



ENLENS: Energy Transition Through the Lens of SDGs

Research Priority Area application

1. Title: Minimal and Maximal Thresholds for a Just Transition

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3. Societal case

One of our central global challenges is to ensure that everyone has access to enough energy and related resources for a decent life, without overshooting planetary boundaries. The SDGs have served as an important foundation for addressing this challenge, combining minimum needs with environmental concerns about sustaining those needs over time. Beyond the SDGs, there is increasing attention to minimum thresholds (e.g., specifying how much energy is “enough” for a decent life) as well as maximum thresholds or limits, both collectively (e.g., planetary boundaries) and individually (e.g., excessive energy use).

However, conceptions about what constitutes “enough” and/or “too much” are not politically neutral and carry significant implications for how we think about justice, resource distribution, and impacts on Earth systems. Moreover, competing approaches to threshold setting may be perceived differently by the public. Understanding such differences is critical for developing policies that are fair and broadly accepted.

This project aims to investigate minimum and maximum thresholds philosophically, assess their impact on resource use and Earth systems through modelling, and study public attitudes about thresholds via surveys. The results will help ensure that the energy transition appropriately balances considerations of justice, knowledge of Earth systems, and political realities. While anchored in addressing SDGs 7 and 13, this work will impact a wide range of SDGs as we understand the requirements of meeting minimum needs universally (e.g., SDGs 1, 2, 3), the increased pressure this can put on Earth systems, including tipping point risks (e.g., SDGs 14, 15), as well as how to organize economies to support rather than undermine the relevant minimal and maximal thresholds (e.g., SDGs 8, 10, 12).

4. Scientific case

This project will help advance the conceptual foundations of the energy transition by improving our understanding of fundamental questions about threshold setting in three main directions.

First, we will conceptually interrogate the wide range of different principles that exist across interdisciplinary literatures for setting minimal and maximal thresholds (e.g., SDGs, doughnut economy[1], decent living standards[2], safe and just Earth system boundaries[3], sufficientarianism[4] and limitarianism[5]), how they might be justified, and what trade-offs different combinations of principles might imply.

Second, building on this conceptual work, the project will then attempt to quantify a select range of different minimal and maximal threshold principles and adapt an existing Earth Commission model[6] to provide a *preliminary* assessment of the comparative impacts of

adopting each principle, thereby clarifying the stakes of policy choices regarding threshold setting (and laying the groundwork for future modelling efforts).

Finally, in order to help link the conceptual and modelling dimensions of the project to the social and political realities for energy transition policymakers, the project will design and conduct a nationally representative survey of the Dutch and US populations to assess public perceptions about threshold setting, with a focus on *judgments of fairness* and *potential policy support*.

5. Contribution to the aims and success indicators of ENLENS

A. How will your project evolve after the proposed research/activity. What is the long-term goal? (ENLENS aims at initialization of new activities that may carry on thereafter (seed-money))

The modelling results will serve as a preliminary demonstration of the relevant relationships between thresholds and impacts that we aim to extend and refine by pursuing future funding for a PhD project. We also envision broadening the survey work to additional European countries, as well as in the Global South where the implications, public discourse, and policy agenda around threshold setting take on a different shape.

B. Why and how does your project contribute to the UvA-community of interdisciplinary research, and ENLENS more specifically?

The project's unique combination of conceptual analysis, modelling, and survey-based methodologies will help unravel the complex and high-stakes considerations at play in the energy transition regarding threshold setting in a way that only deeply interdisciplinary work can produce.

We anticipate three main academic outputs, as contributions to ENLENS from this research: 1) a conceptual paper on minimal and maximal thresholds and their relationship to principles of justice and equity 2) a modelling paper investigating potential impacts of different threshold scenarios, and 3) an empirical paper about the public's perception of minimal and maximal thresholds (including judgments of fairness and potential support of policy measures aligned with different thresholds).¹

C. ENLENS aims at broadening the community beyond the group of project PIs. Describe how your project will contribute to this goal.

Beyond the PIs, the project will both develop and build upon existing networks and collaborations across faculties at UvA (e.g., computational modellers at FNWI and social psychologists at FMG), and to external partnerships (e.g., drawing on Rammelt's work with the Earth Commission and Hickey's network of climate modellers at Princeton).

To ensure that the relevance of the work reaches beyond the academy, the project team will communicate results and facilitate public discourse through public events (e.g., hosted at SPUI25), as well as in popular media venues (e.g., op-eds, blog posts). We will also organize an event at the Institute for Advanced Study (through Dablander and his work with the POLDER initiative) inviting Dutch policymakers working on sustainability to discuss the results and their relevance for policymaking.

6. Budget

¹ The latter two papers may extend beyond the official timeline of the grant before realistically finalized.

Faculty of Science (15,000)	
The Netherlands Survey costs (1000 participants)	€10,000
Project workshop organization – Travel, accommodation, organizational costs	€2,000
Travel and accommodation for international conference attendance	€2,000
Communication and dissemination activities, including project public events	€1,000
Faculty of Social and Behavioural Sciences (15,000)	
Research assistant to run model (4 months, 0.5 FTE)	€15,000
Additional Data Acquisition (5,000)	
United States Survey costs (1000 participants)	€5,000
Total budget:	€35,000

7. References

- [1] Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Random House
- [2] Rao, N.D. & Min, J. (2017). Decent living standards: material prerequisites for basic human wellbeing. *Social Indicators Research*, 1-20.
- [3] Rockström, J., Gupta, J., Qin, D. *et al.* (2023) Safe and just Earth system boundaries. *Nature* 619, 102–111.
- [4] Shields, L. (2016). *Just Enough: Sufficiency as a Demand of Justice*. Edinburgh University Press.
- [5] Robeyns, I. (2025). *Limitarianism: The Case Against Extreme Wealth*. Penguin.
- [6] Rammelt, C. F., Gupta, J., Liverman, D., Scholtens, J., Ciobanu, D., Abrams, J. F., ... & Zimm, C. (2023). Impacts of meeting minimum access on critical earth systems amidst the Great Inequality. *Nature Sustainability*, 6(2), 212-221.