

Fair Transformations to a Fossil Free Future

PROGRESS REPORT 2024

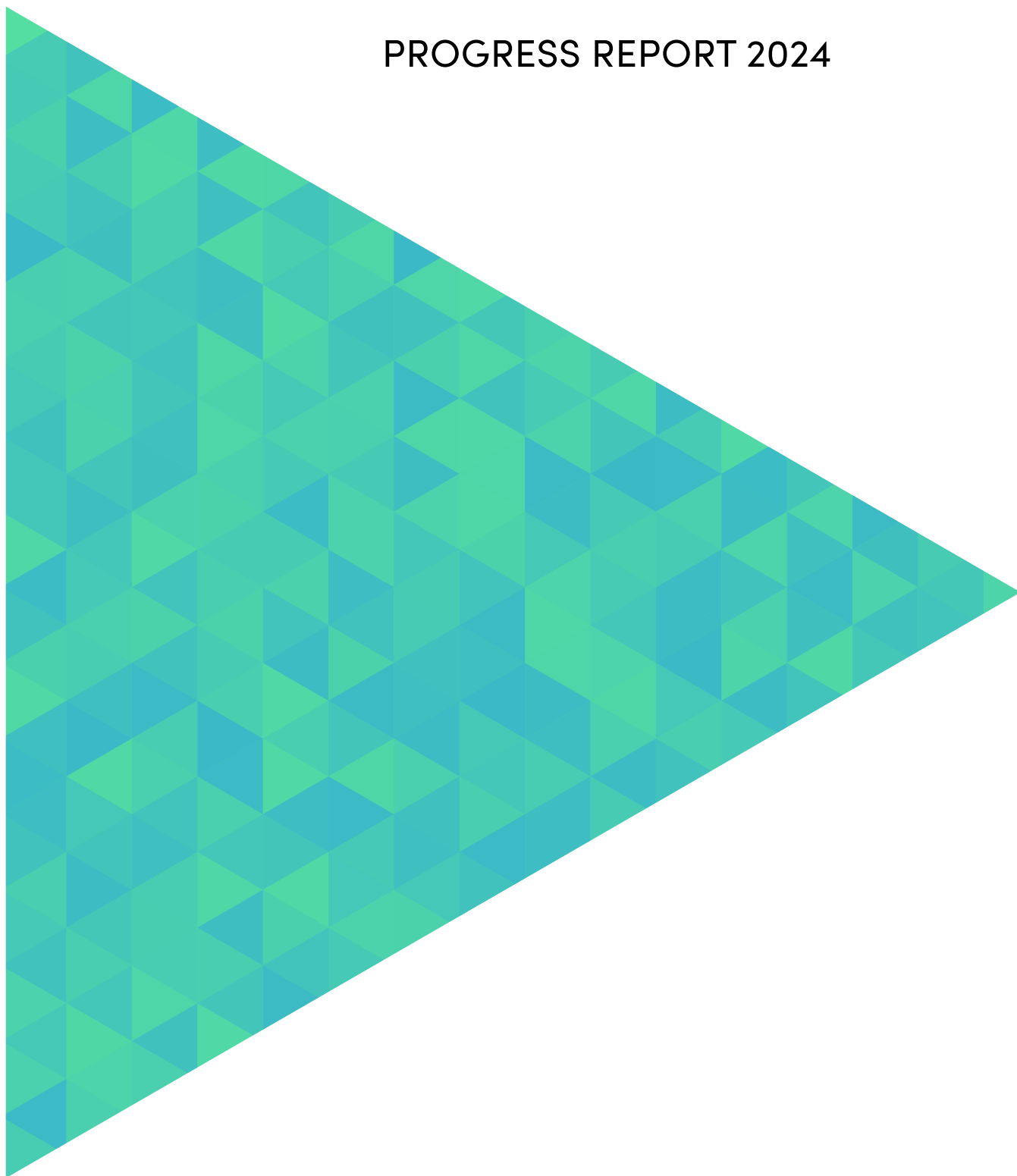


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Foreword



Such a treat it is to be part of Fairtrans, a programme that stands at the forefront of advancing knowledge and action for a fair societal climate transformation. Over the course of the programme so far, we

have seen new knowledge take shape through innovative and inclusive methods, co-created with a wide range of stakeholders. One significant milestone was the first-ever Swedish national climate assembly – a remarkable learning process that gained widespread media attention. This pioneering effort provided meaningful recommendations to decision-makers in the national parliament.



None of this would have been possible without the dedication and expertise of the people involved at every level of Fairtrans. With a strong focus on core research questions, the programme has continuously evaluated and seized emerging opportunities. This proactive approach is a solid foundation for building an even more impactful second phase.

Fairtrans exemplifies the power of collaboration, bringing together diverse skills and perspectives from researchers, civil society organisations, and other key partners. By integrating these contributions, the programme has achieved outcomes greater than the sum of its parts. This synergy has enabled the development of new research infrastructure, publications, and actionable knowledge that advances the understanding of a just transition. Notably, the programme's transdisciplinary approach has filled critical gaps in our knowledge, particularly on the role of perceived fairness in fostering public support and acceptance for climate initiatives.

At the heart of Fairtrans is its science-based co-creation model, which has brought together a unique coalition of Swedish civil society organisations. These organisations, often working independently, now share a forum for dialogue and collaboration on fair climate transformation. Through science-informed deliberations, capacity building, knowledge sharing, and joint leverage opportunities, Fairtrans has created a robust platform for transformation grounded in scientific rigour. The testimonials from leaders of some of our keystone partners (see *Impact Stories*, page 28) underscore the value of this approach. Strengthening and expanding this arena to the European level will be a key focus in the programme's second phase.

The achievements of Fairtrans are evident in many ways: a growing body of scientific publications, successful multidisciplinary collaboration, and increasing international recognition. These accomplishments position us well for the next phase of the programme, where we will continue to generate the knowledge and tools needed for a fair and just climate transformation.

Congratulations and heartfelt thanks to everyone who has contributed to the success of Fairtrans so far. Your dedication and efforts are making a tangible difference.

Ethel Forsberg, Chair of the Board



Photos: Minda Holm (Stockholm Resilience Centre), Daniel Josefson (KIT), Jonas Mellqvist (TCO), Anders G Warne (Fossilfritt Sverige), Sonia Goicoechea (European Environmental Bureau)

1. Introduction

The Fairtrans approach

The Fairtrans approach to science and co-creation centres on fostering collaboration between researchers and civil society organisations (CSOs), by co-creating knowledge and policies where both researchers and civil society actors learn from each other's knowledge, experiences and insights. This follows best international practice by being context-based, pluralistic, goal oriented and interactive (Norström et al. 2020) and ensures that a diversity of knowledge informs the scientific process. In practice, this is achieved by dialogues in workshop series with large CSOs representing some five million members in Sweden; together we aim to achieve a fair and fossil-free future.

The Fairtrans approach has succeeded in reaching above the targets set up during the start of the programme. Our results are published in international journals that the Norwegian list deems to hold high or standard scientific quality. Examples include Nature Climate Change, Nature Communications, Sustainable Development, Climate Policy, and Environmental Research Letters.

Large number of scientific articles published and submitted

Phase 1 has examined various aspects of the requirements, challenges and opportunities for Sweden to fulfil its commitment to the Paris Agreement. From a list of 34 scientific publications and 18 articles in review, Fairtrans research has explored this by quantifying fair carbon budgets for Sweden and other countries and the effects of different mitigations paths on land-use and greenhouse gas (GHG) emissions, by exploring the role of spatial planning of nature-based solutions to reduce urban-related emissions, and by studying the possibility of new management practices to increase carbon sinks and climate benefits. Research has also targeted the emissions-reduction potential of digital teleworking and co-working, the importance of an inclusive approach to digitalisation and what role community climate commons play for social sustainability and collective climate action. Further, the programme has explored public acceptability of climate mitigation policy, and analysed the influence of fairness, social values and habits on attitudes to various climate and energy policies with a large-scale population-representative Swedish sample.

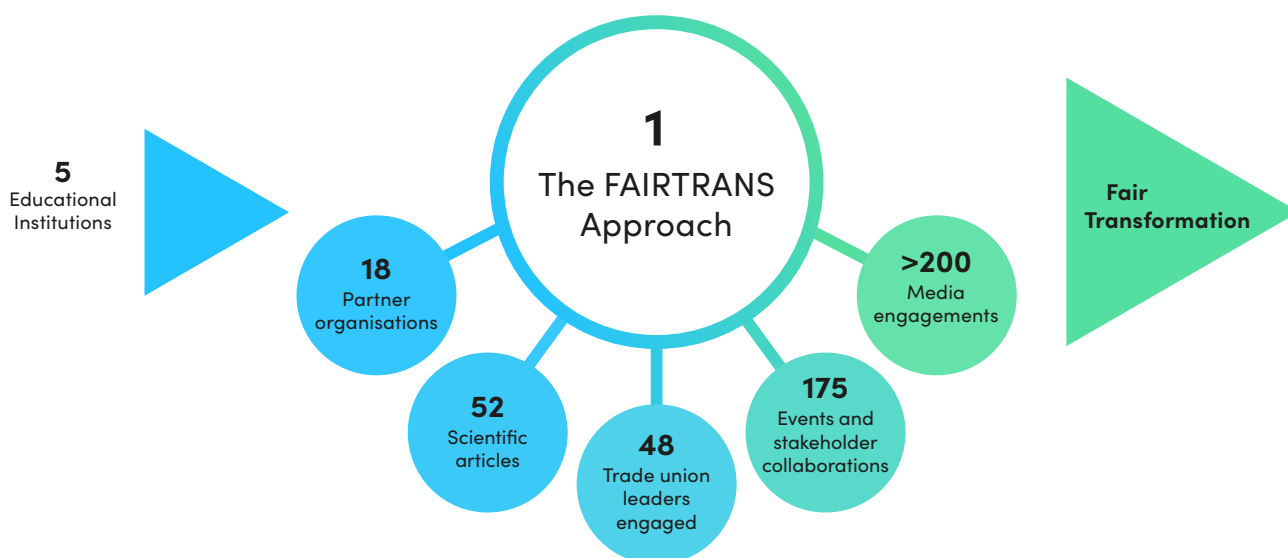


Figure 1. Fairtrans in numbers

The acceptability of more stringent behaviour-regulating climate policies and the importance of addressing habits in sustainability science has been investigated. Finally, studies have analysed strategies to counteract climate denial and the importance of democracy to climate policy ambition. A general takeaway from this research is that a fair and evidence-based approach to science and policymaking is key to support a transformation towards a fossil-free future while strengthening its legitimacy in society.

Engagement with partners in civil society

Since its launch in 2021, Fairtrans has not only gained valuable insights from scientific studies,

but also held major workshops with our partners and launched initiatives in civil society with far reaching media coverage. These include Sweden's first national Climate Assembly and an educational programme for union leaders – Transformative Leadership for a Just Climate Transition – delivered three times due to high demand. Researchers of Fairtrans have been visible on TV and radio, in international and national newspapers, and on social media. We have engaged in the UNFCCC Conference of the Parties (COP26, COP28 and COP29), Landsbygdsriksdagen (Rural Parliament), the Almedalen Week, the annual conference of Fossil Free Sweden and several scientific and other conferences.



The first-ever citizens' assembly on climate in Sweden on a national level.
Photo: Daniel Josefson, KIT.

Programme partners

Universities and research institutions

Stockholm University
Gävle University
Uppsala University
Lund University
IVL Swedish Environmental Research Institute

Civil Society Organisations

Cykelfrämjandet
Ecoforestry Foundation
Hyresgästföreningen
The Swedish Trade Union Confederation
(Landsorganisationen, LO)
Ledarna
Swedish Society for Nature Conservation, SSNC
(Naturskyddsföreningen)
Rural Sweden (Riksorganisationen Hela Sverige
Ska Leva)
Solidar

Svensk Kolinlagring
The Swedish Confederation of Professional
Associations (Svenska Akademikers
Centralorganisation, Saco)
Swedish Consumers' Association (Sveriges
Konsumenter)
Swedish Investors for Sustainable Development,
SISD
The Remote Lab
The Swedish Confederation of Professional
Employees (Tjänstemännens Centralorganisation,
TCO)
We Don't Have Time

Authorities and government bodies

Fossil Free Sweden (Fossilfritt Sverige)
The Swedish Environmental Protection Agency
(Naturvårdsverket)
The Sami Parliament (Sametinget)



Stockholms
universitet



Naturskyddsföreningen



solidar



Svensk
Kolinlagring



2. Vision and mission

The vision of Fairtrans, Phase 1, is to contribute nationally and internationally to a fair societal transformation that helps to realise the Paris Agreement, based on scientific knowledge and respect for planetary boundaries and social goals.

The mission of Fairtrans, Phase 1, is to develop science-based and fair roadmaps for rapid decarbonisation, consistent with the Swedish carbon budget, through collaboration with key actors from civil society.

2.1 Learnings

The scientific output of the programme has exceeded targets, as evidenced by the number and quality of scientific journal publications, citations and media coverage (Table 1).

The organisation of the scientific production enabled interdisciplinary research creating new links with international scientific networks, and involved a wide range of competencies with significant learning and interactions across WPs and universities. Despite the challenge of having university based WPs, we succeeded in stimulating individual researchers to identify with the programme as a whole. We will keep a similar WP structure in Phase 2. The large organisation, with participating universities and multiple partners, was also challenging to coordinate. Based on this experience, we will decrease the numbers of partners and integrate the different WPs and universities even more in Phase 2. There are ample synergies in deeper research collaboration to be explored. Moreover, not all research produced in the programme so far has yet been deliberated upon by our partners in workshops.

The uniqueness of Fairtrans is the emphasis given to and the inclusion of CSOs in co-creating knowledge and policies, enabling the participating researchers to get insights and feedback on

the research process and for CSOs to integrate scientific results in their work. As such, we observed that our research has influenced and strengthened the discourse about a fair and fossil free future in Sweden, as visible by the updated climate policies from trade union partners¹.

The societal benefits of the programme, in terms of e.g. improved achievement of the Swedish Parliament's environmental quality objective "Reduced Climate Impact", are achieved primarily by the Fairtrans approach, with co-creation of knowledge and policies with our CSO partners and partners representing national authorities (SEPA, the Sami Parliament, Fossil Free Sweden). This also includes more regular education as well as strategic communication. We initially addressed the "organised Sweden" but to complement this, the Fairtrans board supported the proposal to conduct Sweden's first national citizens' assembly on climate, to explore what "unorganised" people may think about climate politics if they get a chance to listen to experts and deliberate. National TV and other media reported on the Climate Assembly's call for more ambitious climate politics, which we deem will result in societal benefits, e.g. in terms of raised awareness about the roles of such deliberative mini publics (DMP) and input to the debate on climate policy. However, we also learnt that conducting such a public event demands a large investment of resources, and therefore we will focus on academic research and evaluation of the impacts of the climate assembly in Phase 2.

Fairtrans researchers are extraordinarily active in the public debate and this type of dissemination of scientific results and debate will continue.

Since the beginning of the programme, Fairtrans collaborators have assessed and co-created strategies and policies for fair transformations through research as well as forums of co-creation.

¹ Ett handslag för klimatet – TCO:s klimatpolitiska program (TCO, 2024) <https://tco.se/fakta-och-politik/lansering-av-tco-s-klimatpolitiska-program>
Sacos klimatpolitiska ståndpunkter (Saco, 2023) <https://www.saco.se/globalassets/start/opinion--fakta/rapporter/2023/sacos-klimatpolitiska-standpunkter-2023.pdf>
Vad krävs för en rättvis klimatomställning? (LO, 2023) [https://www.lo.se/home/lo/res.nsf/vRes/lo_fakta_1366027478784_rattvis_klimatomstallning_pdf/\\$File/Rattvis_klimatomstallning.pdf](https://www.lo.se/home/lo/res.nsf/vRes/lo_fakta_1366027478784_rattvis_klimatomstallning_pdf/$File/Rattvis_klimatomstallning.pdf)

Examples include the three consecutive educational courses on just transition for trade union leaders². These courses, as well as workshops and other dialogues, have resulted in trust-building, also between environmental NGOs and trade unions. This has enabled development of shared visions and promoted increased climate ambitions. Another large CSO is Rural Sweden, which gave climate policies a prominent space at their biannual "Rural Parliament" in May 2024 by inviting FAIRTRANS programme directors to the final plenary³. The scientific output has influenced debates about climate transformation and policy, for example the recent articles on fairness and carbon taxes (Lindvall et al. 2024).

Fairtrans has an ambitious agenda, which has sometimes resulted in a heavy workload, taking a toll on our working environment. This was the case especially during implementation of the climate assembly. In a programme of this size, peak workloads need to be handled with care in order to maintain a good and healthy working environment. A lesson learned is that long term resource planning and project management, with a robust programme office with people in place on a daily basis to solve problems by way of dialogue, is key for long term success.

Another lesson is that the years pass quickly when engaged in a programme of this sort, which is why we will invest in networks and relation building with the participating universities so that the knowledge production continues beyond 2029 when the funding for Phase 2 ends.

We have experienced that collaboration with expertise from other Mistra programmes with overlapping interests has been a successful way to achieve goals (see e.g. Hahn et al. 2024 that involves expertise from Carbon Exit).

2.2 Transition to Phase 2

The proposed continuation of Fairtrans will build on learnings in Phase 1 and provide a coordinated and transdisciplinary set of competences to address current and up-coming challenges in the complex mission of the programme. We attempt to develop the Fairtrans approach when addressing new challenges and tasks, for instance when new

competences and actors will be added to the network in the transition to Phase 2.

Activities in Phase 2 expand the Fairtrans approach by deepening and internationalising co-creation with civil society organisations (CSOs) in Sweden and the EU. We will focus on seven Swedish CSO partners with large numbers of members: LO, TCO, Saco, Ledarna, Swedish Society for Nature Conservation, Rural Sweden, and Hyresgästföreningen (The national association for tenants). Three public authorities also remain from Phase 1: The Swedish Environmental Protection Agency, The Sami Parliament, and Fossil-Free Sweden. All of these ten partners have participated actively during Phase 1. Other organisations, "Collaborating actors", include individual trade unions (members of LO, TCO or Saco), other Swedish CSOs, as well as Industry and employer organisations. In Phase 2 we will also deepen the initiated collaboration with CSOs at the EU level. A collaboration is already initiated with the European Environmental Bureau (EEB) and the European Trade Union Confederation (ETUC).

We aim to establish Fairtrans as a long-term competence and action arena functioning as a resource for achieving a fair climate transformation. In order to handle peak workloads in Phase 2, we will increase the capacity for strategic planning by re-organising the programme and the programme office at SRC (see application section 4). Our host SRC is generously co-funding the Programme Director 20% and one PhD student 50% (+ the 4th year). We have also secured co-financing 50% for a PhD student from the University of Gävle (+ the 4th year). Uppsala University plans to continue with the same level of co-funding as during Phase 1, i.e. two PhD students and one guest professor working circa 5% in the programme.

These three research environments at the partner universities – Stockholm Resilience Centre, Urban Sustainability at Gävle, and Climate Change Leadership at Uppsala – have developed their research strategies to accommodate the Fairtrans approach. We have established a strong programme office, a collaborative network with complementary competences and research infrastructures, routines and social relations that we will carry over to Phase 2 and beyond.

² <https://fairtrans.nu/nu-startar-fairtrans-kurs-fackligt-ledarskap-for-en-rattvis-klimatomställning/>

³ <https://landsbygdsriksdagen.se/highlights/landsbygdsriksdagen-2024-fairtrans/>

SRC hosts programme offices for two Mistra programmes, Fairtrans and FinBio. FinBio overlaps with our programme in its focus on change processes and transformation. We have engaged in a dialogue on how to draw on complementary expertise for achieving joint interests with FinBio, hence networking our programme inwards as well.

In Phase 2, we will organise the scientific production in four work packages. To counteract WPs from becoming single university based, each work package will be led by two senior researchers from different universities. We continue exploring different kinds of complementary skills and interactions across WPs and partner universities. The transdisciplinary research in Phase 2 will be more streamlined and focused. This is enabled by ending research on carbon budgets, climate benefits in forestry and agriculture, and the role of digitalisation (sections 3.1, 3.3, 3.4). Despite the success of our national Climate Assembly, we have decided not to conduct a similar grand public project in Phase 2 but instead plan for smaller DMP workshops and above all focus more on research on the empirical data that the national Climate Assembly has generated.

The continued lines from Phase 1 research will focus on transformative capacity, sufficiency in climate politics, stringent climate policy, and place-specific policy and intervention. A specific aim of Phase 2 is to study our own Fairtrans approach to deepen the scientific understanding of whether we increase transformative capacity in our partner CSOs as well as their potential and opportunity to establish coalitions amongst themselves, with other relevant societal stakeholders and ultimately to drive a fair climate transformation. This will create a more in-depth understanding of the approaches, agency, and capacities of the CSOs, for shaping a fair and large-scale climate transformation in Sweden.

A novelty in Phase 2 is the Scientific Advisory Group (SAG). In SAG, professors from different countries, researching sustainability transformation and governance strategies, will advise on how to further internationalise our scientific collaboration and production. We will in particular discuss how research results on climate governance, policy and transformation can further feed into global research endeavours and collaboration.

By continuing to invest in strategic communication, increasing co-creation activities with partner organisations and focusing on education activities with key CSO partners and other collaboration actors, we aim to maintain the high level of societal impact we have accomplished in Phase 1.

3. Performance and key findings per work package

The work packages (WP 0–5) of Phase 1 support the impact logic and programme focus towards a fair fossil-free future. WPs 1–3 develop understanding and scenarios for decarbonisation, WP 4 aims at shaping the ongoing rapid digital development to promote fair transformations, and WP 5 identifies transformation barriers and drivers, and co-develops governance and policy frameworks and instruments. WP 0 manages, administrates and communicates the programme internally and externally, to all partners, including funders, the programme board, and the general public. The programme team includes researchers from the natural sciences, sustainability science, economics, political science and other social sciences, professional communicators, and a board with experience and insights into the Swedish governance system. In Table 1 below, the progress (2021–2024) is compared to expected output as presented in the original Programme Plan A.

3.1 WP1. A fair science-based carbon budget for Sweden (Deliberative policy making within a fair science-based carbon budget for Sweden)

Leads: Ingo Fetzer (Stockholm Resilience Centre, SRC) started as lead. Tim Daw (SRC) took over as lead to organise the climate assembly. Participants: Thomas Hahn (SRC), Sara Cornell (SRC), Mikael Karlsson (Uppsala University, UU).

Aim and research questions

The aim of WP1 is to model various scenarios for Sweden and assess their contributions to achieving the Paris target. WP1 provides a comprehensive foundational building block for Fairtrans, by assessing the national carbon budget for Sweden under different biophysical assumptions and allocation principles, and assessment of fair goal-effective pathways for achieving a fossil free Sweden over time. WP1 started with the following questions:

1. What is the Earth-system informed fair national carbon budget for Sweden (task 1.1)?
2. What are the key gaps compared to the present situation and what pathways may bridge them (task 1.2)?
3. What trade-offs and synergies may emerge with the pathways for achieving the Paris Agreement (task 1.3)?

As we originally planned to respond to all three research questions by 2023 (Programme plan B), WP1 changed title to "Deliberative policy making within a fair science-based carbon budget for Sweden" with Tim Daw as the new WP-leader, in order to find a home for the Climate Assembly.

Key scientific publications

For RQ 1 we have published an article estimating countries' additional carbon accountability for closing the mitigation gap based on past and

	Scientific output		Popular science and policy output			Stakeholder collaborations
	Scientific articles*	Conference presentations	Articles in magazines + newspapers	Blog posts, TV, radio, Seminars	Co-created policy reports, popular science reports	Workshops, roundtables, etc. with CSOs.
Planned 2021-2025	30	22	23	56	14	40
Reported Nov. 2024	52	53	>200		14	122

* Published or submitted articles and book-chapters

Table 1. Planned and actual outputs of Fairtrans Phase 1, 2021–2024 (all WPs)

Note that the content under "Popular science and policy output" was modified already in Programme Plan B in December 2022, compared to Programme Plan A.

future emissions (Hahn et al. 2024). The issue of a fair national carbon budget was also the theme for the first workshop in spring 2022. In this article we show that if countries achieve their own climate targets (NDCs and net-zero), future fossil emission will be about 801 Gigatonnes CO₂. However, the global fossil carbon budget for staying under 1.5°C warming (with 50% probability) from January 2023 is only 225 GtCO₂. We argue that the accountability to close the mitigation gap (of 576 GtCO₂), by more ambitious mitigation and carbon dioxide removal, should be distributed among countries based on an equal per capita principle, accounting for carbon debts since 1990. In general, high-income countries have large carbon debts per capita while several upper-middle income countries have high excessive carbon claims, i.e. high future emissions per capita in relation to a 1.5C budget (Fig. 2).

Based on this distribution principle we calculated a fair national carbon budget for 37 countries. When accounting for carbon debts, 18 of these (EU being treated as one country) have “additional carbon accountability” to close the mitigation gap by more ambitious mitigation and carbon dioxide removal in their own and other countries. Returning below the 1.5°C target by 2100 seems extremely difficult and becomes more challenging each year but the annual cost of rapid decarbonisation and carbon dioxide removal may be lower than the annual global military expenditures.

RQ 2+3 have in part been met by two scientific publications (Basnet et al. 2023; Mosnier et al. 2023), emphasising the interdependence between climate systems, food production and ecosystems. The articles develop and apply the ‘FABLE (Food, Agriculture, Biodiversity, Land-use and Energy) Calculator’ to e.g. analyse the effects of dietary transformations and the transition towards more sustainable food production scenarios on land use and greenhouse gas emissions. Furthermore, the studies assess the extent to which transitions in agricultural production and natural resource use contribute to Sweden living up to its commitments under the Paris Agreement. For this, an integrated approach is essential to reduce problem-shifting where narrow problem-solving causes new problems. The articles conclude that changes in consumption patterns need to be part of the deeper transformation to sustainable resource use.

The new Task 1.3 was the planning, coordination, delivery and follow up of Sweden’s first national citizens’ climate assembly (see section 6). The aim was to enrich the public discussion on climate policy by showing whether a group of randomly-selected Swedish residents, after learning and deliberation, could agree upon recommendations for how Sweden should reduce emissions given the obligations under the Paris Agreement.

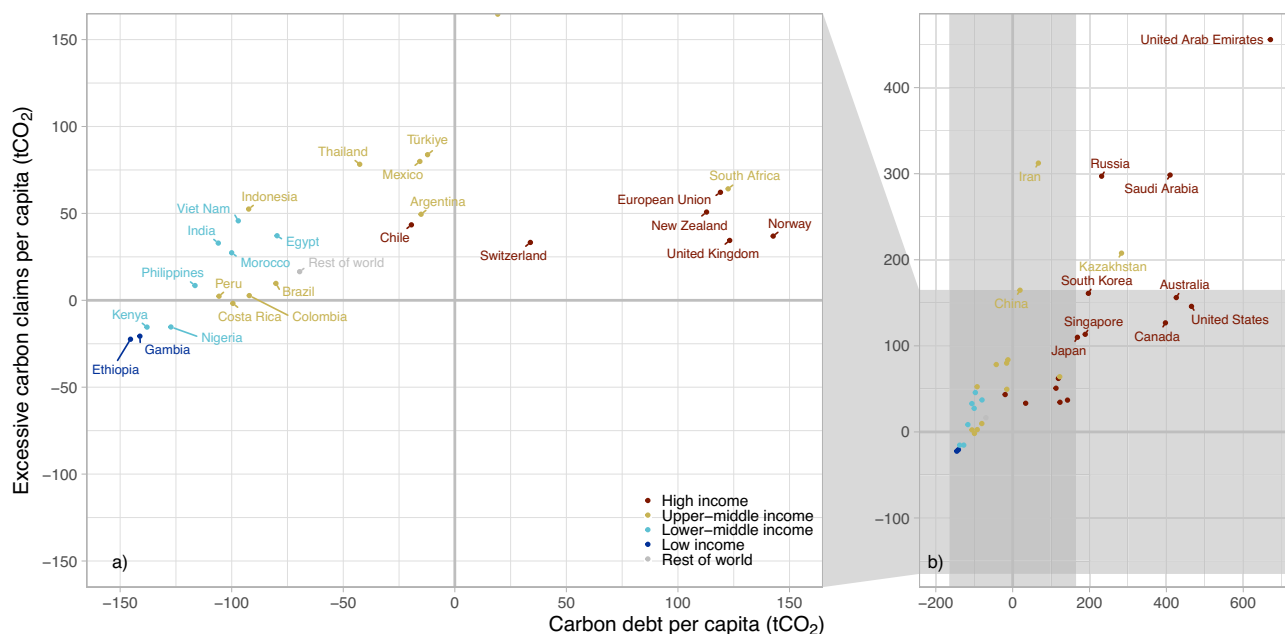


Figure 2. Excessive carbon claims per capita (beyond an equal share of the remaining carbon budget) and carbon debt per capita for 37 countries (Hahn et al. 2024).

Research collaborations

The work on carbon budgets and equity benefitted much from our collaboration with Johannes Morfeldt, Chalmers University of Technology in Gothenburg, who is part of the Mistra Carbon Exit programme. The work on developing and applying FABLE is part of a large international consortium of modellers from more than 20 countries, led by Aline Mosnier from UN-SDSN (France) and Valeria Javalera Rincón IIASA (Austria). The stakeholder dialogues have been conducted in close collaboration with Elin Rööf from Uppsala University (Sweden) and Amanda Wood EAT Lancet consortium (Norway) co-financed by Formas. Research into the DMPs and studying the climate assembly built on close collaboration with Åbo Akademi in Finland, Simon Niemeyer from the University of Canberra's Centre for



The Climate Assembly. Photo: Marcus Lundstedt, Stockholm Resilience Centre.

Deliberative Democracy and collaborations with the EU Worldtrans project led by the Norwegian Meteorologisk Institutt. An additional SEK 1 million co-financing for the Climate Assembly came from European Climate Foundation and EU Horizon/WorldTrans.

Plan for year 4 and Phase 2

For the last nine months of Phase 1 (December 2024–August 2025), WP1 will focus on researching and writing articles based on data collected during and since the Climate Assembly in spring 2024. Additional data collection includes a follow up survey to the members of the assembly, and a national public opinion survey and interviews with key policy actors. We will publish a policy report in Swedish on Sweden's fair national carbon budget and accountability to help closing the global mitigation gap.

For Phase 2 we will close the work on carbon budgets to enable focus on other research tasks. WP1 was expected to be completed during the first 3 years of Phase 1. Research on DMPs will continue under Phase 2 in WP1.

3.2 WP2. Budgeting fair transformations

Lead: Eva Alfredsson (UU)

Participants: Daniel Lindvall (UU), Mikael Malmeus (Swedish Environmental Institute, IVL), Laila Mendy (UU), Thomas Hahn (SRC), David Collste (SRC), Oskar Lindgren (UU), Mikael Karlsson (UU).

Aim and research questions

The aim of WP2 was to identify technological investments that accelerate emission reductions within the carbon budget. We also analyse how the efficiency gain relates to decoupling and rebound effects. Finally, we analyse the effects on rapid decarbonisation on the SDGs.

Three research questions are explored:

1. How should technological innovation and investments be steered to achieve a transformation of the Swedish economy within the carbon budget? (Task 2.1, 2.2 and 2.3.)
2. Acknowledging the importance of rebound effects on the rate of decarbonisation, how can ideas of social progress be “decoupled” from the GDP growth paradigm? (Task 2.4)
3. How are the costs and benefits of these measures distributed within the Swedish population and among economic actors in the short and long term and its effects on Swedish SDG achievements? (Task 2.5.)

Key scientific publications

For RQ 1 we have published an article on industrial climate mitigation strategies and the remaining fair carbon budget, with a focus on Sweden (Alfredsson et al. 2024). In this study we explored the climate mitigation strategies of the 15 industries with the largest carbon dioxide emissions in Sweden. We analysed the mitigation plans of the companies in relation to what can be considered their fair shares of the remaining global carbon budget for keeping global warming below 1.5 degrees. We furthermore determined the uncertainties associated with the strategies. The results suggest that if the communicated mitigation plans are implemented as planned, the companies overdrift the budget, but they stay within an alternative 1.7 degree carbon budget. The analysis shows that already small delays or lower efficiency in

implementation result in evident overdrafts of, also, the alternative budget. There are also substantial political and technical risks that, if materialised, can prevent timely mitigation. The article demonstrates the importance of transparent industrial climate mitigation strategies and in particular the need for policymakers to set incentive structures to promote strategy implementation.

Budget option	Carbon budget (Mt CO ₂)	Share allocated to top emitters (Mt CO ₂)	Cumulative emissions (Mt CO ₂)	Difference
Main	227	79	140	-61
Alternative	464	163	140	23

Table 2. The 15 industries cumulative emissions compared with the fair carbon budgets from January 1, 2022 (Alfredsson et al. 2024)

As a consequence of the results of this study and specifically the risks discovered with the current mitigation strategy, we chose to dive deeper into the another part of the current mitigation strategy – access to critical raw materials. In this study (Malmaeus et al., in review) we analysed access to critical resources from a global budget perspective. We analysed how the projected demand for 14 critical metals in the EU relates to different allocation principles. We found that the demand for 13 out of 14 metals is higher than the per capita allocation. In a scenario with a 5% annual production increase, 10 out of 14 metals are overused in relation to an equal per capita share of the global production capacity. A gap analysis shows that only somewhere around 10–20% of the projected use for a green transition in the EU would be sustainable for many metals in relation to such an equal allocation. The finding calls for strategies which are substantially less dependent on the use of critical metals.

RQ2 has been met by three studies. The first is an article (Lindgren et al. 2023) in which sufficiency in energy policies and parliamentary debates were mapped during four governmental terms of office (2006–2022). The mapping revealed an absence of sufficiency elements and concluded that sufficiency remains at the periphery of Swedish energy policy.

A second study develops a model to analyse sufficiency policies in Sweden (Zwetsloot et al.

in review). The results indicate that policies are effective only when applied as a coherent package. The model simulation shows how a downscaling of production, when combined with reduced working hours and redistribution of wealth, causes rapid reductions in environmental pressures whilst reducing poverty, inequality and unemployment.

RQ3 is met by a study on the system dynamics approach for a global evolutionary analysis of sustainable development (Feder et al. 2024). This paper evaluates the issue of pursuing sustainable development from an evolutionary perspective by conceptualising unsustainability as the emergence of negative macro-selection effects, arising from both the natural and social domains. The Earth4All model is used to illustrate the complex interactions between economic, social, and natural selection processes. The model results illustrate that the current global development trajectory is strongly unsustainable from both a natural and a social perspective, leading to the emergence of relevant natural and social macro-selection.

Another article in WP2 (Hahn et al. 2022) discusses similarities between carbon offsets and biodiversity offsets and identifies similar shortcomings in not addressing the economic drivers of emissions and biodiversity loss. Ensuring additionality would require controlling economy-wide rebound effects but this may impede GDP growth.

Research collaborations

WP2 research has involved researchers from Uppsala University, IVL and SRC. The work has also greatly benefitted from collaboration with our partner organisations and workshops on subjects such as sustainable investments, as well as from conferences where we have explored the role of policy packages (European Society for Ecological Economics in Pisa, Italy, 2022; NESS, Turku 2024).

Plan for year 4 and Phase 2

The priority for year 4 is to finalise the papers in review and in preparation. In a manuscript addressing RQ2, we use a conceptual model to analyse if proposed resource sparing policies are effective (Malmaeus & Alfredsson, in preparation). The abstract for this paper was presented at the NESS conference in Turku 2024. In another manuscript we compare three different models for studying sufficiency policies. We explore their advantages, disadvantages and usefulness. This analysis and the other studies in Phase 1, provide a

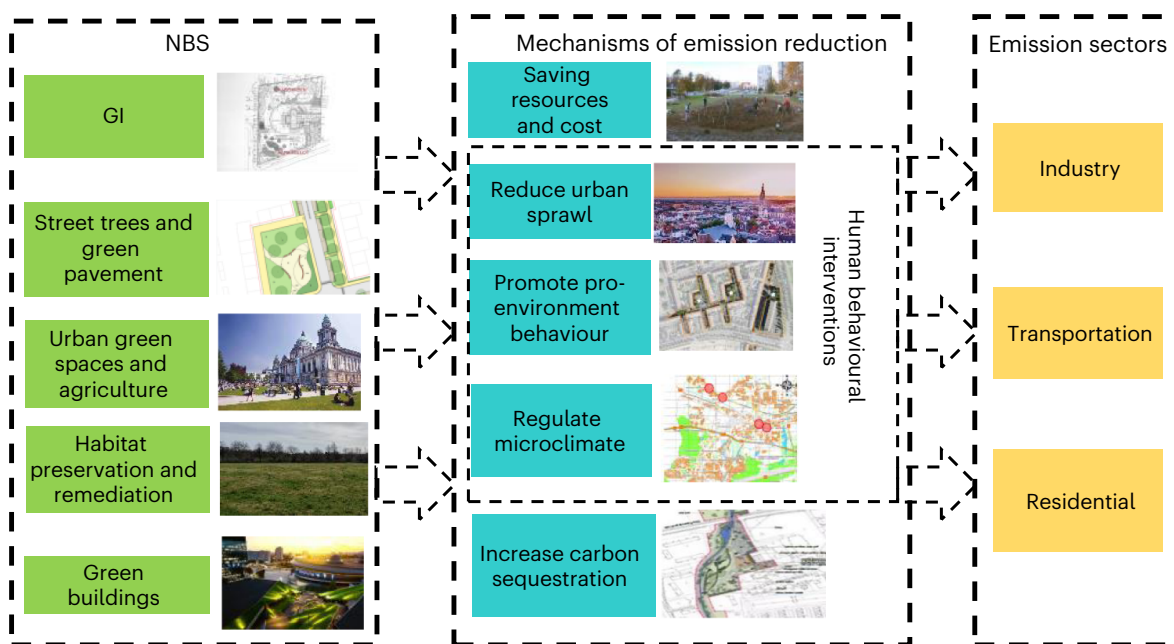


Figure 3. Potential pathways of Nature Based Solutions (NBS) to reduce emissions, such as for instance the role of green infrastructure (GI) in regulating urban microclimate (Pan et al. 2023).

stepping stone for Phase 2, in which we will explore how resource productivity can be accelerated through effective and efficient sufficiency policies.

3.3 WP3. Land use, forestry and agriculture

Lead: Thomas Hahn (SRC)

Participants: Mikael Karlsson (UU), Romina Martin (SRC), Natalya Stryamets (SRC), Shyam Basnet Kumar (SRC), Lova Brodin (Svensk Kolinlagring), Louise Hård af Segerstad (Svensk Kolinlagring), Mikael Karlsson (Ecoforestry)

Aim and research questions

The aim of WP3 was to explore avenues to make Swedish forestry and agriculture sustainable carbon sinks and reconcile conflicts on how to optimise these green climate benefits. Our research questions are:

1. Acknowledging the potential for climate benefits from both standing forests and forestry, how can these climate benefits be optimised in a legitimate and cost-effective way?
2. Looking specifically at bioenergy, how can the present conflicts be resolved?
3. How can Swedish forests increase their resilience to various stresses and shocks in order to safeguard its climate benefits?
4. How can innovation for carbon farming and regenerative agriculture be catalysed in collaborative ways with diverse stakeholders?

In 2023 WP3 changed the title to "Land use, forestry and agriculture." Task 3.1, connected to RQ1, was changed to "Economic and carbon analysis of carbon sinks and substitution effects of forestry, agriculture and land use policy."

Key scientific publications

The research in WP3 has resulted in six published and one submitted articles so far, plus two just about to be submitted. Three of the published articles address the land-use policy part of the modified task 3.1. Samuelsson et al. (2024) focus on spatial planning for active travel to reduce emissions in urban areas, and the articles by Cong et al. (2023) and Pan et al. (2023) analyse the role of spatial allocation of nature-based solutions where especially those that shape human behaviour, with other existing measures in different scenarios could half total carbon emission in 54 major EU cities. The indirect effects in utilising spatial planning for changing habits are considerable, for example in influencing human behaviour (Figure 3).

RQ 2 has been addressed in a study exploring the largest common denominator among scientists researching the use of forest-based biomass in energy systems. In the first step, a series of interviews has been carried out. Second, based on the documentation, we will apply the Delphi method to the interview findings, i.e. conduct

a written process for identifying and analysing common views, points where deviations occur between the participants, and the reasons for this. The third step, planned to be carried out in spring 2025, will be a roundtable dialogue in which interested respondents will be invited to discuss the findings so far. Lastly, the work will be documented in a peer-reviewed article and a policy brief.

RQ 3 has been addressed by four articles (Hahn et al. 2021; D'Amato et al. 2022; Hahn et al. 2023; Martin et al. in review). Resilient ecosystems function as insurance to climate crises, by both mitigating adverse effects and increasing adaptive capacity. The climate benefits of forests and forestry depend on e.g. how resilient forests are to storms, droughts, fires and pests. We have made a theoretical and conceptual contribution by analysing "insurance value" and "resilience value" and operationalising the importance of general resilience to all kinds of stresses and shocks, as opposed to specified resilience (Hahn et al. 2021; 2023). Continuous Cover Forestry (CCF) and close-to-nature forestry are regarded as nature-based solutions in Germany where a combination of crises, knowledge networks and "example forests" have enabled a transformation towards CCF. We have explored the barriers for Swedish forest owners to initiate similar transformations.

RQ 4 has been addressed by Johansson et al. (2022), describing the experimentation with new management practices and with voluntary incentive schemes. With over 40 individual farmers, our subcontractor Svensk Kolinlagring⁴ leads the largest carbon farming co-production process in Sweden. In November 2024, Svensk Kolinlagring qualified as one of 39 nominees, of almost a thousand, to the The Food Planet Prize Longlist 2025.⁵

Research collaborations

WP3 has opened up for new collaboration with SLU (several co-produced articles) and within the International Society for Ecological Economics. An unexpected new collaboration has been enabled by Mistra's offer to finance a researcher from Ukraine. Thanks to Mistra's grant, Nataliya Stryamets has been able to stay for over a year in Sweden (her article has been delayed due to personal reasons).

Plan for year 4 and Phase 2

The priority is to make sure that all three submitted articles and manuscripts under preparation are published during Phase 1. The initial RQ1 has been addressed in a manuscript on global substitution and forest carbon leakage potentials of the Swedish forest sector, which will be submitted by the end of the year. This manuscript uses the Swedish forest model Heureka and the global model GLOBIOM-forest to include climate benefits of exported wood products. Reduced harvests were found to yield the greatest short-term climate change mitigation, mainly due to a substantially larger Swedish forest carbon sink. BAU induces the largest long-term climate benefits, assuming constant substitution effects. However, decarbonization efforts, including fossil-free heating and climate neutral cement, will reduce substitution effects over time. Increased recycling or reduced consumption would also reduce the relative importance of substitution effects and increase the role of carbon sinks.

Attitudes towards CCF are becoming more supportive in Sweden but the innovators at niche level identify lack of knowledge at all levels as the main barrier to expand CCF. A manuscript on these issues will be submitted in 2024. From interviewing innovators we address knowledge gaps concerning the barriers and carriers for incentivising forestry transformation in Sweden.

We will close the research on climate benefits from forestry and agriculture, while wood products will be addressed from a sufficiency perspective in Phase 2. The research on spatial allocation of nature-based solutions in urban land-use planning will continue in Phase 2.

⁴ <https://svenskkolinlagring.se/about-us/>

⁵ <https://foodplanetprize.org/news/longlist-2025/>

3.4 WP4. Fair Digital Transformation and Co-creation for Socially Accepted Climate Action

Leads: Johan Colding (University of Gävle, HiG) started as lead. Stefan Sjöberg (HiG) took over in 2024.

Participants: Stephan Barthel (HiG), Mathis Cehlin (HiG), Owen Gaffney (SRC), Sofie Lindeberg (HiG), Marita Wallhagen (HiG), Henrik Dahl (Future Position X, FPX), Per Andersson (FPX), Katarina Nordin (FPX), Maria Svensson Wiklander (Remote Lab), Anna Rex (Remote Lab), David Olsson (WDHT)

Aim and research questions

The aim of WP4 is to promote transformation by 1) developing knowledge for ensuring smart digital climate action that is fair, inclusive and fostering democratic values; 2) improving science-based and co-produced knowledge for carbon reducing remote work commons; and 3) improving science-based knowledge about public acceptability of transformation. The aims are addressed by three main research questions:

1. What types of first-level digital disparities and second-level digital inequalities are prevalent today?
2. What actors drive remote working communities and commons in Sweden today?
3. What behavioural changes, concerning e.g. flying, eating and commuting, are the public willing to accept?

Key scientific publications

To respond to aim 1 and 2, WP4 set out to study digital climate action related to coworking spaces and teleworking. This resulted in a report (Colding et al. 2023) and an article (Rex & Westlund 2024) showing that digital teleworking and coworking spaces have a potential to decrease carbon dioxide emissions caused by transport, and that coworking spaces can have an important role as nodes in sustainable local development, fostering inclusive social networks with actors from private, public and civil society sectors. The importance of an inclusive digitalization was further investigated in an article by Colding et al. (2024), where the results called for not only including ecological but also social sustainability in urban planning processes. Social sustainability has long been a rather fuzzy concept. Therefore Nilsson et al. (2024) performed the first systematic literature review on social sustainability. The results from this study show that social sustainability is a multi-faceted

concept including equity, social capital, well-being, participation and influence, which is important to consider in relation to a fair transformation and collective action. The concepts of fairness and justice are crucial for Fairtrans. To deepen the understanding of fair climate transformation and climate justice, a research circle was carried out with six researchers within Fairtrans. This resulted in a report (Sjöberg et al. 2024). In this we conclude that a fair transformation requires both distributional as well as procedural justice, promoting inclusion and democratic influence, but also a new narrative calling for a change of lifestyle as a liberation rather than a sacrifice. Public acceptance ought to be promoted by bottom-up democratic participation and influence. Researchers within WP4 have elaborated a new innovative concept, Community Climate Commons (CCC), where many of the aspects mentioned above coincide (Colding et al. 2022; Nässén et al. 2024). Based on a systematic review, CCCs can be defined as community-based commons that form the basis for mobilisation and collective action against ongoing climate change (Nässén et al. 2024). Various forms of CCCs are identified, such as the above-mentioned coworking spaces and energy communities (e.g. locally based and collectively governed solar or wind power parks). CCCs have a potential to constitute an important bottom-up based complement to macro level policies and technology in mitigation and adaptation to ongoing climate change (see Figure 4 below).

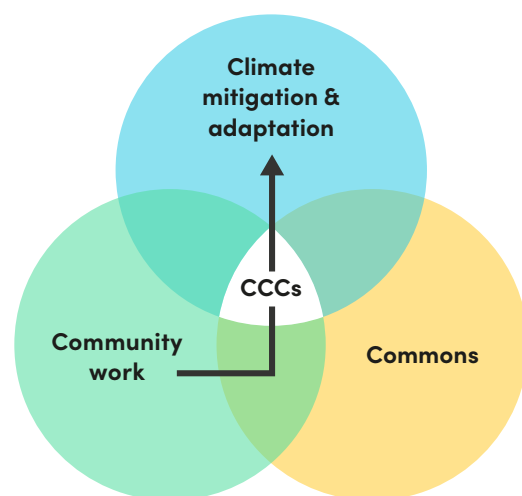


Fig 4. Conceptual model of community climate commons (CCC). Source: Nässén et al. 2024.

To respond to the third aim, two surveys were conducted, one international with focus on attitudes towards climate transformation, conducted by Ipsos. It received substantial media impact. The second survey was conducted by Skop and focused on public acceptability of climate mitigation and energy policies in Sweden, resulting in several publications. Two of these focus on the energy transition, and attitudes to wind and nuclear power, with a specific focus on the relevance of compensations and the proximity effect. Lindvall et al. (2024a) found that by compensating host municipalities and people living near wind turbines, public support could be enhanced, yet also showing that ideological motivation, right wing leaning and “TAN attitudes”, strongly determine wind power resistance. In an additional study, Lindvall et al. (in review) analysed the strong polarisation of wind and nuclear power, suggesting that politically motivated reasoning influences attitudes. Linder et al. (2022), laid the conceptual foundation of addressing pro-environmental habits in sustainability science. An empirical finding from the national survey that followed this conceptual work is that the car-driving habit is an important variable that negatively influences support for carbon taxes, comparable in strength to previously shown key variables for policy support, such as political leaning and environmental concern (Linder et al. in review).

While environmental concern, habits, political leanings and fairness were found to determine public acceptance of climate mitigation policy, the studied relationships were merely correlational. Casual relationships of how determinants interact remain to be researched in order to better understand how to design actionable policy. Also what roles local collective civic action in community climate commons may play for an effective, yet fair, climate transformation at the national level is yet to be studied.

Research collaborations

WP 4 is coordinated by the University of Gävle and has generated an internal cross-disciplinary collaboration between the fields of social work and sustainability science. The national survey conducted as part of WP 4 has sparked collaborations with Uppsala University, the University of Gothenburg, and the Royal Swedish Academy of Sciences. On an international level, the production of research papers has involved collaborations with Shanghai Jiao Tong

University, MIT, ISGlobal, the University of Surrey, the University of Helsinki, Aalto University, The New School in New York, Indiana University, the Norwegian Institute for Nature Research, and the University of Tokyo.

Plan for year 4 and Phase 2

WP 4 will organise two symposiums in December 2024, one national on energy communities and one international (ISUS) on social mobilisation for a fair transformation. Both will be held at the University of Gävle. Researchers from WP4 plan to present a paper on ecosocial community work and community climate commons at a conference at Dortmund University in March 2025. Four papers in review are likely to be published during Phase 1.

The studies and activities within WP4 have led to an increased focus on issues of social sustainability, justice, democratic participation and bottom-up based mobilisation as important aspects for a fair climate transformation. In the plans for Phase 2, the work on CCCs will deepen, with focus on concrete empirical cases of existing CCCs and with a particular focus on energy communities.

3.5 WP5. Co-creating fair transformations to a fossil free future

Leads: Mikael Karlsson (UU) and Anna Linell (Global Utmaning) started as leads. Sofia Bernett (SRC) took over Anna Linell's role in 2023.

Participants: Tim Daw (SRC), Lisen Schultz (SRC), Tatiana Sokolova (Södertörn University), Jens Ergon (UU), Laila Mendy (UU), Roger Hildingsson (Lund University).

Aims and research questions

WP5 aimed to:

1. identify and analyse barriers and drivers, and explore concrete transformative avenues in climate governance and policy;
2. develop and promote effectual and effective science-based fair transformative strategies and policies;
3. stimulate co-creative learning, engagement and envisioning for fair and fossil free transformations.

Of these topics, the first related to governance and policy research, whereas the two other points concerned stakeholder deliberations and capacity building.

	Outcomes and impacts	Weaknesses
Trusted elite cues	Conservative politicians, military sources increase political support in students; evangelical climate change scientist increases beliefs in evangelical students; military cues increase concern and beliefs	May not necessarily increase support for political action
Message Frames	Negative emotional experience increases climate change concern, mitigation support; nature videos with mixed emotional tones are effective in increasing environmental concern; preservation of socio-political system frames increases pro-environmental behavioural intentions	Support for mitigation may pre-exist for other reasons, these methods are vulnerable to exposure bias
Education	Increases belief in conservatives; overcomes scepticism in adolescents with individualistic worldviews; reduces denialism in those with high levels of social dominance orientation	Selective exposure bias could deter conservatives from climate change education and information

Figure 5. Three counteractions in relation to response denial (Mendy et al. 2024)

Key scientific publications

The governance and policy-oriented research has covered three areas.

First, on climate denial, Mendy et al. (2024) systematically examined how to counteract climate denial, which is a significant barrier to climate policy development and implementation. The study, being the most comprehensive review in the field, identified multiple feasible intervention forms, including trusted elite cues, message frames and education (see figure 5). The article offers guidance for those interested in counteracting denialism. Moreover, Mendy & Karlsson (submitted) have explored how climate researchers and their research is impacted by denial, scepticism and distrust, and they show that researchers commonly are exposed to unjustified criticism and that

frequent attacks towards themselves and their research findings may result in self-censoring, media avoidance and publishing reluctance. Yet, research institutions offer little training and funding for engaging with these problems.

Second, concerning public acceptability, Lindgren et al. (2024) report on climate rationing by surveying 8654 individuals across five countries on five continents (Brazil, Germany, India, South Africa, and the US). Comparing the public acceptability of rationing fossil fuels and high climate-impact foods with consumption taxes, the study reveals that the acceptability of fossil fuel rationing is on par with that of taxation (see figure 6). This encourages dialogue and further studies on rationing, as a comparatively stringent climate policy instrument.

Lindvall et al. (2024b) examined if public acceptance of stricter carbon taxation in Sweden can be enhanced, by addressing collective and personal distributional consequences or by promoting procedural justice. The results show that support for higher carbon taxation is enhanced if tax revenues are redistributed to affected groups, and that the collective justice framing changes the attitudes also among individuals who express the most antagonistic attitudes to increased carbon taxation. Policies addressing personal distributional outcomes, or perceptions of procedural injustice, had no significant effect on policy acceptance. While this study did not find any evidence for effects of procedural justice, Lindvall and Karlsson (2023) published a review on research exploring the effect of democracy on climate policy performance, showing that democratic development positively

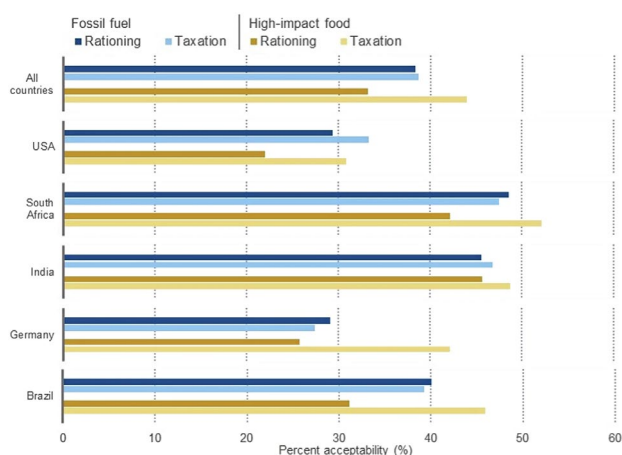


Figure 6. Acceptability of rationing and taxation of fossil fuels and high climate-impact foods across countries (Lindgren et al. 2024).

affect climate policy ambition, in terms of adopted targets and legislations, yet not necessarily climate policy impact, in terms of reduced greenhouse gas emissions.

A third area of inquiry centres on stakeholders and the landscape surrounding climate policy development, including the relationships between actors and the role of state interventions. Ergon et al. (pending review A) explore the understanding of fair climate transformation among actors in Sweden, a country presently diverging from its traditional role as a climate frontrunner. Based on a series of in-depth interviews, the study maps perceptions on just transformation among businesses, trade unions, environmental organisations and other CSOs. The analysis reveals broad coinciding interests, despite diverging views on the depth of the transformation. Convergence is driven by a desire to restore Swedish climate leadership, and includes financial reform, more active state interventions, and new policy tools to ensure public legitimacy, pointing towards a green Swedish model. This is related to the key role of the state in governing climate transformations, and the analysis further draws on the green state literature. This literature was moreover reviewed in Kronsell & Hildingsson (2022), in which we present an updated analysis of the state's capacity to intervene in economic relationships and where we also engaged with transition theory and the ecological democracy literature. In Ergon et al. (pending review B) policy dismantling, as well as policy packages targeting emission reductions and distributional effects in parallel, are analysed through modelling. Compared to lowered energy taxation, climate policy packages are shown to result in not only emission reductions but also in reduced income inequality.

Research collaborations

The work has been conducted in collaboration between Fairtrans researchers at Uppsala University (Mikael Karlsson and Daniel Lindvall, and PhD students Jens Ergon, Laila Mendy, Oskar Lindgren), Lund University (Roger Hildingsson) and Gävle University (Stephan Barthel and Patrik Sörqvist). During 2022-23, Professor Sverker Jagers, then Zennström Visiting Professor at Climate Change Leadership (CCL) at Uppsala University, now at Göteborg University, was affiliated to Fairtrans (in-kind contribution from UU amounting to circa 5%). He is still co-writing Fairtrans articles and acts as co-supervisor to Oskar Lindgren.

Associate Professor Naghmeh Nasiritousi, in 2023 researcher at CCL at CCL-UU, now employed at Linköping University, has participated in the programme and continues as co-supervisor to Laila Mendy. These collaborations will continue in Phase 2, in which also budgeted time is allocated to Naghmeh Nasiritousi, whereas Sverker Jagers will continue to work in-kind (circa 5%). In 2023-2024, Professor Stacy Vandever, then Zennström Visiting CCL Professor at UU, now at University of Massachusetts Boston, was affiliated to Fairtrans and contributed to various studies (amounting to circa 5%). He will continue to be involved in-kind, for example in the planned NESS conference 2026. The team of researchers have also initiated a collaboration with key persons in the Earth System Governance Network, which from 2025 is planned to be hosted by CCL at UU.

Plan for year 4 and Phase 2

During 2025, already submitted articles will be finalised and we will in addition submit and publish one conceptual article on societal transformations, and at least one additional modelling study on the impacts of climate policy packages. However, the main part of the work will focus on developing and carrying out a major survey, covering climate policy and attitudes in eight EU Member States. We will thus gather population-representative data from, tentatively, Austria, Denmark, France, Germany, Italy, Lithuania, Poland, and Sweden, facing similar but also different challenges and opportunities to ensure public support for domestic climate policies. This approach allows us to assess inter-country heterogeneity and comparatively examine sources of differences and similarities between the countries. Compared to much of the existing



The third class of Fairtrans' executive programme for union leaders. Photo: Minda Holm, Stockholm Resilience Centre.

literature, which focuses on hypothetical policies, the survey will take its departure from established climate policy and elicit public attitudes towards real policies, targets and laws associated with the European Green Deal. The work with analysing the data will continue in Phase 2.

To continue the climate policy research conducted in Phase 1, we will focus more in-depth on a number of key knowledge gaps linked to climate policy packages and real policies, and their impact, in both Sweden and the EU. Additionally, we will interrogate policy-making processes in various EU Member States.

Co-creation, stakeholder deliberation and capacity building

WP5 holds a key role within Fairtrans, as it contains co-creation with stakeholders, and is supported by, and supports, all other WPs. In April 2024, we conducted a large workshop with partners on a fair and effective climate transition, hosted and co-funded by Saco. The next workshop is planned for spring 2025, in favour of three dialogue meetings this autumn with partners to deliberate on the programme as a whole, evaluating it so far while glancing at Phase 2. The policy report connected to the workshops 4-5 is underway and is about to be published at the time of writing. Additional co-creative meetings and roundtables have been conducted with partners LO, TCO, Saco and Naturskyddsforeningen through 2024, as in previous

years. By inviting partners and stakeholders to policy discussions on a fair transformation with researchers and members of Fairtrans' board in We Don't Have Time's broadcasting from COP28 (late 2023) and 29, the Fairtrans approach has been visible on an international arena.

A customised executive programme for trade union leaders was conducted in three rounds, engaging 48 representatives from 30 organisations, including the three central organisations LO, TCO, and Saco. A central focus of the course was empowering the union movement to take proactive leadership in driving a fair transformation. Participants developed action plans across four dimensions: as individual professionals, within their organisations, as a collective movement, and in their broader societal role. The initiative has fostered the creation of an alumni network, where participants can exchange insights from their interactions with scientists and discussions on union-related challenges and opportunities. In the programme's second phase, a similar executive course will be developed for industry and employer organisations.

As capacity-building permeates the programme, Fairtrans has co-financed and further developed the course material "Uppdrag Klimatambassadör", with the aim to train and support "climate ambassadors", knowledgeable and inspiring climate role models within trade unions and at workplaces around Sweden. In Phase 2, we aim to scale this initiative, as it provides concrete tools for capacity-building and raises knowledge levels on climate solutions within the trade union movement (<https://www.uppdragklimatambassador.se>).

In Phase 2, we will aim to establish Fairtrans as a key agenda-setter and authority on what a rapid fair climate transformation entails, particularly as a resource for understanding how the transformation can be accelerated in ways that gain broad acceptance, in Sweden and the EU. To establish useful connections with CSOs on a European level, WP leads Mikael Karlsson and Sofia Bennett participated in the Civil Society Forum for Sustainability, a workshop on shaping the European Green Deal arranged in Brussels in November by European Environmental Bureau (EEB), Solidar, SDG Watch Europe and Real Deal. A collaboration is now emerging, aiming for Fairtrans Phase 2.



Civil Society Forum for Sustainability, Brussels.
Photo: Sonia Goicoechea, EEB.

4. Management and organisation (WP0)

Fairtrans has until November 2024 been led by two programme directors (PDs); Thomas Hahn and Stephan Barthel. The host organisation is Stockholm University and the programme office is placed at Stockholm Resilience Centre (SRC). The PDs have been responsible for operating all daily affairs within Fairtrans, as well as for reporting progression and budget of the programme plan B, due in November each year to the board and to Mistra. The chair of the board is Ethel Forsberg. Board members are Kristian Skånberg, Helen Rosengren, Leo Rudberg and Pernilla Bergmark and the adjunct members are Johan Edman (MISTRA) and Anna Kaijser (Formas). The board is deciding on the strategic budget reserve, the annual report and the annual programme plan with a connected budget. The board's mission is to ensure that Fairtrans is run in line with the agreement between MISTRA, Formas and Stockholm University as well as the bilateral sub-agreements signed between participating universities and organisations respectively. The mission is also to help connect Fairtrans scholars and deliverables with relevant networks in society.

Knowledge production is decentralised and organised in five work packages that are responsible for the scientific production and

co-creation work. Leaders of WPs partake in monthly meetings with the executive group and between these whole-group meetings, each WP and research task has regular meetings. The programme has also engaged a Policy Group (also known as the Transformation Advisory Board). Members are Tomas Kåberger, Susanna Gideonsson, Johanna Sandahl, and Ulrika Liljeberg. One key task is to secure contact and communication with users and receivers of Fairtrans deliverables, and it can take initiatives for outreach activities and for spreading the intentions and results of Fairtrans in society. The programme has invested in strategic communication by employing Sofia Bernett full time. Since November 2024, Sofia Bernett has assumed the role of Deputy Head of Programme, alongside her role as Communications Manager (CMD), as Thomas Hahn has chosen to resign as Program Director in order to focus on research at the end of Phase 1 and in Phase 2. Stephan Barthel continues as PD. Mikael Karlsson has assumed a new role of Policy Manager (PM).

Easy to follow annual steering documents (Plan B) have been set up and shared. These annual plans are co-created every year by the PDs and WP-leaders and they are followed up on a yearly

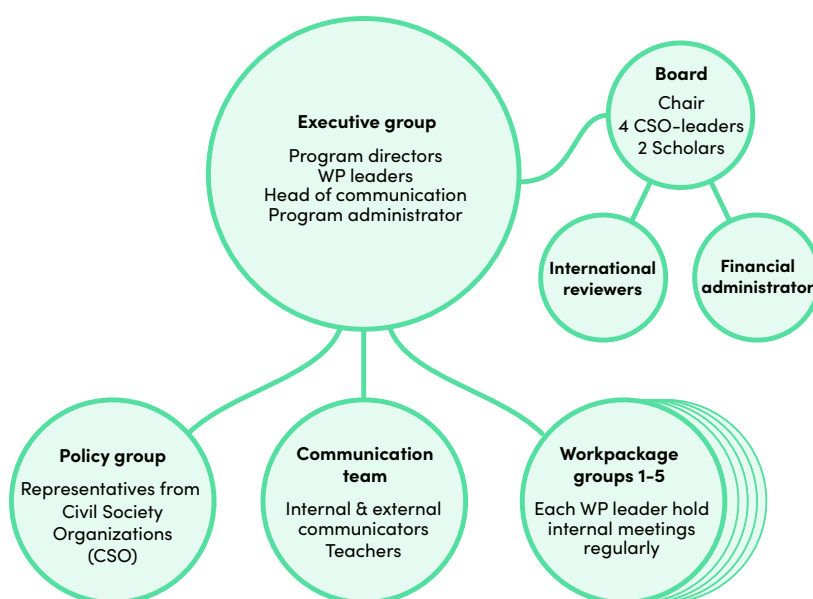


Figure 7. Organisational map of Fairtrans Phase 1.

basis. The programme office at SRC is used to facilitate internal communication and file sharing in a safe and efficient manner. Any deviation from the time plan is discussed in the executive group to decide how to act and, if possible, mitigate the risks that caused the deviation. The yearly financial statements are signed off by the host organisation for quality assurance of the resources being used. A code of conduct was set-up summarising the principles, values, and proper practices for the programme. Every participant undertakes to respect the code of conduct.

Communication

Fairtrans has effectively shared research results and highlighted key programme initiatives to wide audiences in Sweden and internationally. Our main target groups being our CSO partners, decision makers within national authorities, regions, municipalities and the parliament as well as the Swedish public, we have continuously expanded the external communication of the programme over Phase 1. Researchers have published numerous op-eds and opinion pieces in mainstream media and specialised publications, and participated in interviews with various media outlets. Some of the highlights of 2024 are featured under "Fairtrans in the Media" below.



Article by researchers Stephan Barthel, Stockholm University and Karen Chen, Yale University in The Conversation, May 2023, based on the scientific article 'Higher depression risks in medium- than in high-density urban form across Denmark' published in Science Advances.



Op-ed in Dagens Nyheter by researchers Mikael Karlsson, Uppsala University and Björn Kjellström, Luleå University of Technology, August 2021.



Researcher Daniel Lindvall, Uppsala University, featured in The New York Times, October 2023.

In 2024, we aimed to further develop LinkedIn as Fairtrans' preferred social media platform to inform and engage relevant stakeholders with programme updates and news. We hoped to reach 500 by the end of 2024, a target exceeded as we now have some 1000 followers. Some of the most engaging posts of 2024 were about the survey on attitudes towards the climate transition, the executive programme for union leaders and the citizens' assembly on climate.

The citizens' assembly on climate (Medborgarråd om klimatet) has been the programme's most widely covered initiative, featured in multiple newspaper articles and broadcast media, and followed by approximately 1,550 people on social media. This initiative has been showcased and discussed at numerous public events. Communication efforts around the assembly continue to generate interest from Fairtrans' partners, stakeholders, and the general public, as well as from the Swedish Parliament, where a seminar with members and researchers is arranged by parliamentarians on 27 November.

"The citizens' assembly's desire to accelerate green policies aligns with several opinion polls."

— Dagens Nyheter, Editorial, May 2024

"I therefore think it is very good that this initiative is being taken, so that the dialogue takes place together with researchers."

— Climate Minister Romina Pourmokhtari on the citizens' assembly, Dagens Nyheter, March 2024

Followers on LinkedIn

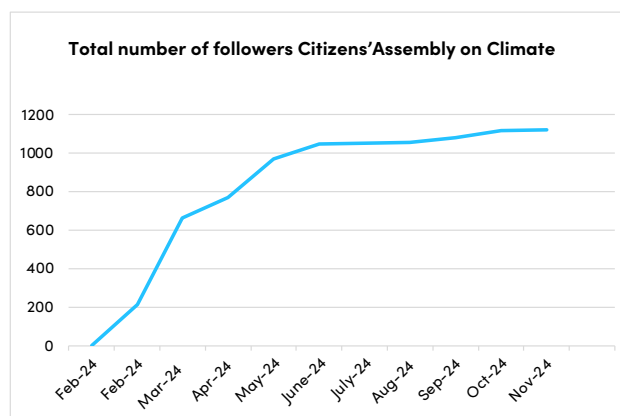


Figure 8

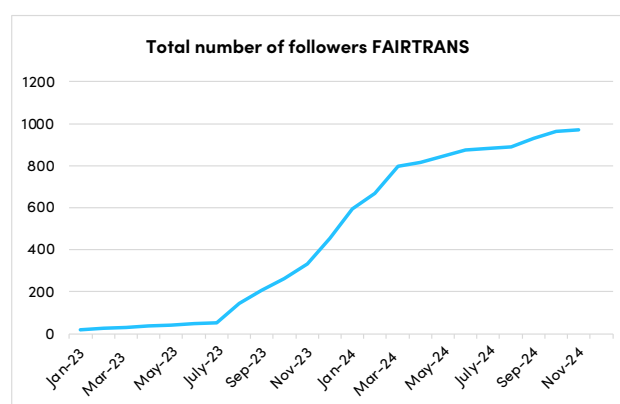
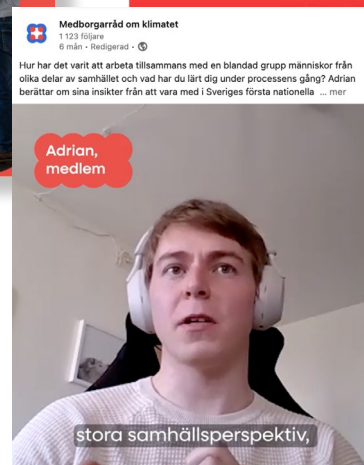


Figure 9



The Climate Assembly on social platforms.



5. Programme Impact

The prospected pathways to impact in Phase 1 are summarised in figure 10. The results of Phase 1 have been achieved with deliverables produced in time, conceptual innovations on the role of remote digital commons, estimated carbon budgets, a database on attitudes to climate transformation, 52 scientific articles, one kick-off and five large workshops “Assembly Meetings”. A final workshop and a manifest will moreover be delivered in spring 2025. In terms of outcome, we argue that the programme is internationally known since we have many ongoing international collaborations. We consider our science communication to be at a world class level. The annual reports 2021/2022 and 2023 have been delivered on time. On the topic of bioenergy, work is still on-going, expected to be published in spring 2025. Remote Lab in Östersund, a key sub-contractor of Fairtrans, has become one of several national platforms for remote work, which we have documented scientifically (Rex & Westlund, 2024). Through numerous policy discussions with CSOs, public agencies, businesses, politicians and others, Fairtrans has impacted the climate agenda in terms of enhanced understanding of the need for fairness in climate transformations.

In terms of impact, the scientific discourse on climate transition has started to include explicitly fairness perspectives. We are confident that Fairtrans has contributed to this, although it remains to be explored to what extent this is the case. One indication is that our publications are picking up citation and media space on issues related to fair climate transformation. We have also increasingly participated in policy discussions in national media, and, recently, been invited to large conferences arranged by e.g. Fossil Free Sweden and Viable Cities. We argue that this impact in the media and among stakeholders has impacted the discourse on a fair climate transformation in Sweden. Dialogues indicating growing alliances between our partner organisations have also occurred. We can moreover conclude that triple loop learning has taken place through our educational activities, and enhanced civic engagement is evident in publications from our partners. Fairtrans is thus increasingly shaping the national climate policy arena.

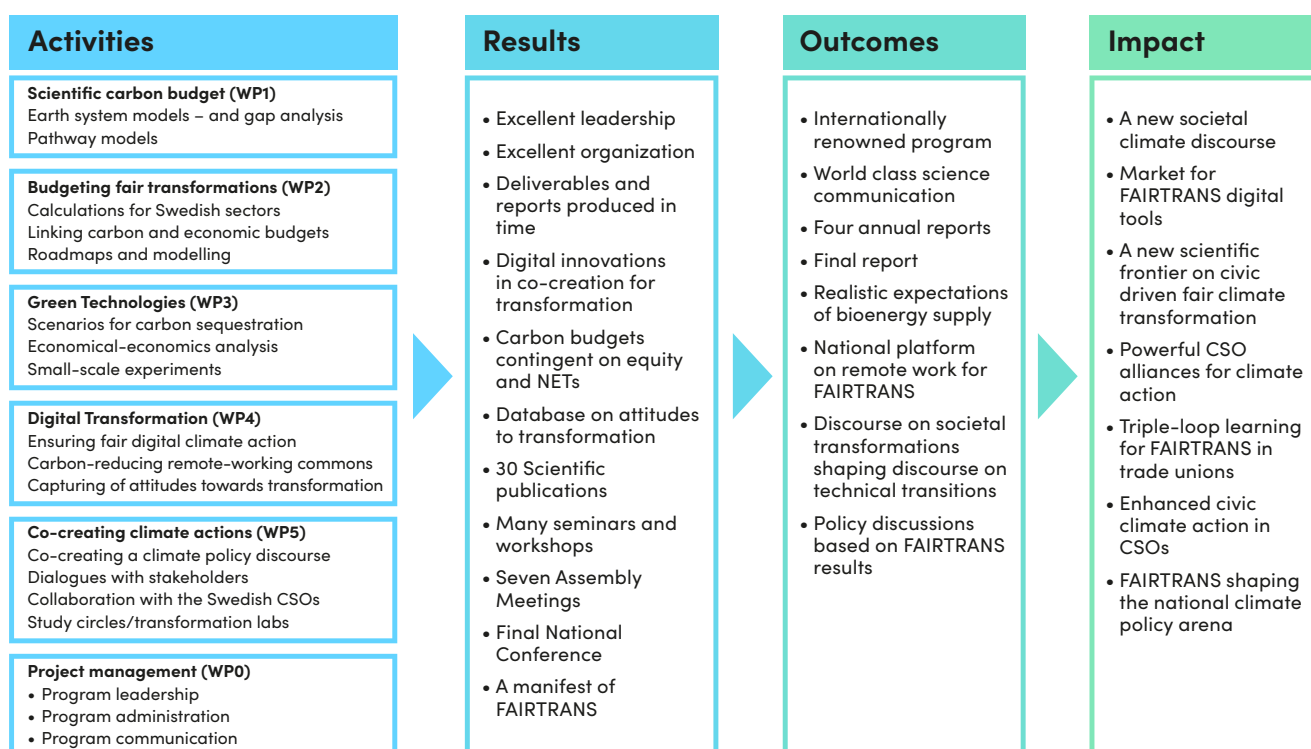


Figure 10. Pathways to impact Fairtrans Phase 1.

5.1 Scientific impact

We anticipated 30 publications during the first four years (see Table 2 from plan A). However, as of November 2024, we have 34 peer reviewed scientific publications and another 18 submitted to scientific journals of high quality.

We have published in international journals that the Norwegian list deems to be of high or standard scientific quality. Examples include Nature Climate

Change, Nature Communications, Sustainable Development, Landscape and Urban Planning, Climate Policy, Energy policy, Environmental Research Letters. A satisfactory scientific impact is indicated from rising citation rates in Scopus and Web of Science (see top ten publications October 2024 in table 3) and by the Altmetric attention score (See top ten publications in table 4). For a full list of publications produced by Fairtrans, see section 8.

Table 3. Top ten cited publications of Fairtrans on 28 November 2024, indicating impact on the international scholarly scene.

Peer reviewed scientific publication	WoS	Scopus
Linder, N., Giusti, M., Samuelsson, K., Barthel, S. (2022). Pro-environmental habits: An underexplored research agenda in sustainability science. <i>Ambio</i> 51: 46–556. https://doi.org/10.1007/s13280-021-01619-6	53	64
Pan, H., Page, J., Shi, R., Barthel, S., et al. 2023. Contribution of prioritized urban nature-based solutions allocation to carbon neutrality. <i>Nat. Clim. Chang.</i> 13, 862–870 (2023). https://doi.org/10.1038/s41558-023-01737-x	39	44
Cong, C., Pan, H., Page, J., Barthel, S., Kalantari, Z. (2023). Modeling place-based nature-based solutions to promote urban carbon neutrality. <i>Ambio</i> 52 (8), 1297–1313	17	19
Colding, J., Barthel, S., Ljung, R., Eriksson, F., Sjöberg, S. (2022). Urban Commons and Collective Action to Address Climate Change. <i>Social Inclusion</i> https://doi.org/10.17645/si.v10i1.4862	16	16
Hahn, T., Eggers, J., Subramanian, N., Caicoya, A. T., Uhl, E., Snäll, T. 2021. Specified resilience value of alternative forest management adaptations to storms. <i>Scandinavian Journal of Forest Research</i> . https://doi.org/10.1080/02827581.2021.1988140	15	15
Lindvall, Daniel. 2023. Why municipalities reject wind power: A study on municipal acceptance and rejection of wind power instalments in Sweden. <i>Energy policy</i> . https://doi.org/10.1016/j.enpol.2023.113664	13	15
Johansson, E. Brogaard, S. Brodin, L. 2022. Envisioning sustainable carbon sequestration in Swedish farmland. <i>Environmental Science & Policy</i> , 135:16–25. https://doi.org/10.1016/j.envsci.2022.04.005	13	13
Basnet, S., Wood, A., Röös, E., Jansson, T., Fetzer, I., & Gordon, L. 2023. Organic agriculture in a low-emission world: Exploring combined measures to deliver a sustainable food system in Sweden. <i>Sustainability Science</i> 18(1), 501–519. https://doi.org/10.1007/s11625-022-01279-9	12	12
Barthel, S., Colding, J., Hiswåls, A.-S., Thalén, P. & Turunen, P. 2022. Urban green commons for socially sustainable cities and communities. <i>Nordic Social Work Research</i> , 12(2), 310–322, 2022. DOI: 10.1080/2156857X.2021.1947876 https://www.tandfonline.com/doi/epdf/10.1080/2156857X.2021.1947876?needAccess=true	11	12
Lindvall, Daniel & Karlsson, Mikael (2023). Exploring the democracy-climate nexus: a review of correlations between democracy and climate policy performance. <i>Climate Policy</i> . https://doi.org/10.1080/14693062.2023.2256697	7	9

Table 4. Top ten altmetric publications on 28 November 2024 indicating news attention, social media attention and policy document impact from scientific deliverables in Fairtrans.

Peer reviewed scientific publication	Altmetric attention Score
Pan, H., Page, J., Shi, R., Barthel, S., et al. 2023. Contribution of prioritized urban nature-based solutions allocation to carbon neutrality. <i>Nat. Clim. Chang.</i> 13, 862–870 (2023). https://doi.org/10.1038/s41558-023-01737-x	390
Lindgren, Elwing, Karlsson, Jagers (2024). Public acceptability of climate-motivated rationing. <i>Humanities and Social Sciences Communications</i> 11: 1252: https://www.nature.com/articles/s41599-024-03823-7	140
Hahn, T., Morfeldt, J., Höglund, R., Karlsson, M., Fetzer, I. (2024). Estimating countries' additional carbon accountability for closing the mitigation gap based on past and future emissions. <i>Nature Communications</i> 15, 9707. https://doi.org/10.1038/s41467-024-54039-x	79
Johansson, E. Brogaard, S. Brodin, L. 2022. Envisioning sustainable carbon sequestration in Swedish farmland. <i>Environmental Science & Policy</i> , 135:16–25. https://doi.org/10.1016/j.envsci.2022.04.005	33
Mendy, Karlsson, Lindvall. (2024). Counteracting climate denial: A systematic review. <i>Public Understanding of Science</i> 33:4 https://doi.org/10.1177/09636625231223425	19
Linder, N., Giusti, M., Samuelsson, K., Barthel, S. (2022). Pro-environmental habits: An underexplored research agenda in sustainability science. <i>Ambio</i> 51: 46–556. https://doi.org/10.1007/s13280-021-01619-6	18
Lindvall D, Sörqvist P, Barthel S. (2024). Overcoming the headwinds: Can policy design shape public acceptance of wind power in Sweden? <i>Energy Research & Social Science</i> , Volume 116.	18
Lindvall, Daniel & Karlsson, Mikael (2023). Exploring the democracy-climate nexus: a review of correlations between democracy and climate policy performance. <i>Climate Policy</i> . https://doi.org/10.1080/14693062.2023.2256697	16
Basnet, S., Wood, A., Röö, E., Jansson, T., Fetzer, I., & Gordon, L. (2023). Organic agriculture in a low-emission world: Exploring combined measures to deliver a sustainable food system in Sweden. <i>Sustainability Science</i> 18(1), 501–519. https://doi.org/10.1007/s11625-022-01279-9	13
Lindvall, Daniel, 2023. Why municipalities reject wind power: A study on municipal acceptance and rejection of wind power installments in Sweden. <i>Energy policy</i> . https://doi.org/10.1016/j.enpol.2023.113664	12

Fairtrans has ignited a productive transdisciplinary research network between Stockholm Resilience Centre, CCL at Uppsala University, the University of Gävle, Lund University and IVL. Four PhD projects today, whereof two are externally funded by Uppsala University, operate in line with goals of the programme. Three master students have revised their MSc theses into scientific articles and submitted them with support from the programme; two have been published so far. The research collaborations extend to international networks visible when viewing co-authorships of the publications of the programme. Our research network includes scholars at Shanghai Jiao Tong University, MIT, IS Global, University of Surrey, Helsinki University, Aalto University, New School,

NY, Indiana University, Norwegian Institute for Nature Research, University of Tokyo, University of Massachusetts Boston, Yale University and the Earth System Governance Network.

Both inductive and deductive approaches have been used with methods ranging from literature reviews and synthesis; case studies based on interviews; GIS-modelling; large surveys and statistical analysis; and more. The number of oral presentations at scientific conferences and other arenas by Fairtrans scholars exceeded what was anticipated at the start of the programme. Fairtrans scholars have attended international conferences and been invited to give several plenum speeches (see comprehensive list in section 9).

5.2 Societal benefits

At the heart of Fairtrans lies co-creation with key societal actors to build capacity, raise knowledge levels, and create and strengthen coalitions supporting Sweden's commitment to the Paris Agreement. Fairtrans has co-created knowledge and policy with the programme's CSO partners, bridging differences and identifying common ground on several climate policy relevant issues. Research findings from our work packages have fed into these discussions and have proved highly valuable to the partners themselves, including the development of individual partners' standpoints and reports, as well as in their respective communication. Fairtrans' senior researchers are continuously consulted and included in climate policy processes driven by our partners. The trade unions and Rural Sweden have stepped up in their climate leadership since our collaboration started, evident in new climate policies from the trade union partners and climate positioning at the Rural Parliament in May 2024.

All in all, this work has contributed to the achievement of the Swedish Parliament's environmental quality objective "Reduced Climate

Impact", as well as Sustainable Development Goal (SDG) 13, on Climate Action. Through the collaboration, and the focus on fair transformation, the work has moreover benefited a number of targets under SDG 13, Decent work and economic growth. The insights developed on these issues would not have been achieved without the co-production approach of Fairtrans.

By establishing a foundation for a unified manifesto between the partners in the programme, planned to be concluded in spring 2025, we have built a strong joint transformative capacity. We now look forward to present a common manifest before the end of Phase 1.

The executive programme for trade union leaders, leveraging SRC's equivalent experience with business leaders, has established Fairtrans as a platform to enable science-driven collaboration among labour market actors and develop a strong policy vision for a fair, fossil-free future. In Phase 2, we aim to build on and further develop the Fairtrans network, also including industry organisations, to encourage broader coalition-building for equitable climate action in Sweden and within the EU.



Union leaders and researchers gathered for the third round of Fairtrans' executive programme on a just transition in September, 2024. Photo: Minda Holm, Stockholm Resilience Centre.

Key research initiatives of the programme have examined the conditions, opportunities, and challenges associated with adopting and implementing climate policy suggestions in Sweden and internationally. The findings suggest that while it is possible to design stricter and more equitable policies with the potential of being accepted by the broader public, resistance to these measures persists, indicating a need for further investigation (Barthel et al. 2023; Lindvall et al. 2024a; 2024b).

Moreover, by conducting Sweden's first national citizens' assembly on climate, along with the extensive media coverage of the initiative, we have raised awareness on the value of deliberative processes and contributed to the broader national debate on climate policy. The outcome of the assembly suggests that when people have time to think, learn from experts and each other, and discuss in facilitated groups, they favour ambitious and fair climate policies.

Impact Stories

Testimonials from some of our keystone partners.

Johan Lindholm, President of The Swedish Trade Union Confederation, LO

– Fairtrans has given us access to research on a fair climate transition and to a good network. And involving our affiliates has helped us share the knowledge widely within the LO family.

“Everything flows from the top” and trade union leaders need to have knowledge about climate change and the climate transition. The executive programme, *Trade union leadership for a just climate transition*, helped us better understand what's at stake, strengthen our leadership, and filter out some of the irrelevant facts and misinformation present in the current debate.

The combination of research and practical policy in Fairtrans is very interesting. Participating in Fairtrans' workshops, as well as discussions with researchers and civil society representatives, has been useful for our policy development on climate and a just transition.

The climate transition is urgent, and the closer Fairtrans can get to concrete proposals on what a just transition policy looks like, the more it will help us.



Photo: LO/Clara Dagb

From a trade union perspective, we would like to see the link between the labour market and the climate transition strengthened in the future. The climate transition involves a major structural transformation that affects jobs, and Fairtrans can help strengthen knowledge about the link between climate policy and the labour market. For example, understanding scenarios for how the labour market could develop on the road to a fossil-free society under the Paris Agreement.

Managing conflicts between different fairness claims is important. Fairtrans helps navigate various perspectives by bringing together different actors and linking the discussions to research. We are also working on strengthening our local trade union's climate work and need guidance on how we communicate the climate transition in a way that engages members of the LO unions. We also need to work more with the language we use and how we talk about the climate transition, so we can get workers on board. It would be valuable to develop our understanding in that area with Fairtrans.

Therese Svanström, President of The Swedish Confederation of Professional Employees, TCO

– Fairtrans has contributed to knowledge building in TCO and has been an important sounding board in the design of our climate policy programme. The leadership programme has been incredibly valuable for both TCO and the affiliates who participated.

In our climate policy programme, we have poked and prodded the concept of a fair transition. We have landed on four principles that now guide our work. Here, the Fairtrans workshops and the dialogue with researchers has been valuable forums for our thinking. The leadership programme has also been an important forum for cross-union discussions on these issues.

In the collaboration, we have appreciated having heavyweight climate scientists a phone call or email away. It has been valuable to be able to anchor our work in the latest research. We have also made many valuable new contacts in civil society.

We believe that Fairtrans can further strengthen the support and legitimacy for a rapid and just transition by contributing to further knowledge building and providing concrete proposals and tools for a just transition.



Photo: Eva Edsjö

Göran Arrius, President of The Swedish Confederation of Professional Associations, Saco

– Saco’s members are strongly committed to climate issues. They also expect Saco to be actively involved and support climate transition issues. In our climate policy, Saco has clearly emphasised the importance of research and has demanded that the government pursue a more fact- and research-based climate policy. Here, the Fairtrans programme has played an important role in providing input and data, which is the main reason why Saco wanted to become a partner in Fairtrans. Fairtrans’ citizens’ assembly initiative has also been valuable, and Fairtrans’ survey shows broad public support for climate transition.

The executive training via Fairtrans has been important and knowledge-enhancing for our unions. In addition, we have benefited from all the thematic workshops, in which Saco has participated.

I would gladly return to the leadership programme. It created opportunities for both knowledge enhancement and dialogue between Saco, the other unions and researchers.

We hope that the leadership training is offered again. It is needed. The commitment to climate issues – as well as the support for a more far-reaching climate policy – is already strong among academics and clearly among the members of the Saco unions, a survey we conducted found.

We understand that a possible extension of the Fairtrans programme will focus on knowledge sharing at local level as well as continued policy making. This would further broaden the knowledge base and support local engagement.



Photo: Knut Capra Pedersen

Beatrice Rindevall, President of Swedish Society for Nature Conservation (SSNC)

– In a short time, Fairtrans has become a hub for civil society when it comes to co-operation on a fair climate transition. For the Swedish Society for Nature Conservation, it has increased our understanding of trade union issues and how the climate transition can contribute to improved Swedish labour market conditions. It has also created new collaborations, which strengthens our work for a fair climate transition on a daily basis.

Fairtrans has given us the opportunity to work closely and directly with many different trade unions, which has provided us both new insights and more opportunities to influence society. It has allowed



us to write joint opinion pieces as well as arrange guest lectures and joint workshops.

The collaboration has worked very well, thanks to the excellent leadership of Fairtrans' programme management. The full-day workshops have always been very rewarding, with high-level and insightful discussions. The workshops set such a good foundation that even between meetings the co-operation between the organisations continued smoothly.

For us, Fairtrans is an extremely important tool – both for our advocacy work and our co-operation with other organisations. By continuing with similar forums, we can continue this work. And we think this is only the beginning.

Peter Eklund, Member of the Board, Rural Sweden (Hela Sverige ska leva)

– Internally, we are building knowledge through workshops and sharing it across our organisation. We are now developing a future-oriented strategy with a focus on strengthening capacity, conditions and optimism. We would like Fairtrans to train members of Rural Sweden's board, people at our office and within our network of chairpersons.

Externally, Fairtrans has contributed to spreading knowledge and understanding of a just climate transition and citizens' assemblies. For us, particularly through participation in *Landsbygdsriksdagen 2024*, which is our most important platform to reach out to members and others involved in rural and development issues.

Our internal transition work is to develop a long-term strategy with goals for Rural Sweden. Access to science and civil society networks has been important for how our organisation can approach the climate transition and take into account the specific conditions and opportunities of rural areas for a just climate transition.

The workshops have been very useful in shaping our mindsets towards a just climate transition based on science.

In the future, Fairtrans can further strengthen the support and legitimacy of a just climate transition by offering a training that can advance the skills and awareness about a sustainable transition. The programme could also contribute by helping us develop a strategy for our transition work. Perhaps Fairtrans could train climate ambassadors, such as those in some participating trade unions, who could work for our movement.



6. Citizens' Assembly on Climate

9 March – 19 May 2024

As the main deliverable of WP1, the first national Swedish Climate Assembly (CA) '[Medborgarråd om klimatet](#)', deliberated and proposed recommendations to decrease Swedish emissions in light of the Paris Agreement. The focus was on transportation emissions because they are 1/3 of Swedish emissions, politically contested and affect citizens' everyday lives. The logic of investing in a climate assembly within Fairtrans was to broaden the co-production and societal engagement of Fairtrans, complementing engagement with organised civil society by engaging directly with citizens from all walks of life. This was the first climate assembly and the second ever national-scale citizens assembly in Sweden and offered an opportunity to generate and enrich the public discussion on climate politics.

The Swedish CA drew extensively on the international experience of climate assemblies in France, UK, Scotland, Denmark and Finland, through international advisors and the Knowledge Network on Climate Assemblies (KNOCA). This allowed Fairtrans to both reflect emerging best practices, as well as innovate at the cutting edge of CA practice. Innovations included methods to support systems-thinking, and having an explicit ambition as an independently organised CA, to generate and enrich the public discussion on climate politics.

A rigorous sortition process to recruit members was an essential precursor for diverse conversations and public legitimacy of the process. An independent survey firm randomly invited 7000 Swedish residents to participate and received nearly 500 applications including a short survey.

The Climate Assembly's suggestions were handed over to politicians, May 2024. Photo: Daniel Josefson, KIT.



60 members were then selected using an internationally recognised algorithm, to counter selection bias and almost exactly reflect national distribution of variables regarding demographics, geography, political affiliation and climate concern.

The CA meetings included 40 hours of deliberation over two in-person weekends and five online evenings, co-designed with consultants Digidem lab (<https://digidemlab.org/>), who also delivered and facilitated the meetings. Members heard from 20 experts who spoke on topics from general climate policy to transport, played an interactive climate science game (<https://climatefresk.org>) and engaged in small-group deliberation over potential recommendations. The final outcome included 22 recommendations with 62 specific suggestions, and one collective general statement. These were individually voted on by 49 members in the last weekend, and presented to politicians who attended from seven out of eight of the main political parties, including several lead party climate spokespeople.

The Fairtrans CA made a huge societal impact in Sweden. It was reported in some 90 different news TV, radio and newspapers and had a reach of 22 million on broadcast and social media (see section 9). Fairtrans researchers and climate

assembly members themselves have presented the CA and its findings at over 30 occasions to a range of venues and stakeholders including the the Swedish Parliament, Stockholm City Municipality, the Swedish Climate Policy Council, the Swedish Environmental Protection Agency, the international Knowledge Network on Climate Assemblies, and at political festivals.

The Fairtrans CA has created diverse opportunities to advance research on the practice and potential impact of citizens assemblies (co-financed by a 2M SEK Formas research project). Observations, surveys and interviews around the assembly, in collaboration with leading research centres on deliberative democracy, will be complemented by a public survey experiment exploring the discursive impact of such an unusually high profile CA. Initial publications from WP1 include Zeitfogel et al. (2024) on the impact of evidence framing in climate assemblies, two articles in review (Daw; Marquardt) and three master's theses. These discuss DMPs' potential to address the sustainability shortcomings of democracies in times where fact-based deliberation is becoming rare. DMPs can support existing representative democracy institutions by providing considered citizen input to policymakers, informing transdisciplinary research, and enriching public debate.



Forming suggestions on how to reduce Sweden's emissions. Photo: Marcus Lundstedt, Stockholm Resilience Centre.



Members of the Climate Assembly joined researchers and politicians for a seminar at the Swedish Parliament, November 2024. Photo: Per-Ola Öberg.



Swedish national television (SVT) covered the Climate Assembly. Interview with Tim Daw. Photo: Johannes Ernstberger, Stockholm Resilience Centre.

7. Events and stakeholder collaborations

For major events and stakeholder collaborations 2021/22 and 2023, see annual reports.⁶

Workshop #5

2024-04-22. Workshop #5 with programme parties. Theme: "Fair and effective climate policy – which decisions need to be made?" Partners and researchers of Fairtrans gathered at Saco in Stockholm with the aim of finding common ground on policy instruments for a fair transition. Under the guidance of moderators Mikael Karlsson, Eva Alfredsson, Roger Hildingsson, Oskar Lindgren, Anna Berg Grimstad, Helene Karlsson and Sofia Bernett, the participants delved into areas such as investments, skills supply, transport, food and energy. Initial presentation by Peter Olding, Federation Secretary at Saco. The workshop was co-funded by Saco.

Executive Programme on Just Transition for Trade Union Leaders

2024-09-11 (start of programme). Executive programme for trade union leaders: "Union leadership for a fair climate transition". The third round of Fairtrans' executive course gathers 14 union leaders from ten organisations for knowledge-enhancing lectures by leading researchers, joint workshop exercises and the development of long-term action plans for a just climate transformation. The course consists of three meetings on 1) The climate challenge, 2) The road ahead and 3) Learnings and next steps, of which the third meeting is to be held in January 2024. Led by Lisen Schultz, Stephan Barthel and Sofia Bernett.



Researcher Lisen Schultz leading the executive programme for trade unions. Photo: Minda Holm, Stockholm Resilience Centre.

Seminar: "The Climate Transition – how can we make it both fair and effective?" Almedalen, Visby
2024-06-26. Based on the common ground emerging within the Fairtrans programme, representatives from keystone partners LO, TCO, Saco and Swedish Society for Nature Conservation (Naturskyddsföreningen) presented their perspective on a fair climate transition, as a basis for a dialogue between members of the Swedish parliament from the government and the opposition. Moderated by Mikael Karlsson and Sofia Bernett. Hosted and co-funded by TCO. <https://www.youtube.com/watch?v=lzwT2FliML0>

The seminar was followed by a roundtable on the upcoming Fairtrans manifesto. Discussion with representatives from LO, TCO, Saco, Swedish Society for Nature Conservation (Naturskyddsföreningen) and members of Fairtrans' management and board on the process of reaching a common manifesto and joint communication on climate policy suggestions. Moderated by Mikael Karlsson. Hosted and co-funded by TCO.



Fairtrans' seminar with TCO in Almedalen, Visby. Photo: Helene Karlsson, Stockholm Resilience Centre.

Panel discussion: "Green Transition – for everyone?"

2024-06-27. Hosted by WIN WIN Gothenburg Sustainability Award. Sofia Bernett shared insights from the citizens' assembly in a discussion with Marika Palmér-Rivera, LO, and others. <https://almedalsveckan.info/program/69574>

⁶ <https://fairtrans.nu/om-fairtrans/>

Rural Parliament (Landsbygdsriksdagen)

2024-05-24, 2024-05-25, 2024-05-26. The biannual Rural Parliament was in Nyköping this year. Fairtrans' Programme Directors and two members of the Climate Assembly, which completed the weekend before, were invited to host a seminar where the results from the Climate Assembly were presented and discussed. The Programme Directors were invited to the final plenary where we also presented our research on how fairness influences attitudes to increased fuel taxes.

<https://landsbygdsriksdagen.se/aktuellt/rattvis-drivmedelsskatt-viktig/>

This directly influenced the panel discussion on rural politics.

<https://landsbygdsriksdagen.se/highlights/landsbygdsriksdagen-2024-fairtrans/>



TCO presented their new climate programme in August 2024.
Photo: Jonas Mellqvist.

Launch of TCO's Climate Programme

2024-08-20. TCO launched their new climate policy programme with nearly 50 suggestions for a fair climate transition. In connection with the launch, TCO held a breakfast seminar in which Fairtrans researcher Mikael Karlsson participated in the panel, along with representatives of several partners and potential collaboration actors for Fairtrans Phase 2. Fairtrans was mentioned by TCO Chair Therese Svanström as an enabling factor of the new programme, for example by uniting leaders from trade unions in our executive course. Researchers Mikael Karlsson and Lisen Schultz were scientific advisors during the process of forming the TCO programme.

<https://tco.se/fakta-och-politik/lansering-av-tco-s-klimatpolitiska-program>

Civil Society Forum, Brussels

2024-11-04, 2024-11-05. Mikael Karlsson and Sofia Bernett participated in a two-day workshop on shaping the European Green Deal, arranged by European Environmental Bureau (EEB), Solidar, SDG Watch Europe and Real Deal.

Civil Climate Engagement – Why Governments Must Include Everyone in the Transition

2024-11-18. Panel discussion in We Don't Have Time's broadcast from COP29 in Baku. The session explored European perspectives on how to engage civil stakeholders to achieve environmental, social, and climate targets. Participants: Isabella Lövin, Member of the European Parliament, Ludovic Voet, Confederal Secretary, ETUC, Marika Palmér-Rivera, Analyst Just Transition, LO, Rosaline Marbinah, Head of Policy, Oxfam, Mikael Karlsson, Associate Professor, Uppsala University.

Dialogues on Digital 2024

2024-11-15. Stockholm School of Economics. The theme this year was "Sweden's twin transition: Digital innovation for a sustainable tomorrow." Prof. Frank Geels held key-note and Associate Prof. Thomas Hahn (SRC) made a plenary presentation on Green growth: controlling or welcoming rebound effects? <https://www.hhs.se/sv/om-oss/calendar/hoi-events/2024/15-nov-2024---dialogues-on-digital-2024/>

Roundtable on a "handshake on climate" with parties of the labour market

2024-11-12. Lisen Schultz participated in a roundtable discussion with representatives of the Swedish labour market. The aim of the process, initiated and hosted by TCO, is to reach an agreement between the parties on how to contribute to reaching the climate goals while securing jobs and prosperity.

Viable cities

2024-09-5. Barthel, S. Plenum speech on public acceptance and deliberative democracy for achieving fossil free urban mobility. Viable Cities. Transition Lab Forum Live: Klimatsmart mobilitet 2030. Göteborg. <https://www.youtube.com/live/tlioQLAMjcY>



Stephan Barthel on stage at Transition Lab Forum, Viable Cities.



Stephan Barthel presented survey results at Fossil Free Sweden's annual conference. Photo: Anders G Warne, Fossilfritt Sverige.

Annual Conference Fossil Free Sweden (Fossilfritt Sverige)

2024-10-16. Plenum speech by Stephan Barthel on the role for accounting for public acceptance of when aiming to implement stringent climate mitigation policy in Sweden. Fossilfri Konkurrenskraft. Stockholm: <https://www.youtube.com/watch?v=pwC9cOpGpI8>

Conference: Saco MAKRO "Socio Economic decisions in a climate crisis"

2024-08-28. Lisen Schultz participated in a closing panel talk on stage on how the economy and behaviours need to change, and the obstacles for change. <https://www.saco.se/opinion-fakta/aktuellt-fran-saco/makro/>

Royal Swedish Academy of Engineering Sciences (IVA)-conference series

2024-09-11. Barthel, S. Plenum speech and panel discussion on the role of spatial planning in urban design for creating attractive societies during the industrial transition in the north of Sweden. Den Gröna samhällsomställningen i norr: Attraktiva samhällen. Do Space, Gävle. <https://www.iva.se/det-iva-gor/evenemang/den-grona-samhallsomvandlingen-i-norr-attraktiva-samhallen/>

Royal Swedish Academy of Engineering Sciences (IVA)-conference series.

2024-09-11. Sjöberg, S. Plenum Speech on urban social sustainability for creating attractive societies during the industrial transition in the north of Sweden. Den Gröna samhällsomställningen i norr: Attraktiva samhällen. Dp Space Gävle. <https://www.iva.se/det-iva-gor/evenemang/den-grona-samhallsomvandlingen-i-norr-attraktiva-samhallen/>

Mistra Jubilee Seminar Series

2024-02-01, 2024-02-02. Barthel, S. Panel discussion: How do we build a sustainable society? Departing from electrification and the green industrial transition, a discussion about how to account for fairness and a resilient climate transformation for long term sustainability. Wood Hotel, Skellefteå.

Sällskapet riksdagsledamöter och forskare (Rifo)

2024-10-23. Hahn, T. Seminar for Swedish Members of Parliament on sustainable agriculture and natural resources and presentation of our report. The Royal Swedish Academy of Agriculture and Forestry, Stockholm.

Framstegsdagen Region Gävleborg

2024-08-12. Barthel, S. Public Speech. Carbon neutral and healthy urban development. Regional Gävleborg Annual Conference - Framstegsdagen. Bollnäs.

Klimatseminariet, Region Jämtland och Härjedalen

2024-08-18. Lindvall, D. Presentation on the Climate Assembly. Participation in panel talk, workshop facilitator. <https://www.youtube.com/watch?v=mpwdRwR3U1Q&t=19837s>

Workshop on policy packages, KTH Royal Institute of Technology

2024-04-10. Jens Ergon and Mikael Karlsson, science partners in Mistra Sustainable Consumption, participated in a workshop about policy packages and modelling of policy packages for just transformations, with Fairtrans partners including LO, Naturskyddsföreningen and Naturvårdsverket.

Annual Meeting of Nordens Fackliga Samorganisation. Torshavn, Faroe Islands.

2024-04-23-26. Mikael Karlsson gave a keynote speech on the theme "Klimaträttvisa och facket".

Annual Meeting of Nordens Fackliga Samorganisation, Torshavn, Faroe Islands

2024-04-23 -26. Mikael Karlsson moderated a thematic session 'Climate justice and the union movement'.

Conference for the Swedish labour movement science network, LO, Stockholm

2024-04-18. Jens Ergon gave a presentation on A green Swedish model: Conditions for a just transformation

Presentation at The Swedish Environmental Protection Agency

2024-03-24. Daniel Lindvall gave a presentation on acceptance of policy measures.

Presentation at TCO Climate Council

2024-05-07. Daniel Lindvall gave a presentation on fairness and acceptance of climate policy.

Conference on the 2030 Agenda, Formas

2024-05-21. Daniel Lindvall presented the Fairtrans programme.

Workshop on social acceptance of climate policy measures, Swedish Climate Policy Council

2024-09-25. Daniel Lindvall participated and gave a presentation.

Presentation at Saco Klimat Collaboration Council

2024-10-17. Mikael Karlsson participated and gave a presentation on a fair climate transition.

Dialogue meeting with partners on the second programme period of Fairtrans

2024-09-16. Thomas Hahn, Stephan Barthel, Mikael Karlsson, Sofia Bernett.

Dialogue meeting with partners on the second programme period of Fairtrans

2024-09-17. Thomas Hahn, Stephan Barthel, Sofia Bernett.

Dialogue meeting with partners on the second programme period of Fairtrans

2024-10-03. Thomas Hahn, Mikael Karlsson, Sofia Bernett.

LUs Hållbarhetsvecka, Ekonomihögskolan, Lund

2024-04-10. Roger Hildingsson participated in a seminar on EU climate policy and the EY election.

LUs Hållbarhetsvecka, Pufendorfinstitutet, Lund

2024-04-10. Roger Hildingsson moderated a seminar on inclusive climate transformation.

Panel dialogue, Vetenskapsrådet, Almedalen week, Visby

2024-06-27. Mikael Karlsson participated in a panel on "Open science - a democratic power".

Panel dialogue, Science and the public, Almedalen week, Visby

2024-06-27. Mikael Karlsson participated in a panel on "Politicians question scientists".

Panel debate, on transportation, Almedalen week, Visby

2024-06-27. Mikael Karlsson participated in a panel on heavy transport and climate.

EU parliament election debate, CSR Västsverige Göteborg

2024-05-23. Mikael Karlsson moderated a debate between EP candidates

Co-creation meeting with TCO in preparation of workshop #5

2024-03-27. Sofia Bernett and Mikael Karlsson

Co-creation meeting with Saco in preparation of workshop #5

2024-04-03. Sofia Bernett, Mikael Karlsson and Oskar Lindgren

Co-creation meeting with LO in preparation of workshop #5

2024-04-12. Sofia Bernett, Mikael Karlsson and Oskar Lindgren

Workshop. Urban Biodiversity, Sustainability and Health. IS Global, Barcelona.

2024-01-15. Stephan Barthel.

Workshop. Territoriell Strategi för Region Gävleborg.

2024-03-21. Stephan Barthel.

Workshop. Koldioxidneutralt Gävle

2024-04-16. Stephan Barthel.

Cycling for Climate Seminar. Municipalities of Gävle, Eespo, Riga and Pärnu.

2024-01-17. Stephan Barthel.

Symposium Co-creation for urban sustainability. Gävle Rådhus.

2024-06-18. Stephan Barthel.

Viable Cities. Major Green Industrial Establishments. Göteborg

2024-09-05. Stephan Barthel.

Researchers' Desk, Online seminar about the climate assembly

2023-12-06. Thomas Hahn and Tim Daw

Presentation of climate assembly for Fairtrans partners

2024-02-08 Thomas Hahn, Sofia Bernett and Tim Daw

Press conference at Stockholm Resilience Centre
2024-03-07 Sofia Bernett, Tim Daw, Daniel Lindvall plus facilitators, members, expert witnesses and mentors Carolina Klüft and Sverker Sörlin introduced the climate assembly.

Press conference at Stockholm Resilience Centre
2024-05-20 Sofia Bernett, Tim Daw, Daniel Lindvall plus members and mentors presented the results of the climate assembly.



Press conference on the Climate Assembly lead by Sofia Bernett.
Photo: Johannes Ernstberger, Stockholm Resilience Centre.

Swedish Environmental Protection Agency and Swedish Meteorological Institute interagency climate communication network.
2024-05-24. Tim Daw

WWF webinar for Swedish municipalities
“Ökad acceptans för klimatomställningen inom transportsektorn.”
2024-06-10. Tim Daw and one climate assembly member

IVL transport policy group meeting (hybrid)
2024-06-11. Tim Daw and one climate assembly member

International IDEA Stockholm Series of Public Lectures on Climate Change and Democracy
2024-06-11. Tim Daw as discussant and panel member along with Nicole Curato

Naturskyddsföreningen (Swedish Society for Nature Conservation)
2024-06-19. Mikael Karlsson and Sofia Bernett, presentation of climate assembly

Frihamnsdagarna political festival in Gothenburg
2024-08-29. Tim Daw and one climate assembly member took part in a panel on “How do we get acceptance for transport transition?”

Frihamnsdagarna political festival in Gothenburg. WIN WIN Gothenburg Sustainability Award and CSR Västsverige
2024-08-30. Tim Daw and one climate assembly member. Panel and mingle about climate assemblies.

Swedish Environmental Protection Agency climate analysis unit
2024-09-10. Sofia Bernett and Tim Daw, presentation of climate assembly

Swedish Climate Policy Council seminar on ‘Social Acceptance for climate policy. What does research say?’
2024-09-25. Tim Daw and Daniel Lindvall

World Wide Fund for Nature, Stockholm
2024-11-07. Tim Daw, presentation of climate assembly

Knowledge Network On Climate Assemblies. Learning call on the Swedish Climate Assembly
2024-11-26. Tim Daw, Sofia Bernett

Seminar in the Swedish Parliament on the climate assembly
2024-11-27. Daniel Lindvall, Tim Daw, climate assembly members

Knowledge Network On Climate Assemblies (KNOCA). Online workshop on Systems thinking in climate assemblies
2024-02-01. Workshop designed by Sarah Cornell, David Collste and Tim Daw and hosted by KNOCA

MISTRA Sustainable consumption Webinar: Citizens’ Assemblies for transition
2023-12-12. Tim Daw as one of 5 panelists

8. Publications

8.1 Scientific publications 2021–2024

2021 – 1 publ.

1. Hahn, T., Eggers, J., Subramanian, N., Caicoya, A. T., Uhl, E., Snäll, T. (2021). Specified resilience value of alternative forest management adaptations to storms. *Scandinavian Journal of Forest Research*. <https://doi.org/10.1080/02827581.2021.1988140>

2022 – 7 publ.

2. Colding, J., Barthel, S., Ljung, R., Eriksson, F., Sjöberg, S. (2022). Urban Commons and Collective Action to Address Climate Change. *Social Inclusion* <https://doi.org/10.17645/si.v10i1.4862>

3. D'Amato, D., Matthies, B. D., Hahn, T., Toppinen, A. (2022). Private governance of biodiversity and ecosystem services. Findings from Nordic Forest companies. *Frontiers in Sustainability*. * <https://doi.org/10.3389/frsus.2022.945374>

4. Kronsell A, Hildingsson R (2022) Green theory. In: Hay, C., Lister, M., & Marsh, D. (eds.) *The State: Theories and Issues*, 2nd edition, New York: Bloomsbury Academic, Chapter 7.*

5. Johansson, E. Brogaard, S. Brodin, L. (2022). Envisioning sustainable carbon sequestration in Swedish farmland. *Environmental Science & Policy*, 135:16–25. <https://doi.org/10.1016/j.envsci.2022.04.005>

6. Linder, N., Giusti, M., Samuelsson, K., Barthel, S. (2022). Pro-environmental habits: An underexplored research agenda in sustainability science. *Ambio* 51: 46–556. <https://doi.org/10.1007/s13280-021-01619-6>

7. Hahn, T, Koh, N.S., Elmqvist, T. (2022). No net loss of biodiversity, green growth, and the need to address drivers. *Preview. One Earth*, 5 (June 17), 612–614. <https://doi.org/10.1016/j.oneear.2022.05.022>

8. Barthel, S., Colding, J., Hiswåls, A.-S., Thalén, P. & Turunen, P. (2022). Urban green commons for socially sustainable cities and communities. *Nordic Social Work Research*, 12(2), 310–322, 2022. <https://doi.org/10.1080/2156857X.2021.1947876>*

2023 – 11 publ.

9. Lindvall, Daniel (2023). What motivates urban climate leaders? A study of urban climate governance in eight Swedish municipalities. *International Journal of Urban Sustainable Development*. <https://doi.org/10.1080/19463138.2023.2253755>

10. Lindvall, Daniel & Karlsson, Mikael (2023). Exploring the democracy-climate nexus: a review of correlations between democracy and climate policy performance. *Climate Policy*. <https://doi.org/10.1080/14693062.2023.2256697>

11. Cong, C., Pan, H., Page, J., Barthel, S., Kalantari, Z (2023). Modeling place-based nature-based solutions to promote urban carbon neutrality. *Ambio* 52 (8), 1297–1313 <https://doi.org/10.1007/s13280-023-01872-x>

12. Pan, H., Page, J., Shi, R., Barthel, S., et al. (2023). Contribution of prioritized urban nature-based solutions allocation to carbon neutrality. *Nat. Clim. Chang.* 13, 862–870. <https://doi.org/10.1038/s41558-023-01737-x>

13. Karlsson M (2023) Denialism. In N. Wallenhorst & C. Wulf (eds.), *Handbook of the Anthropocene: Humans Between Heritage and Future* (s. 645–649). Springer International Publishing. <https://doi.org/10.1007/978-3-031-25910-4>

14. Hahn, T., Sioen, G.B., Gasparatos, A., Elmqvist, T., Brondizio, E., Gómez-Baggethun, E., Folke, C., Setiawati, M.D., Atmaja, T., Arini, E.Y., Jarzebski, M.P., Fukushi, K., Takeuchi, K. (2023). Insurance value of biodiversity in the Anthropocene is the full resilience value. *Ecological Economics*, Volume 208, 107799. <https://doi.org/10.1016/j.ecolecon.2023.107799>

15. Karlsson M, Westling N., Lindgren O (2023). Climate-Related Co-Benefits and the Case of Swedish Policy. *Climate* 11, 40. <https://doi.org/10.3390/cli11020040>

16. Lindgren, O., Hahn, T., Karlsson, M., Malmaeus, M. (2023). Exploring sufficiency in Energy Policy: Insights from Sweden. *Sustainability: Science, Practice, and Policy* 19(1):2212501, <https://doi.org/10.1080/15487733.2023.2212501>

17. Lindvall, Daniel, (2023). Why municipalities reject wind power: A study on municipal acceptance and rejection of wind power installments in Sweden. *Energy policy*. <https://doi.org/10.1016/j.enpol.2023.113664>

18. Basnet, S., Wood, A., Rös, E., Jansson, T., Fetzer, I., & Gordon, L. (2023). Organic agriculture in a low-emission world: Exploring combined measures to deliver a sustainable food system in Sweden. *Sustainability Science* 18(1), 501–519*. <https://doi.org/10.1007/s11625-022-01279-9>

19. Mosnier A, Javalera-Rincon V, Jones S, Basnet, S., Fetzer I, et al. (2023) A decentralized approach to model national and global food and land use systems, *Environ. Res. Lett.* 18 045001, <https://doi.org/10.1088/1748-9326/acc044>

2024 – 15 publ. published/accepted so far

20. Alfredsson, E. C., Lindvall, D., Karlsson, M. & Malmaeus, M. J. (2024). Industrial climate mitigation strategies and the remaining fair carbon budget–The case of Sweden. *Next Sustainability*, 3, 100031. <https://doi.org/10.1016/j.nxsust.2024.100031>
21. Rex, A. & Westlund, H. (2024). Coworking and local development outside metropolitan areas in Sweden. *Journal of Rural Studies* (105), 103185. <https://doi.org/10.1016/j.jrurstud.2023.103185>
22. Colding, J., Nilsson, C. & Sjöberg, S. (2024). Smart Cities for All? Bridging Digital Divides for Socially Sustainable and Inclusive Cities. *Smart Cities*, 7(3), 1044–1059. <https://doi.org/10.3390/smartcities7030044>
23. Lindvall, D., Sörqvist, P. & Barthel, S. (2024). Overcoming the headwinds: Can policy design shape public acceptance of wind power in Sweden? *Energy Research & Social Science*, Volume 116. <https://doi.org/10.1016/j.erss.2024.103674>
24. Egegård, C. H., Lindborg, M., Gren, Å., Marcus, L., Pont, M. B. & Colding, J. (2024). Climate Proofing Cities by Navigating Nature-Based Solutions in a Multi-Scale, Social–Ecological Urban Planning Context: A Case Study of Flood Protection in the City of Gothenburg, Sweden. *Land*, 13(2), 143. <https://doi.org/10.3390/land13020143>
25. Nilsson, C., Levin, T., Colding, J., Sjöberg, S. & Barthel, S. (2024). Navigating complexity with the four pillars of social sustainability. *Sustainable Development*. <https://doi.org/10.1002/sd.2982>
26. Samuelsson, K., Brandt, A. S., Barthel, S., Linder, N., Lim, N. J., Hallman, D. & Giusti, M. (2024). Diverse experiences by active travel for carbon neutrality: A longitudinal study of residential context, daily travel and experience types. *Geography and Sustainability*, <https://doi.org/10.1016/j.geosus.2024.05.002>
27. Lindgren, O., Elwing, E., Karlsson, M. & Jagers S. (2024). Public acceptability of climate-motivated rationing. *Humanities and Social Sciences Communications* 11: 1252: <https://www.nature.com/articles/s41599-024-03823-7>
28. Mendy, L., Karlsson, M. & Lindvall, D. (2024). Counteracting climate denial: A systematic review. *Public Understanding of Science* 33:4 <https://doi.org/10.1177/09636625231223425>
29. Feder, C., Callegari, B. & Collste, D. (2024). The system dynamics approach for a global evolutionary analysis of sustainable development. *J Evol Econ* 34, 351–374 <https://doi.org/10.1007/s00191-024-00866-6>
30. Emilsson, K., Hildingsson, R. & Fritz, M. (2024). The active, the sympathetic, and the reluctant: Political action and eco-social attitudes among Swedish residents. *European Political Studies Journal**. <https://doi.org/10.1017/S1755773924000213>

31. Lindvall, D., Sörqvist, P., Jagers, S., Lindeberg, S., Karlsson, M., Sjöberg, S. & Barthel, S. (2024). The Role of Fairness for Accepting Stricter Carbon Taxes in Sweden. *Climate* 12, 170. <https://doi.org/10.3390/cli12110170>

32. Zeitfogel, C., Daw, T. & Collste D. (2024). What do you mean “Climate Change”? An analysis of climate change framings in three climate assemblies. *Environmental Science & Policy* 162:103936. <https://doi.org/10.1016/j.envsci.2024.103936>

33. Hahn, T., Morfeldt, J., Höglund, R., Karlsson, M. & Fetzer, I. (2024). Estimating countries’ additional carbon accountability for closing the mitigation gap based on past and future emissions. *Nature Communication* 15:9707. <https://doi.org/10.1038/s41467-024-54039-x>

34. Nässén, N., Lilja, M., Sjöberg, S. & Colding, J. (2024). Community climate commons for collective climate action. *Sustainable Development*. <https://doi.org/10.1002/sd.3227>

2024 – 18 publ. submitted/in review

35. Daw et al. (in review) Deliberative minipublics’ potential for sustainability science and transformation. Submitted to *Ambio*.
36. Raymond, C. M. et al. & Barthel S. (in review) AI and Participatory Urban Planning: Uses, Opportunities and Risks. Submitted to *Landscape and Urban Planning*.
37. Linder, N., Lindvall, D., Jagers, S., Sörqvist, P. & Barthel, S. (in review). It would feel weird to not drive my car! Exploring the role of habits in social acceptance of carbon taxations. Submitted to *Ambio*.
38. Lindvall, D., Sörqvist, P. & Barthel, S. (in review). The Polarisation of Energy Preferences – A study on social acceptance of wind and nuclear power attitudes in Sweden. Submitted to *Climate and Energy Policy*.
39. Colding, J., et al. (in review) The potential of teleworking for collective mobilization towards stronger community ties in carbon neutral human habitats. Submitted to *Planning Practice & Research Journal*.
40. Marquardt, Blum, Daw, Dugasseh, Heitzig, Hysing, Jensen, Kulha, Langkjær, Lindvall, Nasiritousi, Pfeiffer, Schlosberg, Toikka, Tønder (in review) Reconciling Democracy and Sustainability? Three Political Challenges and the Role of Democratic Innovations. Submitted to *Sustainability: Science, Practice and Policy*.
41. Brandstedt, E., Karlsson, M. et al. (in review) The Contested Meaning of Climate Leadership: An Ameliorative Analysis. Submitted to *Environmental Politics*
42. Ergon, J., Hildingsson, R., & Karlsson, M. (in review). Exploring a green Swedish model: Contradictory and coinciding interests on a just climate transformation in Sweden. Submitted to *Ambio*.

43. Ergon, J., Larsson, M., Finnveden, G., Karlsson, M., Gutzianas, I. & Kiss-Dobronyi, B. (in review) How to spend 8 billion Swedish Crowns: Modelling policy packages for a just transformation. Submitted to Climate Policy.

44. Lindgren, O. (in review) The political economy of rationing as a climate policy instrument. Submitted to Climatic Change.

45. Martin, R., Hahn, T., Orach, K. & Wallin, I. (in review) The transformation to Continuous Cover Forestry in Germany over the last century. Submitted to Environmental Policy and Governance.

46. Mendy, L. & Karlsson, M. (in review) Coping with An Antagonistic Climate. Submitted to AMBIO.

47. Malmaeus, M., Alfredsson E.ö & Lindblom E. (in review) On the allocation of critical metals between nations for a just green transition. Submitted to Environmental Development.

48. Knaggård, Å. & Hildingsson, R. (in review) The Swedish carbon tax revisited: Multiple streams dynamics cutting across policy areas and political levels. Submitted to Policy Studies Journal.

49. Wiholm, A., Remmen, A. & Hahn, T. (in review). Decarbonisation, Green Port, Systems Thinking, NetZero. Submitted to Journal of Cleaner Production.

50. Berg Grimstad, A., Karlsson, M., Nasiritousi, N. & Glass J (in review) A framework for strategy coherence: examples from the European Green Deal. Submitted to Environmental Politics.

51. Thollander, P., Barthel, S. et al. (in review). Advances in the social construction of energy management and energy efficiency policy programmes. Submitted to Nature Communications.

52. Zwetsloot, K., Collste, D., Hahn, T., Bennich, T. & Pedercino, M. (in review) Degrowth policies can improve social equity whilst reducing environmental pressures. Submitted to Nature Sustainability.

*No Acknowledgement to Mistra/Formas

8.2 Policy reports and popular science reports 2021-2024

2021

[Potentialer inom styrkeområdet Smarta Hållbara Städer och Samhällen](#)

Barthel, S. Region Gävleborg, 2021

2022

[Tillväxten inför verkligheten](#)

Malmaeus, M. & T. Hahn. COGITO, 2022

[Pathways for food and land use systems to contribute to global biodiversity targets](#)

Jones S, I. Fetzer et al. Montpellier/Paris. 2022.

[Fairtrans Rapport 1: Rättvisa koldioxidbudgetar för Sverige.](#)

Hahn, T., Fetzer, I., Karlsson, M., Ergon, J., Alfredsson, E., Malmaeus, M., Barthel, S., Colding, J. 2022

2023

[Fairtrans Rapport 2: Investerings betydelse för klimatomställningen](#)

Alfredsson, E., Malmaeus, M., Lindvall, D., Karlsson, M. 2023.

[Fairtrans Rapport 3: Rättviseperspektiv på digitaliseringens roll för omställning mot ett fossilfritt Sverige](#)

Colding, J., Sjöberg, S., Barthel, S., Svensson-Wiklander, M., Rex, A., Andersson, P., Nordin, K., Hahn, T. 2023.

[Coworking i Sverige](#)

The Remote Lab 2023.

2024

[Medborgarråd om klimatet - Uttalande och förslag](#)

Stockholms universitet, 2024.

[Vad är en rättvis klimatomställning?](#)

Sjöberg, S., Alfredsson, E., Colding, J., Hahn, T., Malmaeus, M. & Barthel, S. Fairtrans Report, University of Gävle. 2024.

[Bruka utan att förbruka.](#)

Svensson, H., Wijkman, A., Sylwan, P., Gerremo, I., Hahn, T., Edling, P. Slutrapport från en av KSLA:s klimatgrupper. 2024.

[Kapacitetsbyggande för ekosocial integration: Utmaningar och möjligheter för Lunds kommun.](#)

Khan, J., Hildingsson, R., Wahlund, M., and Persson, A. IMES Rapport 138. Lunds universitet. 2024.

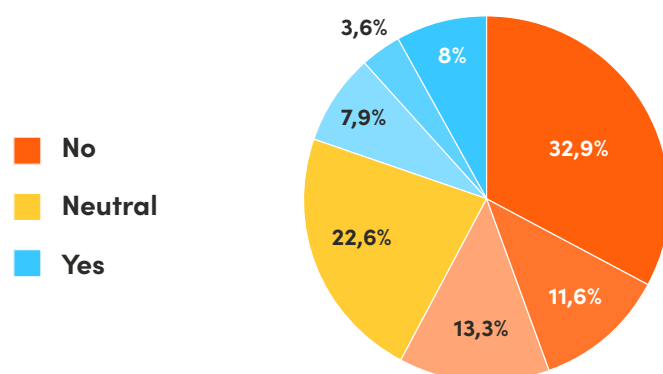
Fair Transformations Towards Sustainability
Olsson, P., Sivertsson, T. Research Fronts and Insights for Phase 2 from the FAIRTRANS Project. Fairtrans Report, Stockholm Resilience Centre. 2024.

Klimatpolitiken i Sverige – ett kunskapsunderlag, utkast 3.0. Karlsson, M., Hildingsson, R., Alfredsson, E., Berg Grimstad, A., Lindgren, O. (2023). Presenterad inför Fairtrans Workshop #5, Styrmedel för en verksam och rättvis klimatomställning, Saco, Stockholm, 2024-04-22.

[Rättvis klimatomställning](#)

Barthel, S., Karlsson, M. Resultat från Fairtrans enkät om svenskarnas inställning till klimat- och energiomställningen. Fairtrans Report, University of Gävle. 2024.

It is more important that politicians work for low fuel prices than to allocate money to the transition to a fossil-free society



Here, the answer is a clear 'no.' In other words, there is a majority in favor of investing in the transition instead of focusing on low fuel prices.

Figure 11. In a large survey with over 5,000 respondents, 57.8% do not support the statement "It's more important that politicians lower fuel prices than invest in a transformation to a fossil-free society". A scale 1–7 was used where 1 is the dark red (strongly against) and 7 is the dark green (strongly support). (Barthel & Karlsson, 2024)

8.3 Master's theses 2021–2024

[Acknowledging Rebound Effects in Policymaking?](#)

Lindgren, O. The Case of Demand-Side Mitigation Strategies in Sweden. Uppsala University. 2022.

[What do you mean by climate change?](#)

Zeitfogel, C. Framings of climate change in citizens' climate assemblies. Stockholm Resilience Centre, Stockholms universitet. 2023.

[A new path to sustainability and justice](#)

Reich, H. Questioning the role of deliberative mini-publics in transformations. Stockholm Resilience Centre, Stockholms universitet. 2023.

[Improving Deliberative Mini-Publics](#)

Vegter, G., Falk, T. Insights from Participants and Organisers through IPO Analysis of Survey Data. Sustainability Science–Sustainable Decision-Making, Gävle Högskola. 2023.

[The change makers of forestry](#)

Brunner, L. A silvicultural silver lining. Stockholm Resilience Centre, Stockholms universitet. 2023.

[Can degrowth deliver social wellbeing within ecological limits?](#)

Zwetsloot, Karel. Dynamics and interactions of degrowth policies in Sweden using iSDG simulation modelling, Master thesis, Stockholm Resilience Centre, Stockholm University. 2024.

9. Scientific conference presentations

2021

Karlsson, M. Presentation at the seminar "Shaping the biomass energy discourse", hosted by the Swedish Members of the European Parliament Jessica Polfjård and Erik Bergkvist. 2021. See: <https://f3centre.se/sv/nyheter-event/shaping-the-biomass-energy-discourse/>

Karlsson, M. Presentation at the seminar "Biomassans klimatpåverkan – Sant och falskt", arranged by f3 Svenskt kunskapscentrum för förnybara drivmedel. 2021. See: <https://www.youtube.com/watch?v=2hQN87ldcCI>

2022

Brodin, L. Poster presentation, Envisioning sustainable carbon sequestration in Swedish farmland, Mötesplats Biosfär, 2022-10-12 <https://biosfarprogrammet.se/motesplas-biosfar/>

Karlsson. Skogsfrågan efter valet: behöver vi välja mellan biologisk mångfald och klimat? Speech at the Annual Climate Seminar, Östersund, 2022-09-21

Collste, D, Fetzer, I. Hahn T. Three-tier approach to a fair national carbon budget, Swedish Climate Symposium, Norrköping, 2022-05-16.

Hahn, T. Presentation on Energy Sufficiency at European Society for Ecological Economics Conference, Pisa, Italy. 2022-06-16.

Hahn, T: Fair national carbon budgets, European Society for Ecological Economics, Pisa, Italy, 2022-06-15.

Hahn, T: Fair national carbon budgets, Nordic Environmental Social Science (NESS) Conference, Göteborg, 2022-06-07.

Lindgren, O. Presentation on Energy Sufficiency at NESS (Nordic Environmental Social Science) Conference, Göteborg. 2022-06-07.

Organising, chairing (Mikael Karlsson) and co-chairing (Eva Alfredsson) a workshop at Nordic Environmental Social Science (NESS) Conference, Göteborg, 2022-06-07.

Organising, chairing (Tim Daw) a workshop at Nordic Environmental Social Science (NESS) Conference, Göteborg, 2022-06-07.

Daw, Hahn, Karlsson, Lindvall et al. Deliberative Minipublics' Potential for Sustainability Science and Transformations. Full paper presented at Nordic Environmental Social Science Conference (NESS), Göteborg. 2022-06.

Isacs, L. Karlsson, M. Efficiency as a non-transformative concept in climate policy. Full paper presented at Nordic Environmental Social Science Conference (NESS), Göteborg, Juni 2022.

Mendy L and Karlsson M. Towards a schematic of responses to climate science denial – a review. Full paper presented at Nordic Environmental Social Science Conference, (NESS) Göteborg. 2022-06.

Ergon, J. Analysing conditions for green transformations: Elements of a Post-Polanyian framework. Full paper presented at Nordic Environmental Social Science Conference (NESS) in Göteborg. 2022-06.

Barthel, S. Resilience implications of teleworking strengthening transformation to a fossil-free future. Conference proceeding for The Nordic Environmental Social Science Conference (NESS): Emergency and transformation, Gothenburg University. 2022-06-07-09.

2023

Stryamets, N. Diversification of forest benefits: a case from small-scale forest farmers in Sweden. FORESTED LANDSCAPES in the Post-2020 Global Biodiversity Framework: mitigation options towards implementation of the SDGs, Evora, Portugal. 2023-10-26-30.

Lindgren, O. Öhman F, VanDeveer S and Karlsson M. Towards a research agenda on environmental policy backlash. The Annual conference of the Swedish Political Science Association (SWEPSA). Göteborg, Sweden. 2023-10-04-06.

Stryamets, N. Non-wood forest products for SDGs: case from Bukovina (Ukraine and Romania). 5th Non-wood forest products Symposium, Turkiet. 2023-09-26-28.

Lindgren, O. Public acceptability of rationing as a climate policy instrument. Beyond crisis – Beyond normal Conference, Trondheim. 2023-09-27-28.

Lindvall, D. Paneldebatt, Athens Democracy Forum. Aten, Grekland. 2023-09-28.

Rex, A., Westlund, H. Coworking and regional spread of growth enterprises. The 17th MARG (Marginal Areas Research Group) conference on "Social Capital and Development Trends of Countryside in Knowledge Society", Inverness, Skottland, 2023-07-24-25.

Brodin, L. More Carbon in the soil for Multiple Benefits. North European Regional Meeting, Helsingfors. 2023-06-08.

Karlsson, M. "Science-Policy Interfaces: From Warnings to Solutions". Keynote speech på internationella konferensen Open Science – from policy to practice conference, Naturhistoriska riksmuseet, Stockholm. 2023-05-17. <https://www.youtube.com/watch?v=rNQL2SHiXq4>

Lindvall, D. Fair transitions and democratic development. PSA Conference, Liverpool, Storbritannien. 2023-04-05.

Barthel, S. Keynote Speech, Kick-off. Centre For Urban Climate Resilience. University of Augsburg, Tyskland. 2023-03-09.

2024

Daw et al. The Swedish National Climate Assembly – 7th June, FACTOR programme workshop, Turku University, Turku, Finland. 2024

Daw. Who's in the room, Draft paper presented at Nordic Environmental Social Science Conference, Turku, Finland. 2024-06.

Organising, chairing (Tim Daw) a workshop at Nordic Environmental Social Science (NESS) Conference, Turku, Finland. 2024-06.

Mendy, Sokolova and Möckel. Facework in a Citizens Assembly for the Climate: Being everything for everyone all at once. Paper submitted to and presented at Nordic Environmental Social Science Conference, Turku, Finland. 2024-06.

Stryamets, N., Elbakidze, M., Hahn, T. Continuous cover forestry for diversification of forest benefits: a case from small-scale forest farmers in Sweden. Oral presentation at IUFRO (the International Union of Forest Research Organisations), World Congress, Stockholm. 2024-06.

Berg Grimstad, Karlsson, Nasiritousi, Glass (2024) A framework for strategy coherence: examples from the European Green Deal. Full paper presented at 16th NESS Conference, Turku, Finland. 2024-06-04-06.

Ergon, J., Hildingsson, R., and Karlsson, M. Exploring a 'green' Swedish model: Contradictory and coinciding interests on a just climate transformation in Sweden. Full paper presented at 16th NESS Conference, Turku, Finland. 2024-06-04-06.

Ergon, J. Presentation: Inequality and emissions: Managing the interlinked challenges of a green transformation. Inequality and the Environment Symposium, Sciences Po, Paris. 2024-01-18.

Ergon, J., Larsson, M., Finnveden, G., Karlsson, M., Gutzianas, I., Kiss-Dobronyi, B. How to spend 8 billion Swedish Crowns: Modelling policy packages for a just transformation. Full paper presented at 16th NESS Conference, Turku, Finland. 2024-06-04-06

Barthel, S. The Swedish Climate Symposium. Conference Session. Sectorial Climate Change Impact. Norrköping. 2024-05-16.

Barthel, S. Key-note IS Global Barcelona: Nature Based Solutions for Urban Climate Resilience and Sustainability. 2024-01-12.

Khan, J. and Hildingsson, R. (2024). Local sustainability strategies and eco-social integration: The case of Lund. Paper presented at ECPR Joint Sessions, Lüneburg, Germany. 2024-03-25-28.

Lindvall, D. Conference, Democracy Futures. Capability Building and Horizon Scanning. PACE Foundation. Washington DC. 2024-10-08-09.

Lindvall, D. Workshop, Can Democracy Survive Climate Change? Title: "Climate change as a factor renegotiating existing structures of democracy". Kings College London, 2024-11-5-6.

Lindvall D, Roundtable on Democracy and Climate, 2024. Albert Hirschman Centre on Democracy, Geneva Graduate Institute, Kofi Annan Foundation. Title; "How to foster democratic practices for climate action?". 2024-02-07. https://www.kofiannanfoundation.org/wp-content/uploads/2024/07/Outcome_document_issue-brief_124.pdf

Lindvall, D, Pfeiffer, F. Democratic Ideals in the Climate Transition. Preferences for deliberative democracy and expert governance in Sweden. At Nordic Environmental Social Science Conference. Åbo Akademi University and University of Turku. 2024.

Khan, J. and Hildingsson, R. Local sustainability strategies and eco-social integration: The case of Lund. Paper presented at ECPR Joint Sessions, Lüneburg, Germany. 2024-03-25-28.

Alfredsson, E. & Malmaeus, M, Resource sparing policies – effects on fairness and sustainable economic development. NESS, Turku. 2024-06.

Karel Zwetsloot, Thesis presentation, Science, Technology, and Innovation beyond growth: Cultivating collective creativity for a sustainable future, Pontevedra, Spain. 2024-06-18-21. <https://esee-degrowth2024.uvigo.gal/en/>

Nässén, N. Presentation, Community Climate Commons for collective climate action, NaPsa (National paper conference in social work), Mid Sweden University, Östersund. 2024-03-21.

Karlsson, M. Science Denial and Climate Change. Invited Keynote at the symposium "Sciences against Misinformation", Swedish Collegium for Advanced Study, Uppsala. 2024-04-16-18.

Karlsson, Mikael. Invoking the precautionary principle. Presentation at the Swedish Climate Symposium, Norrköping, Sweden. 2024-05-15.

Karlsson, Mikael. Co-benefits: the overlooked upside of climate mitigation policy. Invited speech at the session "Exploring Governance Responses", Swedish Climate Symposium, Norrköping, Sweden. 2024-05-15.

Karlsson, Mikael. "Leapfrogging the Goal Achievement Gap in Swedish Climate Policy – Opportunities and Implications". Session arranged and chaired at the Swedish Climate Symposium, Norrköping, Sweden. 2024-05-16.

Karlsson, Mikael. "Exploring Governance Responses". Session arranged and chaired at the Swedish Climate Symposium, Norrköping, Sweden. 2024-05-15.

Lindgren, O. Determinants of public acceptability of rationing fossil fuels and meat. Conference presentation. Nordic Political Science Congress (NoPSA). Bergen, Norway. 2024-06-25-28.

Lindgren, O. Conference presentation and panel participant. Learning from the past to guide the future? The political feasibility of rationing in climate policy. Swedish Climate Symposium. Norrköping, Sweden. 2024-05-15-17.



Fairtrans researchers from all work packages have gathered continuously throughout the programme to present their ongoing work. Photo: Minda Holm, Stockholm Resilience Centre.



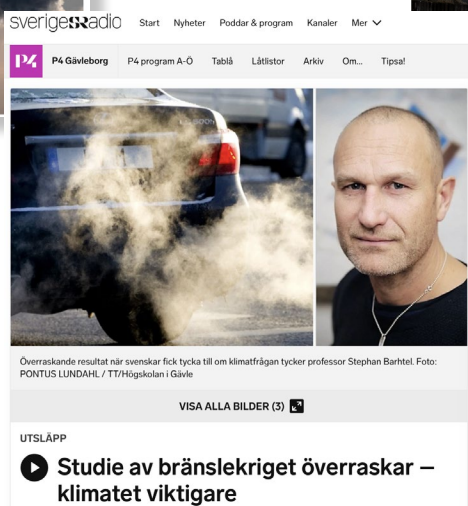
10. Fairtrans in the media

Fairtrans has generated significant visibility and has been featured in major Swedish national media outlets, such as *Dagens Nyheter*, *Expressen*, *Aftonbladet*, *TT*, *TV4 Nyheterna*, *Sveriges Radio*, *Svenska Dagbladet*, *Dagens Industri*. In addition, the programme has received coverage in specialized channels, such as *Aktuell Hållbarhet*, *Forskning & Framsteg*, *Miljö & Utveckling* and *Sveriges Natur*. Fairtrans' researchers have also been featured in international media such as *The Conversation* and *The New York Times*.

This report, combined with previous annual reports, lists more than 200 media engagements since the start of the programme. The coverage ranges from local outlets to nationwide media across Sweden. "Fairtrans" has been mentioned 167 times, primarily in 2024 when the citizens' assembly was initiated and delivered its suggestions. Some 90 articles featured the citizens' assembly.

Another topic of media interest was based on the survey about Swedish citizens' attitudes to the climate and energy transition, revealing among other things, that a large proportion of the Swedes are negative to increased gasoline prices, but become positive if fairness is also considered. Furthermore, the executive programme for union leaders generated coverage, mainly in union magazines.

This considerable level of media impact shows that key strategic programme activities and timely topics, combined with strategic communication resources and efforts, have contributed to shaping the societal discourse about climate policy.



Svenska Dagbladet Nyheter Näringsliv Kultur Ledare Debatt Livet eSvD

"Så kan dyrare bränsle bli mer accepterat"



Det hittills högsta dieselpriiset i Sverige noterades någon vecka in i mars 2022 med över 28 kronor/litern, strax efter krigsutbrottet i Ukraina. Foto: Emma-Sofia Olsson

En majoritet av svenskarna motsätter sig inte höjd bränsleskatt för att minska utsläppen. De som är negativa blir positiva om låginkomsttagare och landsbygdsbor kompenseras, skriver forskare som presenterar en ny studie.



Regeringen slukar företagens koldioxidbudget

DEBATT När Sverige nu går mot ökade utsläpp äts den svenska koldioxidbudgeten upp allt snabbare. Det utrymme som företagen rimligen bör ges riskerar att krympa dramatiskt. Det skriver forskare vid forskningsprogrammet Fairtrans i en debattartikel.



13 mars 2024



Masugnen vid SSAB i Luleå. Foto: Tortap/ Wikimedia Commons



30 september 2024

Många säger ja till ransonering av kött

Klimatet Livsmedel Politik

OPINION | Klimatet

Opinion ”Bred men samstämmig kritik: Ändra kurs i klimatpolitiken.”

25 juni 2024 05:30

Senast på söndag ska EU:s medlemsländer ha uppdaterat sina nationella energi- och klimatplaner för perioden 2021–2030. De nationella planerna kan visa sig allt viktigare i ett läge där EU-parlamentets klimatambitioner riskerar att försvagas, skriver åtta forskare.

Studie: Fortfarande möjligt klara 1,5 grader rättvist - här är vad länderna måste göra

Publicerad: 18 november 2024, 15:40





Se vad medborgarna ville se för klimatåtgärder. Foto: SVT

Medborgarråd: "Satsa på kollektivtrafik och järnväg"

UPPDATERAD 20 MAJ 2024 PUBLICERAD 19 MAJ 2024

Bygg ut järnvägen på fem år och inför högkostnadsskydd i kollektivtrafiken. Det är några åtgärder som Sveriges första nationella medborgarråd om klimatet enades om på söndagen. Riksdagen uppmanades också att sluta en blocköverskridande klimatpolitisk uppgörelse.

Så här vill "Mini-Sverige" ändra klimatpolitiken

Publicerad 2024-05-20



AH Aktuell Hållbarhet

"Kom igen Sverige, nu ställer vi om klimatdebatten!"

Debattklimatet måste förbättras om vi ska klara av att minska utsläppen fort och kraftigt. Sveriges första nationella medborgarråd om klimatet kan bli en injektion för ett inkluderande, demokratiskt samtal om en grön omställning i Sverige, skriver Stephan Barthel och Thomas Hahn, professorer med fokus på miljö samt programchefer för Fairtrans.

Publicerad: 24 januari 2024, 11:30

Det här är opinionsmaterial

Åsikterna som uttrycks här står skribenten/skribenterna för.



Ekot 17:45 Medborgarråd om klimatet har startat

15 min - sön 10 mar kl 17:45

Nyheter och fördjupning - från Sverige och världen.

Ladda ner (15 min, MP3) Dela



LEDARE

Ledare: Regeringens låga ambitionsnivå i klimatpolitiken saknar folkligt stöd

Publicerad 2024-05-25



Mikael Karlsson docent miljövetenskap Uppsala universitet

svt1



tycker det är bekymmersamt för att det här är det största största

Rapport

svt 2

Aktuellt

Avsnitt 74 • 38

Avsnittet är inte tillg.

Aktuellt

2024

Listed here are media items such as articles in newspapers, magazines, TV and radio by Fairtrans researchers or about Fairtrans in 2024. For Fairtrans in the media 2021/22 and 2023, please see earlier Annual Reports.¹

[Ransonering möter mindre motstånd än väntat](#)

Klimatklubben 2024-11-23. Lindgren, O.

[Klimat: En av fyra svenskar tvivlar på vetenskapen.](#)

SVT Rapport 2024-11-24. Karlsson, M.

[En av fyra svenskar osäkra på om människan påverkar klimatet](#)

SVT Nyheter 2024-11-24. Karlsson, M.

[Studie: Fortfarande möjligt klara 1,5 grader rättvist – här är vad länderna måste göra](#)

Aktuell Hållbarhet 2024-11-18. Hahn, T. Karlsson, M.

[Kritiska metaller till vapen – inte grön teknik](#)

Vetenskapsradion Klotet, Sveriges Radio, 2024-11-15. Hahn, T.

[Så kan dyrare bränsle bli mer accepterat](#)

Svenska Dagbladet 2024-10-29. Lindvall, D. Barthel, S. Jagers, S. Karlsson, M. Sjöberg, S.

[Studie av bränslekriget överraskar – klimatet viktigare](#)

P4 Gävleborg 2024-10-19. Barthel, S.

[Lägre utsläpp viktigare än sänkta bränslepriser](#)

Aftonbladet 2024-10-16. Barthel, S. Karlsson, M.

[Majoritet föredrar klimatåtgärder framför billigare bensin](#)

TV4 Nyheterna 2024-10-16. Barthel, S.

[Upprop: Detta måste få ett slut – för demokratins framtid](#)

Dagens Nyheter 2024-09-22. Karlsson, M. Lindvall, D.

[Regeringen slukar företagens koldioxidbudget](#)

Miljö och Utveckling 2024-03-13. Karlsson, M. Alfredsson, E. Lindvall, D. Malmaeus, M.

[Lägg om politiken innan våra ekonomier kollapsar](#)

Aktuell Hållbarhet 2024-06-14. Wijkman, Hahn, et al.

[Myten: Att klimatpolitik slår mot medborgarna.](#)

Aftonbladet Debatt 2024-06-09. Karlsson, M. Lindvall, D. Alfredsson, E. Hildingsson, R. mfl.

[Bred men samstämmig kritik: Ändra kurs i klimatpolitiken.](#)

Sydsvenskan 2024-06-25 Nasiritousi, Karlsson mfl.

[Klimatarbetet hotas av förnekelsemekanismer.](#)

UNT debatt 2024-02-22 Karlsson mfl.

[Ännu en spik i den fossila kistan.](#)

Altinget 2024-01-12. Mikael Karlsson.

[Kan stödet för vindkraft öka genom ekonomisk kompensation eller demokratisk delaktighet?](#)

2024-08-06. Lindvall, D.

[De rikas konsumtion föröder naturen](#)

Svenska dagbladet 2024-01-05. Collste, D. Hinton, J.

[Kom igen Sverige, nu ställer vi om klimatdebatten!](#)

Aktuell Hållbarhet 2024-01-24. Hahn, T and S. Barthel.

[Climat: la Suède ‘fait désormais marche arrière’](#)

2024-01-27. Mikael Karlsson.

[Oljeproducenternas nya ursäkt: Cirkulär kol-ekonomi.](#)

Aktuell hållbarhet 2024-02-13. Mikael Karlsson.

[Turné till lärosäten lyfte faror med faktaförnekelse.](#)

Curie. 2024-04- 23. Mikael Karlsson.

[Har Sverige tappat sin position som bäst i klassen i miljöfrågor?](#)

Sveriges Radio Godmorgon, världen! 2024-02-11. Mikael Karlsson.

[Med den här klimatstaben behövs ingen satir](#)

ETC 2024-02-17. Mikael Karlsson.

P1 Morgon

SR - P1-morgon. 2024-03-12, 05:59.

Artskyddsförordningen behöver ses över.

2024-04-10. Interview, Sveriges Radio Värmland. Mikael Karlsson.

¹ <https://fairtrans.nu/wp-content/uploads/2024/03/FAIRTRANS-Arsrapport-2021-2022-2-PDF-Print.pdf>
<https://fairtrans.nu/wp-content/uploads/2024/04/FAIRTRANS-arsrapport-2023-1.pdf>

[Tre kriser hänger ihop](#)

Aktuell hållbarhet. 2024-04-26. Mikael Karlsson.

Här är listan över Sveriges hållbarhetsmäktigaste.
Aktuell Hållbarhet 2024-04-18. Mikael Karlsson.

[Oro för klimatpolitiken efter EU-valet: Kan sätta käppar i hjulen](#)

Dagens ETC 2024-06-13. Mikael Karlsson.

SVT Morgonstudion
2024-07-03

[Sverige ser ut att missa EU:s klimatmål](#)

SVT Nyheter 2024-07-19. Mikael Karlsson.

Sverige ser ut att missa EU:s klimatmål.
SVT Rapport 07:30, 2024-07-19. Mikael Karlsson.

Sverige ser ut att missa EU:s klimatmål.
SVT Rapport 19:30, 2024-07-19. Mikael Karlsson.

Sverige ser ut att missa EU:s klimatmål.
SVT Aktuellt 21:00, 2024-07-19. Mikael Karlsson.

Sverige verkar missa EU:s klimatmål.
Feber 2024-07-20. Mikael Karlsson.

Sverige styrer mot å bryte klimamål.
NRK Nyheter 22 July 2024. Mikael Karlsson.

Ny studie: Många forskare är öppna för
klimataktivism
Dagens ETC 2024-08-14. Mikael Karlsson.

TCO vill att facket ska spela en större roll i
klimatomställningen
Dagens Arena 2024-08-20. Mikael Karlsson.

Sverige har varslet EU: När ikke klimamålene i 2030.
Energi och Klima. 2024-08-29. Mikael Karlsson.

[Det krävs politiskt mod](#)

Interview in Klimatkommunerna: "En framtid att
längta till". 2024. Mikael Karlsson.

[Pourmokhtari: "Inte alltid resultat som går att mäta"](#)
Miljö & Utveckling 2024-09-18. Mikael Karlsson.

[Forskare om miljöbudgeten: "Regeringen blåjuger"](#)
Miljö & Utveckling. 2024-09-19. Mikael Karlsson.

[Stöd för ransonering av kött för klimatets skull](#)
Uppsala universitet, 2024-09-30. Oskar Lindgren.

[Många säger ja till ransonering av kött](#)

Forskning.se, Uppsala universitet. 2024-09-30.
Oskar Lindgren.

[Oväntat starkt stöd för ransonering som metod i klimatarbetet](#)

Extrakt, Uppsala universitet. 2024-10-03. Oskar
Lindgren.

[Forskning: Fyra av tio positiva till ransonering för att möta klimatmålen](#)

Tidningen Syre, Uppsala universitet. 2024-09-01.
Oskar Lindgren.

[Support for meat rationing to protect climate](#)

Science Daily, Uppsala universitet. 2024-09-30.
Oskar Lindgren.

[A Third of People Would Accept Meat Rationing To Tackle Climate Change, Says Survey](#)

IFL Science, Uppsala universitet. 2024-10-02. Oskar
Lindgren.

[Rising support for meat and fuel rationing to tackle climate crisis](#)

Uppsala universitet. 2024-09-30: Oskar Lindgren.

[¿Racionar carne para frenar el cambio climático? Según un nuevo estudio sueco, un 40% de la población lo apoya](#)

EcoInventos, Uppsala universitet. 2024-10-02: Oskar
Lindgren.

[Study finds about 40% of public supports rationing measures to fight climate change](#)

Uppsala universitet. 2024-09-30. Oskar Lindgren.

[Nästa generation ska känna hopp](#)

Transportarbetaren, 2024-09-28

[Medborgarrådet: "Sverige måste vara lika enat om klimatet som försvaret"](#)

Aktuell Hållbarhet, 2024-06-05

[Nytt initiativ – så vill 60 vanliga svenskar lösa klimatfrågan](#)

NyTeknik, 2024-05-21

[Videodagbok: De ska lösa klimatfrågan](#)

SVT Nyheter 20-05-2024

[Unikt medborgarråd: Politikerna måste enas om klimatutmaningarna](#)

Sveriges Radio, 2024-05-20

[Medborgarråd blottar utmaningen](#)

Svenska Dagbladet, 2024-05-20

[Så här vill "Mini-Sverige" ändra klimatpolitiken](#)

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[Medborgarråd: "Satsa på kollektivtrafik och järnväg"](#)

SVT Nyheter, 2024-05-20

[Så vill 60 vanliga svenskar lösa klimatfrågan](#)

Aftonbladet, 2024-05-20

[Så vill nationella medborgarrådet att klimatpolitiken ska se ut](#)

Aktuell Hållbarhet, 2024-05-20

[Medborgarrådet uppmanar till enighet](#)

Dagens ETC, 2024-05-20

[Marie från Lund kan hjälpa politikerna att bromsa klimatkrisen](#)

Sydsvenskan, 2024-05-20

[Så vill 60 vanliga svenskar lösa klimatfrågan](#)

Göteborgs-Posten, 2024-05-20

[Medborgarrådet om klimatet vill se politik över blocken](#)

Tidningen Syre, 2024-05-20

[Medborgarråd vill se satsning på järnvägen](#)

Sveriges natur, 2024-05-20

[Här möts motpolerna i medborgarrådet om klimatet](#)

SVT Nyheter, 2024-05-10

[Medborgarnas klimatförslag går längre än politikernas](#)

SVT Nyheter, 2024-05-10

[Daniel Lindvall i Aktuellt](#)

SVT Play, 2024-05-07

[Historiskt medborgarråd: Klimatförslag gavs till politiker](#)

Mitt i Stockholm, 2024-06-20

[Klimatet en av de viktigaste frågorna i EU-valet](#)

Forskning & Framsteg, 2024-06-05

[Göteborgarnas idéer: Bilfria gator och gröna tak](#)

Göteborgs-Posten, 2024-06-04

[Regeringens klimat- och miljöpolitik saknar legitimitet](#)

Västerbottens Folkblad, 2024-06-04

[Klimatet: Är medborgarråd populism 2.0?](#)

Vetenskap & Politik (blogg prof. Björn Hassler), 2024-05-31

[Om Vetenskap: Smältande poler!](#)

Podcast från Stiftelsen för strategisk forskning, 2024-05-31

[Ett välmenat förslag till statsministern: Gör som medborgarrådet](#)

Västervikstidningen, 2024-05-31

[Under huven på medborgarrådet](#)

Dagens Opinion, 2024-05-30

[Lisa Magnusson: Regeringens klimatvänliga politik saknar folkligt stöd](#)

Dagens Nyheter, 2024-05-30

[Romina Pourmokhtari: "Det finns olika ideologier i klimatpolitiken"](#)

Dagens Nyheter, 2024-05-30

[Svalka i en varm värld](#)

FUF Play, 2024-05-29. Thomas Hahn.

[Insändare: Var finns ledarskapet i omställningen](#)

Sydöstran, 2024-05-28

[Medborgarråd vill se blocköverskridande klimatpolitik](#)

Supermiljöbloggen, 2024-05-28

[Leonardo värnar om landsbygden – tankarna har nått riksdagen](#)

P4 Skaraborg, Sveriges radio, 2024-05-27

[Debatt: Därför måste regeringen lyssna på medborgarrådet](#)

Dagens ETC, 2024-05-27

[Leonardo var med i landets första medborgarråd](#)

Falköpings Tidning, 2024-05-26

[Ledare: Regeringens låga ambitionsnivå i klimatpolitiken saknar folkligt stöd](#)

Dagens Nyheter, 2024-05-25

[Nytt LO-projekt för skattepengar](#)

Rebecca Weidmo Uvell (blogg), 2024-05-24

[Omnämmande i Lantzampen](#)

Sveriges Radio, 2024-05-24

[Medborgarrådet för klimatet](#)

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[Så vill 60 vanliga svenskar lösa klimatfrågan](#)

Sydsvenskan (via TT), *Samma TT-artikel publicerades i bl a Aftonbladet och flera lokaltidningar t ex Sydsvenskan, Helsingborgs Dagblad, Nordvästra Skånes Tidningar.* 2024-05-23.

[Ann-Charlotte Marteus: SVT får inte slarva för att syftet är gott](#)

Expressen, *Publicerades även i GT och Kvällsposten.* 2024-05-22.

[Förmiddag i P4 Östergötland - Med Daniella Nygren](#)

Sveriges Radio, 2024-05-22

[Medborgarråd med rötter i nazismen föreslår radikal omläggning av klimatpolitiken](#)

Ledarsidorna.se, 2024-05-21

[Medborgarrådet om klimatet har presenterat sina förslag – "öppnar nya forskningsfronter"](#)

Mistra, 2024-05-21

[Medborgarråd för klimatet vill se bättre och billigare kollektivtrafik](#)

Landets Fria, 2024-05-21

[Sebastian var med och tyckte till – så ska klimatmålen nås](#)

Jönköpings-Posten, 2024-05-21

[Unikt medborgarråd: Politikerna måste enas om klimatutmaningarna](#)

Sveriges Radio, 2024-05-21

[Mikael Törnwall: Medborgarrådet blottar utmaningen](#)

Svenska Dagbladet, 2024-05-20

[Medborgarråd lämnade förslag om klimatåtgärder](#)

Stockholms universitet, 2024-05-20

[Första medborgarrådet rekommenderar samåkning](#)

Skjutsgruppen, 2024-05-20

[Förmiddag i P4 Stockholm – Med Alexander Hammarlöf](#)

Sveriges Radio, 2024-05-20

[Medborgarrådet i klimatfrågor har presenterat sina förslag](#)

Studio Ett, Sveriges Radio, 2024-05-20

[Så vill 60 vanliga svenskar lösa klimatfrågan](#)

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[Citizens' council: "Bet on public transport and rail"](#)

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[Medborgarråd: "Satsa på kollektivtrafik och järnväg"](#)

SVT Nyheter, 2024-05-19

[Medborgarnas klimatförslag går längre än politikernas](#)

SVT Nyheter/Rapport, 2024-05-19

[Kan amatörer lösa klimatfrågan?](#)

Forskning & Framsteg, 2024-05-15

[Reportageinslag med två rådsmedlemmar \(Karin och Johan\) samt studointervju med forskaren Daniel Lindvall.](#)

Aktuellt, SVT, 2024-05-07

[Ulrika från Halmstad deltar i Sveriges första medborgarråd om klimatet](#)

SVT Nyheter Halland, 2024-05-02

[Mp: "Skapa ett medborgarråd för klimatet"](#)

Smålands Dagblad, 2024-04-30

[Språket är viktigt för att förstå klimatkrisen](#)

Sveriges Natur, 2024-04-30

[Turné till lärosäten lyfte faror med faktaförnekelse](#)

Tidningen Curie, 2024-04-23

[Ingen demokrati är osårbar](#)

Lottapodden (ca 12 min in), 2024-04-18

[Medborgarråd – ja tack, men på riktigt](#)

Tidningen Syre, 2024-04-17

[Ulrika hjälper politikerna med klimatfrågan](#)

P4 Halland, Sveriges Radio, 2024-04-13

[Tusentals kallades – 60 valdes ut för att lösa klimatkrisen](#)

Helsingborgs Dagblad, Also published in Nordvästra Skånes Tidningar and Landskrona-Posten. 2024-04-10

[Halmstadbo med i klimatråd](#)

Hallandsposten, 2024-04-08

[Susanne från Storfors valdes ut för att tycka till om klimatmålen](#)

KT-kuriren, 2024-03-28

[Sebastian, 30, en av 60 – ska tycka till om Parisavtalet](#)

Jönköpings-Posten, 2024-03-26

[Eventsida Medborgarråd om klimatet](#)

We Don't Have Time, 2024-03

[Missledande råd för klimatet](#)

Klimatupplysningen, 2024-03-15

[LU-forskare i Sveriges första nationella klimatmedborgarråd](#)

Lunds universitet, 2024-03-15

[Omnämnande i Lantzkampen](#)

Sveriges Radio, 2024-03-15

[Ungdomsrörelser SKA utmana ordningen](#)

Aftonbladet, 2024-03-14

[Insändare: Medborgarråd för klimatet: Vägtrafiken orsakar en tredjedel av alla utsläpp](#)

Norrbottnens-Kuriren, also published in several lokal newspapers, e g Lysekilsposten. 2024-03-13

[Medborgarråd om klimatet](#)

Klimatsans, 2024-03-12

[Stockholm University co-leads Sweden's first national citizens' assembly on climate](#)

Civis – Europe's Civic University Alliance, 2024-03-12

[Experter från IVL deltar i Sveriges första medborgarråd om klimatet](#)

IVL, 2024-03-12

[Daniel utvald – ska lösa klimatomställningen i nytt råd](#)

P4 Skaraborg, 2024-03-11

[Obegripligt svt-inslag om "medborgarråd"](#)

Näringslivets Medieinstitut, 2024-03-11

[60 svenskar ska lösa knäckfråga om klimatet](#)

Aftonbladet (via TT), this article was published in a large number of newspapers, eg Tidningen Syre and Tidningen Global as well as some 50 local newspapers such as Norrbottens-Kuriren, Gotlands Allehanda, Uppsala Nya Tidning, Nerikes Allehanda, Jönköpingsposten and Ystads Allehanda. The headline was on several occasions "Nytt medborgarråd ska göra skillnad i klimatomställningen". 2024-03-10

[Medborgarrådet om klimatet har startat](#)

Ekot, 2024-03-10

[60 slumpmässigt utvalda ska lösa klimatomställningen](#)

Sveriges Radio, 2024-03-10

[Vanliga människor ska lösa klimatfrågan – i nytt medborgarråd](#)

SVT Nyheter, 2024-03-09

[Renässans för medborgarråd: Kan mer demokrati hjälpa oss ur klimatkrisen?](#)

Tidningen Syre, 2024-03-08

[Nu ska klimatfrågor lösas – av 60 svenskar](#)

Vetenskapsradion Nyheter, Sveriges Radio, 2024-03-08

[Råd med 60 svenskar tar sig an klimatfrågan](#)

Sveriges Natur, 2024-03-07

[60 svenskar utvalda att lösa svåra klimatfrågor](#)

Dagens Nyheter, 2024-03-07

[Så ska 60 vanliga svenska knäcka klimatfrågan](#)

Tv4 Nyheterna, 2024-03-06

[Carolina Klüft: "Jag tror inte det gått någon förbi att vi måste göra mycket mer"](#)

Dagens ETC, 2024-01-09

11. Financial summary

Costs funded by Mistra until October 2024	Total in sum
Payroll cost *	14 997 101
Travel costs	284 966
Board	411 170
Workshops, meeting etc.	590 455
Climate Assembly, surveys, etc.	3 049 248
Contributions to indirect costs	3 703 718
Sub-contractors	1 507 429
Total costs funded by Mistra	24 544 088

* Salary costs during 2024 for other universities than Stockholm have not been accounted for.

Use of the budget reserve

International survey	80 000
Supervision of external PhD students	520 000
Supporting MSc students to publish	500 000
Wind power resistance	220 000
Climate Assembly	1 770 000
Research review and synthesis	140 000
Surveys for Phase 2	770 000
Total use	4 000 000

Budget and co-finance

The budget has been used according to the plan with a few delays. By 31 October 2024 we have used 24,5 MSEK of the budget. Salary costs during 2024 for other universities than Stockholm have not been accounted for; by the end of 2024 we expect to have used more than 31 MSEK.

The Climate Assembly was a large budget post and this fall we have analysed its costs and implications for the remaining budget. The assembly has been financed by the budget reserve (see above) and by reallocating 1.1 MSEK from a survey, as well as by co-finance from European Climate Foundation, EU/WorldTrans and Formas of altogether 1 MSEK. Thanks to this co-finance, the board decided in November 2024 to spend the remaining budget reserve on two surveys. These surveys will be conducted in spring 2025 and will provide crucial research infrastructure for the research in Phase 2.

No co-finance was needed for this research call. The collaboration with CSOs requires lots of time from our partners and we have not tried to quantify these in-kind contributions. We have made objective estimates for two types of co-finance. One is for the Climate Assembly mentioned above. The other is for three PhD students who fully contribute to Fairtrans research and publications – Laila Mendy and Oskar Lindgren at Uppsala University (funded by UU) and Nessica Nässén at Gävle University College (funded by University of Gävle). The three PhD students cost 10.4 MSEK altogether. The total co-finance for Phase 1 has therefore been about 11.4 MSEK; 1 MSEK for the Climate Assembly and 10.4 MSEK for the PhD students.

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