the French NGO négaWatt (Association négaWatt, 2018) introduced this concept of sufficiency-moderation to distinguish it from the logic of energy efficiency. While energy efficiency aims at reducing the quantity of energy (and/or carbon) per unit of production, energy sufficiency (“*sobriété*” in French) aims at lowering the volume of energy consumed therefore guaranteeing that moderation policies actually translate into energy savings by avoiding a “rebound effect” (or Jevons paradox) in consumption.

¹ Morel, 2020.

This contrast between sufficiency and efficiency in energy policy goes back to the emergence of the notion of optimality in neo-classical economics (at the end of the 19th century): efficiency/optimization is a relative concept which supposes that energy use is being monitored and evaluated according to an external finality, i.e. economic efficiency. Sufficiency on the contrary is an absolute notion, where volumes and not values take center stage in the monitoring and evaluation of energy use (hence the notion of “self-sufficiency” which denotes the absence of external dependence).

négaWatt’s scholars and activists insisted on the plurality of sufficiency policies:

- **Structural sufficiency**, which consists in reorganizing activities and space in such a way as to favor energy-efficient uses (for instance by reducing the distance between workplaces, businesses and homes);
- **Dimensional sufficiency**, which aims at downscaling the size of our equipment as much as possible (for instance by reducing the size and weight of motor vehicles in urban areas often transporting a single person);
- **Use sufficiency**, which tends to moderate the use of energy equipment (by turning off advertising screens in subway stations or limiting speed on highways or repairing rather than replacing digital equipment);
- **Collaborative sufficiency**, which translates into consumption sharing (carpooling, sharing of certain domestic equipment).

Using these policies as leverages, négaWatt has for last twenty years designed energy roadmaps for France and recently European regions (CLEVER, 2023) where sufficiency, as distinguished from and combined with efficiency, is key to reduce energy demand (and that of other resources)¹.

The recently released installments of the Sixth Assessment Report (AR6) by the Intergovernmental Panel on Climate Change (IPCC) contain the first international definition of sufficiency, marking the *third age of the notion*. The short text, which first appeared in Chapter 9 and then Summary for Policymakers (SPM) of Working Group III Report (IPCC, 2022), found its way to the SPM of the Synthesis Report (SYR) published in March 2023 (IPCC, 2023) thanks to lead author Yamina Saheb and defines sufficiency as: “a set of policy measures and daily practices that avoid the demand for energy, materials, land, water, and other natural resources while providing well-being for all within planetary boundaries” (page 31, footnote 52). The report also provided a more precise formulation on the concept in chapter 9 (Buildings), where it is stated:

¹ Based on energy sufficiency, energy efficiency, and renewable sources energy transition scenarios can reach 100% renewables by 2050.

Sufficiency addresses the issue of a fair consumption of space and resources...The remaining carbon budget, and its normative target for distributional equity, is the upper limit of sufficiency, while requirements for a decent living standard define the minimum level of sufficiency...Decent living standards are a set of essential material preconditions for human wellbeing which includes shelter, nutrition, basic amenities, health care, transportation, information, education, and public space.

This definition echoes a growing array of studies that have emphasized in recent years the potential of emissions reduction of so-called “demand-side” policies (Creutzig, Niamir, Bai et al. 2022). Hence defined, sufficiency policies appear of critical importance in mitigating climate but also biodiversity and ecosystems crises (IPCC, 2023)¹.

This very useful definition of sufficiency can be refined: on the one hand, it mixes sufficiency as a state (positive or normative) and sufficiency policies as means of achieving it; on the other, it seems to cast sufficiency policies as demand policies only (as opposed to supply). It is thus useful to specify that, on the one hand, sufficiency as a state positively designates a situation or space² in which limited resources are used to satisfy reasoned needs which can result in a state defined normatively as a universal decent living standard compatible with planetary boundaries. On the other end, sufficiency policies can be defined as measures aimed at ensuring this compatibility (possibly through the use of consumption and production “corridors”)³.

The key aspect of sufficiency in this third age is the combination of sustainability and justice: there is a level of human well-being compatible with the Biosphere’s viability, but it entails that some have too little while others have too much. With this refined definition in mind, we now examine how post-growth streams converge toward this confluence.

Post-growth streams and sufficiency confluence

The notion of sufficiency as the emphasis on downscaling economic metabolism in a socially just way has been at the core of the new generation of degrowth studies since the “great recession”. The Living Well Within Limits (LiLi)⁴ project led by Julia Steinberger at Leeds University has for instance both focused on universal living standards compatible with the Biosphere given actual biophysical

¹ The potential of demand-side mitigation options by 2050 ranges from 29% of reduction in emissions for industry up to 67% for land transport and 73% for electricity.

² Gough (2023) defines sufficiency as “the space above the floor of necessity but below the ceiling of excess”.

³ See respectively Di Giulio and Fuchs, 2014 and Bärnthaler and Gough, 2023.

⁴ <https://lili.leeds.ac.uk/>

requirements of human well-being and the related necessary curb on excessive/luxurious modes of consumption. Sufficiency is as well implicit in recent definitions of degrowth as “a democratically planned downscaling of production and consumption to lighten ecological footprints while reducing inequality and improving wellbeing around the world” (Parrique, 2022). Such is also the focus of recent empirical approaches like “the Degrowth Doughnut” that aim at combining environmental and social policies while considering the urgency of a global metabolic shift away from the growth paradigm (Domazet, Fischer and Köves, 2023)¹. Degrowth is also related to sufficiency via lesser-known intellectual traditions such as the Eastern and Central European one, for instance self-management in 1970s socialist Yugoslavia and subsequent experiments on social and ecological planning (Domazet and Ančić, 2019).

The Doughnut design allowing for “the safe and just space for humanity” has been explicitly built as a common ground between social insufficiency and ecological excess with contemporary reinterpretations stressing the centrality of sufficiency in this design. Such is the case of the Mases research project (Mainstreaming Social-Ecological Sufficiency) led by Leuphana Universität Lüneburg which revolves around “social-ecological sufficiency” defined as “socially satisfactory standard of living within ecologically sustainable natural resource usage”. Interestingly, the project aims at exploring the “desirability” of sufficiency (the “consensual based assessments of socially sufficient levels of household consumption, including deliberative approaches”) as well as the feasibility of sufficiency (or “ecologically permissible” average household consumption budgets).

Finally, the well-being economy provides a substantial (i.e. specific) rather than formal (i.e. generic) definition of sufficiency by putting health at the center of the post-growth approach (Laurent et al. 2022). While health is obviously at the heart of essential human needs (Doyal and Gough, 1991), well-being economy narratives see health as one of several dimensions of wellbeing (Mason and Büchs, 2023). But health is growingly being prioritized within the well-being economy as evidenced by the recent “Well-being economy initiative” of the World Health Organization (2023)², the “Health in the Well-Being Economy” Regional Forum (held in Copenhagen on 1–2 March 2023) and the first “Well-being Economy Forum” (held in Reykjavik on June 14-15, 2023). As argued in a recent Eurohealth policy brief (Stegeman et al. 2023): “People’s health, wellbeing and levels of health inequalities in societies are determined by a wide range of factors, that are beyond the scope of health care systems. The economy itself is a critical determinant of health that affects other key determinants, like good quality environments, adequate income, housing, a sense of safety, security and belonging, purpose and participation”. Sufficiency is indeed linked to prevention healthcare: current healthcare systems are

¹ Domazet, Fischer and Köves (2023) Doughnuts for Strategies: A tool for an emerging sustainable welfare paradigm, *European Journal of Social Security*.

² The WHO European Well-being Economy Initiative is led by the WHO European Office for Investment for Health and Development of the WHO Regional Office for Europe, based in Venice, Italy.

too oriented towards the treatment of pathologies and the avoidance of mortality by therapy and insufficiently towards the prevention of the burden of morbidity.

Overall, health appears as a relevant substitute to economic growth because of its holistic and bounded nature (Laurent, 2023a). The notion of “full health” aims at updating the 1946 WHO definition of health (“a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”) by stressing the issue of social justice (inequalities and health democracy), the role of social relations via their impact on happiness and life expectancy and the challenge of ecological health (by taking into account the One health/Planetary health approaches). Full health, depending on social links and natural bonds is thus defined as “a continuous state of well-being: physical and psychological, individual and social, human and ecological” (Laurent, 2023).

A brief word is needed here on two other literature strands that relate to the post-growth agenda but stand at its periphery: green growth and a-growth. A recent paper comparing green growth, a-growth and degrowth positions characterized green growth advocates as believing “it is possible to reconcile economic growth with absolute decoupling; they claim that economic growth is necessary to achieve it – primarily because economic growth generates more efficient technologies” (Lehmann et al. 2022). In other words, the focus of green growth, as exemplified in the European Green Deal, is efficiency rather than sufficiency, especially material efficiency (Laurent, 2020). As for a-growth, defined as “being agnostic and indifferent about GDP growth” (Van den Bergh, 2016), it is focused on the respective political potential of degrowth and a-growth rather than conceptual nuances.

Institutional confluence: sufficiency policies

On top of these analytical connections, post-growth streams also converge toward the need for sufficiency policies able to give life to their visions. Two aspects of these policies can be usefully differentiated: policy methods and institutional designs.

Policy methods: insights from SISU and CLEVER

The recent research projects SISU and CLEVER contain key insights on how cooperation and trust can become leverages for sufficiency policies which actually enjoy a wide popular support (Lage et al. 2023). As part of Finland’s Strategic Research Council six-year Just Transition program (2023-2029), SISU¹ aims at designing feasible solutions towards a “healthy, green and fair Finland”, building on the work of the

¹ <https://sisu-stn.fi/>

Finnish Climate Change Panel¹ and Finnish Expert Panel for Sustainable Development². The key innovation of SISU is the attempt to identify factors that maintain citizens' trust in societal institutions during the green transition by organizing “future heritage workshops” where future-conscious sufficiency solutions are co-created by a plurality of societal stakeholders engaged in refining moderation solutions. Trust (both interpersonal and institutional) and participatory deliberation are in this perspective central in the elaboration of sufficiency policies.

Cooperation was also a defining feature of the CLEVER³ project and scenario, covering 30 countries and based on the négaWatt approach combining sufficiency, efficiency and renewables. Using an original definition of sufficiency policy⁴, it put forward both social justice goals and collaboration methods. Social justice is factored in through “corridors of convergence” towards convergent level of services (cross-sectoral sufficiency) while the collaborative vision allow for “corridors of consumption” (between different levels of energy services in the different case studies toward a common goal within agreed boundaries)⁵. The project resulted in building “a consistent European vision, integrating exchanges and energy flows between countries, the sharing of effort with due consideration of national limitations and remaining potentials, and the convergence of policy strategies.”

Institutional designs: Universal basic services and the sufficiency state

In a key paper, Büchs (2021) combines rather than opposes Universal Basic Income (UBI) and Universal Basic Services (UBS) in order to design policies aiming at combining social needs and environmental limits. While UBI focuses on consumption and UBS on production/provision, articulating the two allows to “identify basic needs, organise the collective provision of goods or services required to satisfy these needs, and provide people with free access to these goods and services” as part of a sustainable welfare strategy. UBI and UBS should thus be seen as complements rather than substitutes, because like climate mitigation and adaptation policies, the “design of one would influence the design of the other” (this being true both in terms of provisioning needs but also social acceptability).

¹ See Sufficiency Policy Report 2020 https://www.ilmastopaneeli.fi/wp-content/uploads/2020/09/Sufficiency-in-climate-policy_2020-09-25.pdf

² See Policy Brief for Transformative Change 2022 <https://www.kestavyyspaneeli.fi/wp-content/uploads/sites/41/2022/06/A-Positive-Future-for-Finland.pdf>

³ Climate neutrality, Energy security and Sustainability: A pathway to bridge the gap through Sufficiency, Efficiency and Renewables, Final Report, June 2023.

⁴ “Redesigning collective and individual infrastructures and practices to minimise demand (energy, materials, land, water and other natural resources) while delivering human well-being for all within planetary boundaries” (Clever, 2023).

⁵ See chapter 2 of Clever (2023).

The sustainable welfare agenda finally bring us to an overarching sufficiency institution: the “sufficiency state” and its functions. Welfare states vary in terms of goals, governance, and financing but, as a branch of public finance, they all share three core functions: allocation, redistribution and stabilization (Musgrave 1959). For each of these key functions, Laurent and Hirvilammi (2022) compare the logic of the welfare state and the logic of the sufficiency state¹.

Through the *allocation* function, sufficiency states seek to correct market misallocation of resources by, first, promoting public social consumption and, second, by managing and preventing the public costs associated with environmental problems. It promotes public consumption that is more eco-efficient than private consumption (Gough, 2017). Sufficiency policies include public investments in decent housing, fossil-free transportation, food security, and renewable energy based on the understanding that the preventive and compensatory services ought not to be paid for by individuals in a situation where the harm is collective.

The *distribution* function of welfare states consists in correcting social inequalities and aiming for decent living standards while the sufficiency state aims at correcting inequality and ensuring decent living standards within planetary boundaries to all individuals. In current welfare states, it is assumed that economic growth will ensure higher tax revenues. This argument becomes problematic when, like it is the case today, economic growth leads to higher social risks and impacts through the degradation of the Biosphere, itself leading to declining economic growth, increased spending and diminished public revenues. By a recent account (Rising, 2023), in 2022, climate change has led to a global GDP loss of 6.3%. In that year, the IMF estimates global growth at 3,5%², meaning that the global economy is in negative growth or ecological recession territory. Rather than relying on improbable ever increasing public revenues, the sufficiency state aims at social savings, starting with healthcare spending related to environmental degradations and crisis (climate shocks, air and water pollution, etc.). It also requires progressive social-ecological taxes and regulations of luxuries to finance necessities (Laurent, 2023).

Stabilization has been one of the most important original functions of welfare states. However, the growth dependent welfare states are contributing the current ecological crises deteriorating the stability of societies. Sufficiency state, in contrast, seeks to prevent external natural shocks and therefore protect human well-being in the long run. By encouraging households and the public sector to avoid unnecessary consumption and energy use, the regulatory sufficiency policies can contribute to stabilizing the ecosystem changes to prevent the most catastrophic consequences.

¹ In this article, we discuss the concept in relation to welfare states but in principle, the idea is relevant also to developing countries, where economic growth is needed to a sufficient level only and where states can also follow the precautionary and preventive measures instead of thinking that economic growth will fix both social and environmental problems.

² Source: IMF https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD

6. Summary and avenues for future research and policies

This report has attempted to show that the three main contemporary post-growth streams converge towards sufficiency, an ancient notion which enjoys current momentum, that can materialize in the form of sufficiency policies.

The need for convergence among post-growth streams might be questioned. While it has been argued that the heterogeneity of post-growth approaches is a weakness given the unified nature of growth-focused approaches (Van den Bergh, 2022), this plurality appears rather as a strength given the complementarity of the approaches highlighted here. But these visions should be grounded in existing concepts so as to be easily appropriated by citizens and must be embedded in institutions and policies so as to be readily appropriated by policymakers. This is why convergence toward sufficiency and sufficiency policies is useful.

Sufficiency has been and is already very much part of the daily life of many people around the world and quickly becoming a policy tool both in terms of mitigation and adaptation. In a country like France, which is both biophysically temperate and affluent in many ways, sufficiency policies have been applied in recent years to soil, water and energy out of necessity. But they did in a conceptual vacuum and without a proper public debate. Next steps in post-growth convergence should entail developing co-constructed sufficiency indicators and sufficiency policies.

Annex 1. Visualizing Sufficiency: the social equator

In this final part, this report attempts to sum up its insights into a visual design. Its purpose is to try to represent what existing post-growth designs, such as the Doughnut, do not allow to see and do not fully capture. It is also to convey the sense of convergence between post-growth streams, mixing their key insights toward sufficiency and sufficiency policies.

As defined in this report, sufficiency relies on three conditions:

- The existence of a sufficient level of human well-being compatible with the Biosphere’s viability; this means that the planet should be part of the design;
- This sufficient level of human well-being is one that is not excessive nor insufficient (the state of sufficiency possibly taking the form of a space or “sufficiency corridor”); this means that excess and insufficiency should be part of the design;
- Sufficiency policies allow to move into the sufficiency space/corridor and to stay there.

In geography, the terrestrial equator is an imaginary line drawn around our planet, halfway to the poles, marking the separation between the northern hemisphere and the southern hemisphere with a latitude of 0°. The “social equator” (Figure 1) is also an imaginary line representing the level of human well-being compatible with the viability of the Biosphere, bringing down excessive modes of consumption and production and lifting up insufficient well-being conditions globally¹.

On the right end side of the figure, the state of sufficiency (the social equator), the sufficiency corridor and its boundaries are represented. Those boundaries correspond to the “safe and just Earth system boundaries” recently highlighted in the planetary boundaries literature (Rockström, Gupta, Qin et al., 2023)². On the left end side of the figure, excessive and insufficient well-being conditions are ordered according to the global distribution of income and wealth (Chancel et al. 2022).

¹ “The distance to the equator” is a metric commonly used in inequality economics literature to account for development inequality, see Theil and Fink, 1983.

² When assessing where humans stand with respect to planetary boundaries regarding climate, the biosphere, fresh water, nutrients and air pollution at global and subglobal scales, the authors use not just “safe” quantitative thresholds for maintaining Earth system resilience but also three justice criteria (Interspecies justice, Intergenerational justice and Intragenerational justice). As a result, some boundaries become more stringent: for climate, while the “safe” limit stands close to 1,5°C, the safe and just limit is set at 1°C, a threshold that human societies have already exceeded.

At the center of the figure, sufficiency policies allow to reach the sufficiency corridor (for instance via social-ecological taxation and transfer, Laurent 2023) but also to stay within its limits (focusing on the interlinkages between cooperation, health and justice, see the “social-ecological feedback loop” presented in Laurent, 2023).

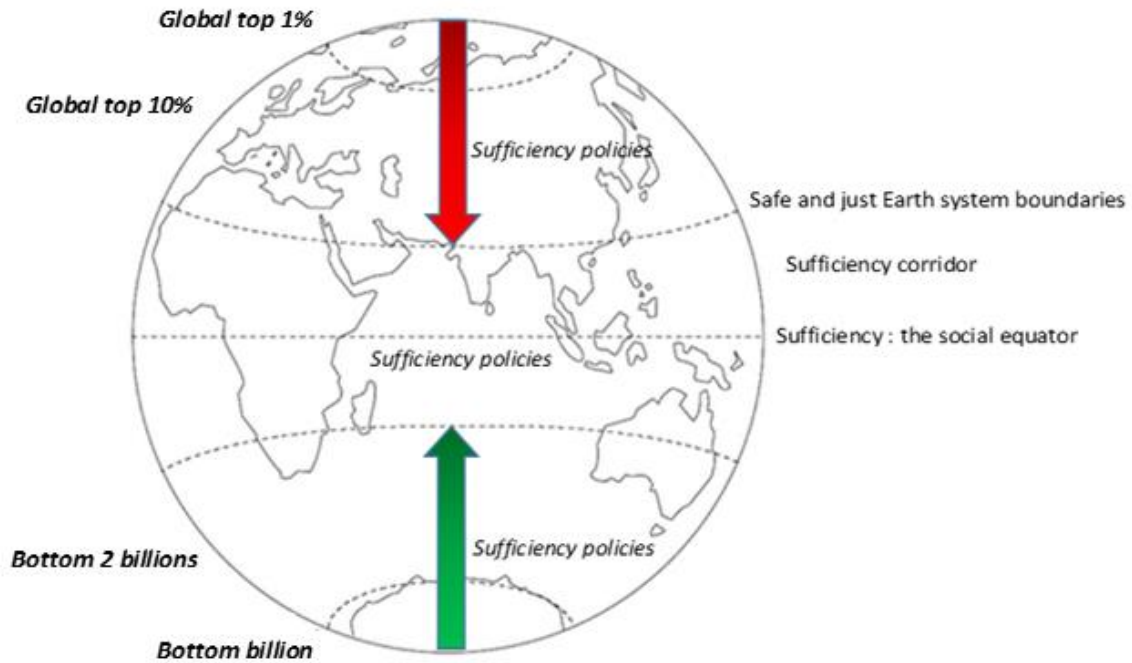


Figure 1. The social equator. Source: own elaboration.

Note: The climate crisis provides tentative empirical estimates of this visualization. Ending extreme poverty (of some 700 million people) has a negligible impact on global emissions (Wollburg, Hallegatte, & Mahler, 2023) while emissions from the top 1% and top 10% are considerable (representing respectively 17% and 48% of total emissions, see Chancel, 2022). In a country like France, the bottom 50% of the population is already at the level of emissions compatible with the Paris Treaty goals (Chancel, 2022), in other words close to the safe and just earth system boundary regarding climate.

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