

Sufficiency solutions for a resilient, green, and just Finland (SISU)

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1. Summary

This project investigates and implements the untapped potential of sufficiency solutions. The aim is to ensure that the sustainability transition and core promises of the welfare state can be realized even in current conditions, where economic growth is scarce or non-existent. During the project:

1. An ecological macroeconomic model for Finland will be created, and the application possibilities of the model will be developed in collaboration with stakeholders.
2. Research will be conducted on which current and new forms of vulnerability are highlighted in the sustainability transition relying on sufficiency solutions, and which change factors limit vulnerable individuals' experience of their own agency.
3. Factors that sustain citizens' trust in societal institutions during the sustainability transition will be identified.
4. Heritage Futures Workshop activities will be established for use by museums and educational institutions so that they can strengthen their role in a fair sustainability transition and the adoption of transformative skills.

A central promise of the welfare state is to care for those in vulnerable positions within society, and ensuring their opportunities for a good life is of utmost importance during societal change. Another key factor defining successful societal change is citizens' trust in societal institutions. If trust erodes for any reason, it becomes difficult to manage societal change in an orderly manner. These justice-related factors are of particular focus in this research project.

2. The Societal Challenge

In the future, prospects for economic growth may be somewhat limited. However, most ideas and proposals for a better future still rely heavily on economic growth. This setting poses a remarkable risk. Current forms of economic and human activity not only generate progress but also mounting challenges. Therefore, it is reasonable to seek alternatives for the future of Finnish society.

To avoid exceeding the planet's unyielding limits, efficiency must be improved across all sectors of society. However, current knowledge suggests that improving efficiency alone is not enough.

It is also essential to move away from overconsumption, as so-called green growth, i.e., decoupling economic growth from the increase in natural resource use, has proven challenging.

The SISU project focuses on the "untapped potential of sufficiency solutions" (IPCC, 2022), aiming to shift from a consumption-centered social policy towards more direct actions aimed at improving well-being. The project's goal is to identify viable and widely acceptable solutions so that the sustainability transition and the core promises of the welfare state can be fulfilled even under current conditions, where economic growth is either scarce or non-existent.

Societies can be flexible and resilient, particularly when they learn to thrive without a dependence on economic growth. The next version of the Finnish welfare society will most likely be built on sufficiency. When planetary boundaries are exceeded, sufficiency thinking means that those who can afford it will contribute more. At the same time, the common pool cannot be promised to grow, at least not by the same measures as before.

The Agenda2030 roadmap identifies the challenge for Finnish society as the welfare concept based on continuous consumption growth leads to exceeding the Earth's carrying capacity (Prime Minister's Office, 2022). The idea of sufficiency starts from the premise that it is possible to cultivate other aspects of well-being better, and thus achieve an even higher quality of life. This requires that new methods reach all citizens, and that no one is left behind.

In the pursuit of a good life in recent decades, the emphasis has been on improving living standards. A sufficient standard of living is a necessity, but quality of life involves a more broadly defined sense of well-being, such as life satisfaction, a life perceived as meaningful, the ability to influence living conditions, and recognizing one's personal resources. These intangible aspects are abundant and accessible to everyone. For instance, greater life satisfaction arises from paying more attention to the good things already present in life rather than focusing on what is missing. In a social policy aimed at well-being, it is essential to define which factors are crucial for well-being and which do not contribute to it.

A central promise of the welfare state is caring for those in vulnerable positions within society. In a just sustainability transition, no one is left behind, and the change happens fairly so that everyone can feel they are part of the transition towards a good future. The challenges to realizing the sustainability transition include not only distrustful attitudes, fears and uncertainties, but also people's unequal positions and starting points for enacting change. Another key factor defining the success of the sustainability transition is citizens' trust in societal institutions. In the SISU project, trust-sustaining factors will be identified so that policy actions can actively maintain citizens' trust. If trust erodes for any reason, managing societal change in an orderly manner becomes difficult.

Sustainability defined by sufficiency can both guide the renewal of businesses and the economy, and enhance citizens' experiences of the value of life. SISU encourages the creation of a better future and thinking that extends beyond economic growth and efficiency. Increasingly, the focus is on citizens' experiences of the goodness of life. This can open new

perspectives on the realization of the sustainability transition since people who have adopted a more sustainable lifestyle are more satisfied with their lives than those who, despite available opportunities, do not do so (Salonen & Konkka, 2023).

The SISU project is inspired by questions that remain largely unresolved – often because they aren't even be asked:

- When the direction of the future is defined by sufficiency instead of growth, who gets to determine what are necessary needs and what are extra wants?
- When additional money is no longer the only solution, can public organizations still be stable, human-oriented and flexible?
- When our familiar links to the welfare society change shape, whose trust in institutions is tested, and how can trust be maintained?
- When those already in a vulnerable position suffer the most from changes, how can they still remain involved in creating sustainable societal and economic activity?
- When wellbeing is possible without economic growth, what are the possible shared practices and meanings?

Through participatory methods and collaboration with the private, public, and third sectors, the project will create sustainable partnerships, practices, and concepts that will continue to promote sufficiency solutions even after the project ends. The SISU project has four research objectives. The following section describes the measures to achieve these objectives and outlines the expected results.

OBJECTIVE 1. Create an ecological macroeconomic model for Finland and develop its application possibilities in collaboration with stakeholders

Activities: With the ecological macroeconomic model (FINGREEN) created in the project, sufficiency solutions will be simulated, laying the foundation for their safe implementation in Finnish society. The macroeconomic model helps to understand the dynamics of transition. It is based on the EUROGREEN model developed in the contexts of France and Italy, which will be refined in this project to suit Finnish conditions. In addition to climate emissions, the FINGREEN model will also incorporate an examination of impacts on biodiversity. This allows for the evaluation of the ecological, social, and economic effects of various future pathways.

Results: The FINGREEN model and the scenarios developed from it address the need to diversify the macroeconomic foundations guiding policy. The abundance of socio-ecological indicators helps apply the model to long-term forecasts. Dynamic analysis and the simulation of different trade-offs provide perspectives that can be utilized in policy actions and further research to achieve a just sustainability transition in Finnish society. Including biodiversity indicators in the ecological macroeconomic model adds significant value internationally, as existing models primarily focus on climate change. Incorporating stakeholder perspectives

throughout the entire modeling process makes the structure and scenarios of the model more approachable. The model enables the assessment of the potential of sufficiency solutions and how they can be safely and justly implemented in Finnish society.

OBJECTIVE 2. Investigate which current and new forms of vulnerability are emphasized in the sustainability transition based on sufficiency solutions, and which factors reduce the sense of agency among vulnerable groups

Activities: The SISU project will examine the effects of the green transition on vulnerable groups, particularly focusing on their future orientation and sense of agency. This will be done using registry data, surveys, interviews, and citizen dialogues. The goal is to identify which current and new forms of vulnerability are emphasized in the green transition relying on sufficiency solutions, and which change factors may reduce the experience of agency among vulnerable individuals.

Vulnerable groups include, for example, those living in long-term economic insecurity, people suffering from health issues — especially mental health problems —, those living in remote areas, and individuals with immigrant backgrounds. In addition, the research will pay special attention to groups facing intergenerational disadvantage, and more broadly, to the intergenerational impacts of the sustainability transition, particularly from the perspective of youth. By studying parent-child pairs affected by disadvantage, insights will be gained into how different generations experience the sustainability transition, sufficiency solutions, and their effects on personal agency.

Results: The outcome of this work package will be a deeper understanding of vulnerable groups within the green transition based on sufficiency solutions, as well as solutions at both individual and structural levels for promoting social justice. The results will be disseminated through peer-reviewed scientific articles, policy recommendations, and an edited volume intended for educational institutions, social and healthcare services, civil society organizations, and other relevant stakeholders. An electronic guidebook will also be produced for the dialogue method.

OBJECTIVE 3. Identify factors that sustain citizens' trust in societal institutions during the sustainability transition

Activities: Societal change puts citizens' trust in institutions to the test. At the same time, trust in institutions is a significant resource that helps to strengthen justice amidst transformative developments.

The research will be conducted by examining the levels and underlying factors of trust in institutions across different European countries. The data will consist of international comparative surveys, complemented by country-specific macro-level registry data. The analyses will identify how trust is connected to developments in attitudes toward environmental policy. The role of institutions in the sustainability transition will also be studied by analyzing data from a Delphi survey conducted with experts and decision-makers. This survey, consisting of three rounds and built around future-oriented statements, will provide insights into how trust in institutions can be maintained in various future scenarios depicting different pathways for the sustainability transition. The entire research process will take place in close collaboration with stakeholders.

Results: The main outcome will be the creation of a process for maintaining and increasing trust in Finnish society during the sustainability transition. The outputs will consist of scientific publications and policy recommendations. The results will be discussed at conferences and webinars, promoting dialogue and collaboration between citizens, stakeholders, and decision-makers.

OBJECTIVE 4. Establish Heritage Futures Workshop activities for use by museums and educational institutions so they can strengthen their role in the just sustainability transition and the adoption of transformative skills

Activities: A just sustainability transition involves a worldview shift brought about by citizens' clearer understanding of reality. Aligning the worldview with current realities is crucial for the sustainability transition, as sustainable solutions for the future are partly built on a different knowledge and ethical foundation than today's society. The project will organize a series of Heritage Futures Workshops that utilize methods aimed at fostering cultural change (Siivonen et al., 2022). In these workshops, participants will identify the assumptions, beliefs, attitudes, and values upon which desirable futures can be built. Based on this work, the knowledge, skills and practices needed for the sustainability transition will be outlined. The workshops provide an experimental environment for this exploration, and will also utilize the holistic nature of humanity, for example, through Affect card based exercises (Korjonen-Kuusipuro, 2022).

Results: The Heritage Futures Workshops will help researchers and representatives of various stakeholders participating in the SISU project to understand the sustainability transition as a comprehensive cultural process carried out in a just manner. At the same time, the project's researchers will gain valuable data on stakeholders' beliefs about the future, as the process involves addressing changes in meanings, emotions, and expectations. The workshops will support the project's other research efforts and the transition arena process. Interaction, scientific publications, and policy recommendations will contribute to the just implementation of the sustainability transition in society. A manual for the Heritage Futures Workshop methodology will also be created, which can be utilized in museums and educational institutions both during and after the project.

3. Current State of Research (State of the Art)

International research on sufficiency solutions is rapidly increasing (e.g., Jouzi et al., 2024; Jungell-Michelsson & Heikkurinen, 2022; Sandberg, 2021; Niessen & Bocken, 2021). The approach is mentioned as a tool for building sustainable societies not only in the IPCC (2022) report, but also, for example, in the European Commission's 2023 foresight report (COM/2023/376).

The need for research on macroeconomic models based on sufficiency solutions and their societal applications is evident. Existing macroeconomic models are insufficient to help societies navigate the path toward a sustainable future. Current models largely lack the feedback loops between society, the environment, and the economy, and most do not cover societal and environmental indicators broadly enough, such as planetary boundaries.

SISU seeks to address this identified research gap. When sustainability, well-being and inclusiveness are assessed from the perspective of a new macroeconomic paradigm, it is crucial to identify alternative models that go beyond the limits of traditional equilibrium theory. Worth considering are input-output models that use stock-flow compatible accounting and incorporate feedback loops through system dynamics.

Among the projects initiated in the European Union, the ToBe project focuses on ways to create a sustainable and inclusive economy. The project recently published a report on research around the concept of sufficiency in Europe, in which the SISU project is mentioned as an innovative pioneering initiative. Another example of international research on the same theme is the WISE Horizons project, which explores systemic societal change through the synthesis of new post-growth narratives and policies, while also creating indicators and models to support decision-making. The MAPS project, in turn, aims to investigate the resource requirements for a good life and create post-growth scenarios for use by the IPCC and IPBES with a new integrated model. The REAL project is developing fair North-South convergence scenarios by modeling the achievement of human well-being in different countries within planetary boundaries. The SISU project collaborates closely with the WISE Horizons, ToBe, REAL, MAPS, WISER, and MERGE projects.

The added value of interdisciplinary collaboration comes from the ability to integrate different areas of expertise, enabling comprehensive and innovative research on the sustainability transition from the perspective of still underutilized sufficiency solutions.

4. Multidisciplinary Collaboration

A multidisciplinary research team models the macroeconomic impacts of new solutions, and helps people recognize different future scenarios and the emotions and experiences associated with them. The project combines ecological economics, sustainability science, sociology, critical

social science, futures studies, youth studies, and cultural heritage research to explore sufficiency solutions, address intergenerational vulnerabilities, and promote cultural changes.

Particularly, critical social science, ecological economics, sustainability research, sociology, and futures studies have been actively involved in the research on sustainability transitions. Youth studies provide insights into reducing intergenerational vulnerabilities and increasing trust in institutions. Cultural heritage research helps to understand the cultural change necessary for the successful adoption of sufficiency solutions. In other words, the project creates spaces where people can develop future heritage in terms of sufficiency-based meanings, practices and skills that will leave a more sustainable world for future generations.

The SISU project collaborates on various research and interaction sections with other projects in the Research Council of Finland's Strategic Research Council's (STN) Just Transition program. Together with the RELIEF project, a literature and theory review will be prepared to examine the compatibility and potential conflicts of sufficiency solutions with the core principles of EU legislation. With the REBOUND and ForTran projects, the project will jointly organize Heritage Futures Workshops and develop the methodology for these workshops. Additionally, with the ForTran project, the possibility of testing scenarios from the FINGREEN model related to forest use opportunities and constraints identified by ForTran will be explored. Methodological and implementation collaboration will also be established with the MUST project's transformation arena forums. Furthermore, collaboration with the BIOD program's Biodiful project will support the development of the FINGREEN model's extension related to biodiversity.

In addition to internal collaboration within the Just Transition program, there will also be extensive cooperation with the parallel Just Energy program in the form of a webinar series aimed at researchers from both programs. Research and impact collaboration opportunities have also been identified with the BIOD, Climate, Demography, and Young programs.

The SISU project is supported by a multidisciplinary scientific advisory panel composed of international experts. Their insights and networks enhance the impact of the solutions not only in Finland, but also beyond.

5. Interaction and Promoting Societal Impact

A key element supporting the project's societal interaction is the transition arena process. The transition arena process enhances the ability of different stakeholder groups to adopt and effectively apply sufficiency solutions. The goal is to create a long-lasting working model, possibly extending beyond the lifecycle of the project, that integrates sufficiency perspectives into various parts and functions of Finnish society. In the workshops organized throughout the project, feedback from different stakeholders will be collected on the preliminary research findings, and based on this feedback, action recommendations and experiments in various sectors of society will be refined.

The transition arena process will begin in 2025 and continue as a series of workshops throughout the project's duration. The group of stakeholders invited to participate in the transition arena will expand during the process, gradually involving new sectors and groups of experts. In the early stages of the process, the central focus of the transition arenas will be the testing, development, and application of the FINGREEN macroeconomic model. In later stages, other research themes from the project will be introduced and further developed. The content design of the transition arenas and the engagement of invited stakeholders will be done in collaboration with other projects from the Just Transition program, with the possibility of holding joint workshops with multiple projects.

The development and application of the FINGREEN macroeconomic model will take place in collaboration with the project's stakeholders as part of the transition arena process. Additionally, the team developing the model has expanded during the early phases of the project to include international partners. The team participates in modeling meetings with researchers working in consortia on large EU-funded ecological macroeconomic models. The team also works closely with the BIODIFUL project, funded by the Strategic Research Council (STN), to integrate biodiversity impacts into the model. In 2024, the project will organize a stakeholder workshop to collect early-stage feedback on the biodiversity module. Cooperation will also be explored with other Just Transition projects, particularly the ForTran project.

Collaboration with various civil society organizations will be established to engage vulnerable groups. This collaboration aims to create a new participatory dialogue method with the goal of empowering and strengthening the agency of citizens in vulnerable positions within societal change. The Heritage Futures Workshops will be conducted in collaboration with museums (e.g., Kymenlaakso Regional Museum, Finnish Maritime Museum, Lapland Regional Museum, Turku Museum of History and Future), adult education organizations (e.g., Helsinki Finnish Adult Education Centre, OKKA Foundation), and organizations (the Finnish Local Heritage Federation and its member associations). The organization of the Heritage Futures Workshops and the development of the method will be carried out in collaboration with the ForTran and REBOUND projects from the Just Transition program.

There is growing interest in the sustainability transition in Finnish society. To respond to this interest, collaboration will be carried out with the Ykspilkkuviis media outlet. This partnership will culminate in the "Good Future Morning Coffee" concept, which is an open discussion event for everyone. The first session of the solution-focused Good Future Morning Coffee gathered 350 participants from various sectors of society. The goal is to provide a monthly, low-threshold online interaction forum in the future.

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