SUSTAINABILITY TRANSITIONS IN NORRBOTTEN

Positioning Norrbotten's Rural Communities within Sustainability Transition Policymaking



DUST

Democratising jUst Sustainability Transitions

COLOFON

Authors: Myriam Chilvers, Leneisja Jungsberg, John Moodie, Linnea Löfving, Verena Balz, Ioana Forgaci, Leif Engström.

Contributors: Ann-Louice Lövgren Engström, Britta Jonsson Lindvall, Tomas Fägerman, Ulf Sandström, Kjell Nilsson, Tommy Sjölund, Marianne Holmfrid.

Design: Institute for Urban Excellence. **Cover artwork:** Kafferast II, John Savio.

Futures artwork: OOZE architects & urbanists, with support of Malgorzata Rybak, Delft University of Technology.

This publication has been produced as part of the Democratising jUst Sustainability Transitions (DUST) project.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Participating partners:









This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101094869.

TABLE OF CONTENTS

Colofon	3
Table of Contents	5
Paper purpose and scope	6
Recommendations from the rural community	7
Policy recommendations on healthcare	9
Policy recommendations on public transport	11
Policy recommendations on local food production	13
Community and policy futures: Visualising divergent pathways	14
Imagined probable futures	14
Imagined preferred futures	14
Policy futures	15
Territorial capitals	16
Drafting the rural community statements	18
Gauging the regional public opinion	20
Five fast facts about the Pol.is deliberation in Norrbotten	20
Consensus statements	21
Regional Future Literacy Labs: Step by step process	22
Setting the Scene	25
Why are community-led sustainability transitions important?	25
What is the current status of sustainability transition in Norrbotten?	25
Why is the rural community less engaged in Norrbotten's transition?	25
Horizon Europe's DUST project and Regional Future Literacy Labs	26
Annex	28

PAPER PURPOSE AND SCOPE

This policy position paper presents the expectations, hopes, and visions of Norrbotten's rural communities regarding the future direction of sustainable transitions in the region. It contrasts these community perspectives with prevailing policymaking approaches and situates local concerns within the broader policy landscape.

As part of the Horizon Europe DUST project, Regional Future Literacy Labs brought together citizens and policymakers to explore the main challenges and opportunities that sustainability transitions pose for rural communities in Norrbotten. Historically underrepresented in transition policymaking, these communities were engaged through a partnership with Hela Sverige Ska Leva Norrbotten, working directly with a regional network of rural actors. This engagement plays a vital role in shaping and implementing just sustainability transitions across the region.

This paper addresses three key audiences:

- Policymakers at EU, national, regional, and local levels, to ensure that sustainability transition policies are responsive to the specific challenges, opportunities, and needs of rural communities in Norrbotten.
- 2. **Societal groups and NGOs,** to help amplify the voices of communities that are typically least engaged in policymaking.
- Citizens, to raise awareness of regional sustainability issues and encourage dialogue among underrepresented and less-involved rural groups in Norrbotten.

RECOMMENDATIONS FROM THE RURAL COMMUNITY

Through an inclusive and deliberative process, Norrbotten's rural communities have made their position clear: they are not passive recipients of transition policies but active partners in shaping them. A central concern raised in the DUST workshops is the persistent disconnect between national transition strategies and the lived realities of rural areas. Current policies often fail to reflect local conditions, resulting in solutions that overlook or inadequately address the needs of communities beyond urban centers.

Participants expressed frustration at being portrayed as marginal or in need of compensation, rather than being recognised as resilient and innovative communities with valuable contributions to make. In response, Norrbotten's rural communities are advancing a new narrative —one grounded in agency, capability, and collaboration. They argue that the success of the green transition depends on mobilising rural assets: strong social cohesion, ecological knowledge, and a tradition of cooperation.

This community-driven perspective aligns with emerging national and Nordic policy priorities that emphasize place-based and inclusive approaches to just transitions. It also reflects growing public support for equitable development across all regions.

Norrbotten's rural communities strongly assert that targeted public investment is essential to unlocking the region's potential in the green transition. Through the DUST process, they identified three priority areas for strategic action:

1. Health care

2. Public transport

3. Local food production

These priorities are grounded in local experience and align with broader policy debates on rural resilience and climate adaptation. They reflect shared Nordic values of equity, sustainability, and territorial balance, reinforcing the case for more regionally attuned transition strategies.

TREAT HEALTHCARE
AS CRITICAL
GREEN TRANSITION
INFRASTRUCTURE.
SUPPORT
DECENTRALISED
CARE THROUGH
COMMUNITY
HEALTH HUBS.

Participants described healthcare as both a social justice issue and a cornerstone of climate resilience. Norrbotten's vast geography and ageing population challenge equitable care. While digital tools like telemedicine show promise, digital exclusion—especially among older residents and those in remote areaslimits their reach. District nurses were seen as essential for continuity of care where hospitals are distant and mobility is limited. Participants called for mobile health services, more local care points in familiar settings, better communication about existing services, and long-term efforts to attract and retain healthcare professionals. Achieving health equity in Norrbotten requires investment in decentralised, community-based care tailored to local conditions.

The quotes below were shared by Norrbotten's RFLL participants.

"Equal and high-quality access to healthcare should be guaranteed for all, regardless of place of residence."

POLICY RECOMMENDATIONS ON HEALTHCARE

Recognise healthcare as critical green transition infrastructure

Relevant for national policy-makers, regional climate and health planning bodies: reframes healthcare as essential to both social justice and climate resilience. Aims to integrate healthcare into national and regional green transition strategies.

Support decentralised healthcare through mobile units and community health hubs

Relevant for regional health authorities and municipal planners: addresses geographic and demographic challenges by improving access through localised delivery models.

Establish local care points in community hubs (e.g., shopping centres, libraries)

Relevant for municipal governments and community organisations: makes healthcare more accessible and familiar by embedding services in everyday public spaces.

Expand mobile health services (e.g., health buses)

Relevant for regional healthcare providers and funders: ensures healthcare reaches residents in remote or hard-to-access areas, especially the elderly and those without transport.

Improve communication about available healthcare services

Relevant for health agencies and communications departments: enhances awareness and use of existing services, especially among digitally excluded groups.

Develop long-term recruitment and retention strategies for rural healthcare professionals

Relevant for national and regional health workforce planners, and educational institutions: aims to address staffing shortages through targeted training, incentives, and support for rural practice.

More locations in rural areas should be available for basic medical tests.

DESIGN RURAL
TRANSPORT
SYSTEMS THAT
ARE FREQUENT,
FLEXIBLE, AND
FAIR—LEVERAGING
SHARED
RESOURCES AND
PRICING MODELS
THAT REFLECT
RURAL REALITIES.

Public transport was widely acknowledged as both essential and neglected. It suffers from limited routes, poor winter reliability, and overdependence on school-based scheduling, making it impractical for many residents. People highlighted the higher cost-effectiveness of private cars, widespread car dependency, low public trust in current services, and the constraints faced by rural municipalities with limited tax bases.

Still, participants see great potential in rural transport reform —for supporting regional development, enabling better work—life balance, improving accessibility for youth and non-drivers, and advancing the green transition. They proposed shared use of school buses, flexible scheduling, better marketing of train services, and investments in electric vehicles and charging infrastructure.

The quotes below were shared by Norrbotten's RFLL participants.

Increased housing development is one of the key components for ensuring a fair green transition in Norrbotten.

"The focus should be on building affordable rental housing in rural areas."

POLICY RECOMMENDATIONS ON PUBLIC TRANSPORT

Increase frequency and coverage of public transportation

Relevant for Region Norrbotten and municipalities in Norrbotten: increase the number of bus departures, especially during early mornings and late evenings, to cater to both school children and working adults, as well as evening activities for adults and children. A suggestion is using school buses for general public transport during non-school hours.

More financial support to public transport from national government

Relevant for the national government: Region Norrbotten and the municipalties in Norrbotten need more support from the national government to be able to sustain the public transport. The support has been reduced in the last budget.

Test affordable pricing models in more municipalities

Relevant for municipalities in Norrbotten: implement pricing models similar to the 'Kiruna model', where residents pay a nominal fee for an annual bus pass. This could encourage more people to use public transport regularly.

Consider integrated ticketing system

Relevant for Region Norrbotten: introduce an integrated ticketing system that allows passengers to use a single pass for multiple modes of transport, similar to the system in Stockholm. This could increase the use of public transport.

Incentivize usage of public transportation

Relevant for Region Norrbotten: offer incentives for using public transport, such as discounts for frequent travelers or special promotions for events.

Sustainable practices

Focus on sustainable practices, such as using renewable energy for buses and trains, and promoting public transport as a greener alternative to driving.

Increase collaboration between the region and municipalities

Relevant for Region Norrbotten and municipalities in Norrbotten: increase collaboration between local municipalities and the region to fund and support public transport initiatives. This could include joint projects to improve infrastructure and services.

Long-term planning

Relevant for Region Norrbotten: develop a longterm strategy for public transport that includes regular assessments and adjustments based on community needs and feedback.

Expand routes

Relevant for the national government and Region Norrbotten: develop new routes that better connect rural areas with urban centers, making it easier for residents to access essential services and activities. For this extra support is needed from the national government.

PRIORITISE NORTHERN **FOOD SYSTEMS** AS A MATTER OF NATIONAL RESILIENCE. **EXPAND SUPPORT** FOR LOCAL PRODUCERS, COOPERATIVES, AND PROCESSING INFRASTRUCTURE. The workshops revealed broad concern over the vulnerability of local food systems. Despite Norrbotten's capacity to meet most of its own food needs, small producers face high costs, inadequate subsidies, and procurement policies that favour large-scale suppliers. Many producers leave the market within a few years, weakening local resilience.

Participants framed food production as critical for national security, particularly in light of geopolitical uncertainty, and as key to climate adaptation, reduced dependency on imports, and the preservation of local identity and wellbeing. They called for reforms to public procurement to better support local supply, increased youth engagement and training in agriculture, support for cooperative models, and improved local processing infrastructure. Fairer taxation on imports and revised subsidies was also proposed to help level the playing field.

The quotes below were shared by Norrbotten's RFLL participants.

Food should be locally produced

Local food producers should receive public incentives and support.

POLICY RECOMMENDATIONS ON LOCAL FOOD PRODUCTION

Subsidise local food production

Relevant for the national government and Region Norrbotten: increase subsidies for small- and medium-scale farmers to make local production economically viable, especially for vegetables, pulses, dairy, and meat.

Support rural land use and reinvestment

Relevant for the national government and relevant ministries: design land use policies that prioritise food production. Ensure profits from extractive industries (e.g., mining, wind energy) are partially reinvested into agricultural and rural development.

Invest in local food processing infrastructure

Relevant for the national government and Region Norrbotten: build or support small-scale processing facilities (e.g., dairy, fish, vegetables) to increase value-adding capacity and reduce dependency on southern Sweden.

Introduce fair pricing mechanisms

Relevant for the national government: explore tax incentives, import tariffs, or compensation schemes to keep local food affordable and competitive with imports.

Support small-scale innovation and urban farming

Relevant for municipalities and local NGOs: fund micro-projects such as community gardens and urban farming, providing training and toolkits.

Reform public procurement to support local producers

Relevant for municipalities and Region Norrbotten: adjust procurement policies to allow public kitchens (schools, care homes, hospitals) to buy from smaller local producers.

Promote agricultural cooperatives

Relevant for municipalities, Region Norrbotten, and rural development programmes: establish cooperatives to pool resources, equipment, and logistics. Support regional supply hubs or collective delivery systems to enhance economic sustainability.

Recognise food production as a security issue

Relevant for the national government and Swedish Civil Contingencies Agency (MSB): treat food security in northern Sweden as a component of national defence, aligned with emergency preparedness planning.

Market local food and rural lifestyles

Relevant for municipalities, Region Norrbotten, and tourism agencies: promote the benefits of locally produced food and rural living through public campaigns, targeting families, youth, and newcomers.

Increase youth engagement in agriculture

Relevant for Region Norrbotten, municipalities, and Swedish Board of Agriculture: support young people in farming through land access, loans, training, and mentorship. Integrate with school initiatives and agricultural education.

Create geographically based political representation

Relevant for the national government and political parties: introduce mechanisms for place-based appointments to better represent rural and northern needs in national policy processes.

COMMUNITY AND POLICY FUTURES: VISUALISING DIVERGENT PATHWAYS

We recommend unfolding the poster when reading this section, to explore the artwork in context.

Imagined probable futures

The probable futures reflect what the community expects will happen if current trends continue without maior interventions. **Participants** foresee mounting environmental pressures threatening agri-culture and biodiversity, placing natural capital at risk. While improvements in digital infrastructure and AI are expected to expand healthcare access in remote areas -enhancing infrastructure capital- many expressed concerns about losing personalized and culturally sensitive care. Demographic decline, driven by youth outmigration and aging populations, was widely seen as a serious threat to human capital and economic sustainability. Climate-induced mi- gration was viewed both as a potential source of cultural enrichment and as a challenge to social cohesion and resource equity. Many questioned whether local governance structures are equipped to respond effectively to these compounding challenges, signaling increasing strain on governance capital.

Imagined preferred futures

In contrast, the preferred future captures the community's hopes for the Norrbotten region. The community imagines a green economy powered by renewable energy, local food production and circular strategies as the foundation of economic and infrastructural renewal. Another widely shared aspiration centered on healthy, sustainable workplaces that prioritize employee wellbeing, safety, and environmental responsibility. Collaborative communities also emerged as a strong theme—envisioning selfsufficient neighborhoods built on mutual aid and shared skills. Community organizers, local governments, and citizens were seen as central to fostering local empowerment and social cohesion. Technology plays a significant role in the preferred future, but only when paired with strong ethical oversight. Participants viewed Al and digital tools as transformative in healthcare and education, particularly when deployed through public-private partnerships. **Decentralized** healthcare solutions, including digital tools and local health hubs, were seen as critical for rural access. Demographic renewal is another major theme. Participants envisioned attractive, inclusive living conditions and accessible services as tools to counter youth outmigration and regional decline. Political engagement and participatory governance were also strong priorities. Many called for deeper civic education, institutional reform, and stronger local decisionmaking to strengthen trust and agency within communities. Finally, participants expressed a clear preference for multigenerational and communal living—supported by cultural change and innovative housing models—as a way to foster emotional wellbeing, interdependence, and resilience.

These hopes are powerfully voiced by community members themselves:

We need population growth... twice as many people in Norrbotten.

"Equal healthcare for evervone."

"Housing projects will focus on communities building their own small rental houses or villas."

"Rural areas will... grow by providing fresh produce to Norrbotten... through community farming where people come together to cultivate crops and supply local stores."

Policy futures

One result of the first stages of the labs is a mapping of sustainability transition policy measures. The policies were identified based on their specific relevance to the green transition or their focus on regional or local issues, such as regional development documents. The identified policies are led by different levels of government and include national government investigations of the green transition in the north of Sweden, regional development plans, regional Smart Specialization strategies, municipal development plans, and reports from other agencies. Full list of policies is presented in the Annex.

In comparison to the community's desired future, the policy documents present a future which is more focused on industry transition and technical advances.

From the policy documents, a few focus areas have been identified. The policies have a focus on meeting national and international climate goals. Even though these measures are important for the green transition, the challenge is that they do not have an impact on people's day-to-day lives.

- 1. **Carbon neutral industries:** Investments in green technology, phasing out fossil fuels.
- 2. **Reskilling and adapting the work-force:** Preparation for future green jobs.
- 3. **Technology-driven solutions:** Large-scale innovations to teduce emissions and produce renewable energy.

From the policies, several aspects of concern were identified, and a list of "Territorial Capitals" (TCs) was created.

The following tables outline key **territorial capitals** identified from policy perspectives, and places them alongside **territorial capitals mentioned by the community.** This juxtaposition highlights how both policy and local perspectives engage with the region's core assets and challenges.

Natural capital

Policy perspective	
Metals and minerals	Forest
Cold climate	Biodiversity
Water courses (rivers, lakes, sea)	Space (non built-up land in large area)

Community perspective			
Circular economy initiatives	Biodiversity conservation		
Harmony with nature	Local food growth		

Economic capital

Policy perspective	
State owned European-leading companies	Mining and steel production
High level of innovation	Regional economy
Large public sector	

Community perspec	tive
Housing availability	Small businesses
Local entrepreneurship in green economy	

Built environment capital

Policy perspective		Community perspecti	ve
Built up areas around the coast	Green transition "hot spots"	Community and youth spaces	Safe and inclusive public areas

Human capital

Policy perspective		Community perspective	re
Strong triple helix cooperation	Small business owners		Citizen-municipality cooperation
Engaged civil society	Competence	Competence in and of	Educational programs
Horizontal cooperation	Indigenous Sami traditions	· ·	on innovation
Social trust and strong institutions	Large labour union movement	Healthy workplaces	

Infrastructure capital

Policy perspective		Community perspective		
Access to fast broadband	Good size and quality of airport(s)		n-rural nectivity	
Renewable energy		infrastructure dece	alised and entralised thcare	

X-capital

Policy perspective		Community perspect	ive
Excellent research environment	Cross border collaboration	Urban-rural connectivity	Decentralised governance
Attractiveness	National security	Participatory governance	Ethical digitalization
Regional challenges			

DRAFTING THE RURAL COMMUNITY STATEMENTS

After mapping both policy and community futures, the two perspectives were carefully compared. This comparison provided a detailed analysis of how community concerns align with, diverge from, or complement the scope of existing sustainability transition policy measures. Based on these insights, a series of statements were drafted to capture key areas of agreement and tension for further public deliberation.

Insights into aspects where community members and policymakers held diverging views were transformed into statements for public deliberation. Examples include:

"Public transport in rural areas should be scaled back and adapted to actual needs."

"Infrastructure and policies should support and enable relocation to rural areas."

The full list of statements is presented in the Annex.

It is important to note that certain issues were emphasised in policy perspectives but not in community discussions—and vice versa. For example, both communities and policy documents highlighted the importance of housing, as reflected in the shared statement:

"Increased housing development is one of the key components for ensuring a fair green transition in Norrbotten."

In contrast, the following statement originated from community discussions but was not actively addressed in policy documents.

"Banks should be required to lend a certain percentage of their loans to rural areas where it is currently difficult to obtain financing for buying or building homes."





GAUGING THE REGIONAL PUBLIC OPINION

Five fast facts about the Pol.is deliberation in Norrbotten

- Total participants: 84 people took part in the online deliberation.
- Original statements: 91 statements were drafted based on community and policy discussions.
- **3. Added statements:** 42 new statements were submitted by participants during the deliberation.
- **4. Total statements evaluated:** 133 in total (original + added).
- 5. Total votes cast: 4,579 votes were submitted —this includes all agree, disagree, and pass responses across all statements, showing how actively participants engaged with the material.

During the final stages of the RFLLs, the community-generated statements were submitted for public deliberation via the Pol.is platform in the Norrbotten region. The aim was to gather broader public input on key locally raised themes.

The results provide insights into which issues generated the most engagement, where consensus existed, and where opinions diverged. Some statements attracted strong agreement or disagreement, revealing clear divides. Distinct opinion groups formed around statements such as: "The need to expand or scale back public transport in rural areas"; and "The state should continue to support large-scale agriculture over small-scale, local food production."

While some statements sparked substantial interaction and voting, others received limited attention—suggesting that not all issues resonated equally with the wider public.

The Pol.is table on the right page illustrates the consensus statements and includes agreement levels for each.

Consensus statements

Public transport in rural Norrbotten should be scaled down and the money should be scaled down and the money should be scaled down and the money should be spent elsewhere. Disagree Agree Pass Public transport in rural Norrbotten works well as it is. Disagree Agree Pass Public transport in rural Norrbotten works well as it is. Disagree Agree Pass Preffered Future? NO Policy Future? NO		Agree	Disagree Pass	
Public transport in rural Norrbotten should be scaled down and the money should be spent elsewhere. Disagree		91%	2% 6%	
elsewhere. Disagree Agree Pass Public transport in rural Norrbotten works well as it is. Disagree Agree Pass Bayes Disagree Pass Preffered Future? NO Policy Future? YES Policy Future	Public transport in rural Norrbotten should be	Disagree	Agree Pass	
Public transport in rural Norrbotten works well as it is. 2% 15% Preffered Future? NO Policy Future? YES Policy	scaled down and the money should be spent	92%	0% <mark>7%</mark>	
Train traffic in Norrbotten needs to be more reliable (punctual) for more people to want to use it. Agree Disagree Pass Preffered Future? YES Policy Future? NO Policy Future? YES Policy Futu		Disagree	Agree Pass	
reliable (punctual) for more people to want to use it. Equal and high-quality access to healthcare should be guaranteed for all, regardless of place of residence. Agree Disagree Pass Youth want to be involved in society and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Preffered Future? YES Policy Future? NA Preffered Future? YES Policy Future? YES Policy Future? NA Preffered Future? NA Preffered Future? YES Policy Future? NA Preffered Future? NA Preffered Future? NA Preffered Future? NA Preffered Future? YES Policy Future? NA Preffered Futu	•	82%	2% 15%	
reliable (punctual) for more people to want to use it. Equal and high-quality access to healthcare should be guaranteed for all, regardless of place of residence. Agree Disagree Pass Youth want to be involved in society and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Preffered Future? YES Policy Future? NA Preffered Future? YES Policy Future? YES Policy Future? NA Preffered Future? NA Preffered Future? YES Policy Future? NA Preffered Future? NA Preffered Future? NA Preffered Future? NA Preffered Future? YES Policy Future? NA Preffered Futu		Λατορ	Dieagraa Pass	
Lequal and high-quality access to healthcare should be guaranteed for all, regardless of place of residence. Agree Disagree Pass 94% 1% 5% Preffered Future? NO Policy Future? NO Policy Future? NO Preffered Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy Future? NO Preffered Future? YES Policy Future? YES Policy Future? NO Preffered Future? YES Policy F				
Equal and high-quality access to healthcare should be guaranteed for all, regardless of place of residence. Agree Disagree Pass Youth want to be involved in society and therefore need to be included in societal development. Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Preffered Future? YES Policy Future? YES Po	use it.			
of residence. Agree Disagree Pass Youth want to be involved in society and therefore need to be included in societal development. Youth long for investment where they live and therefore need to be included in societal development. Agree Disagree Pass Policy Future? YES Policy Future? YES Preffered Future? YES Policy Future? YES Preffered Future? YES Policy Future? YES				Preffered Future? NO
Youth want to be involved in society and therefore need to be included in societal development. Agree Disagree Pass Preffered Future? YES Policy Future? N/A		3 470	170 070	Policy Future? NO
need to be included in societal development. 97% 2% 0% Policy Future? YES Youth long for investment where they live and therefore need to be included in societal development. Agree 95% O% 4% Preffered Future? YES Policy Future? YES	-	Agree	Disagree Pass	
and therefore need to be included in societal development. 95% Agree Disagree Pass Preffered Future? YES Policy Future? YES Policy Future? YES Preffered Future? YES Policy Future? YES Preffered Future? YES Policy Future? N/A		97%	2% 0%	
and therefore need to be included in societal development. 95% Agree Disagree Pass Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? YES Policy Future? YES Preffered Future? YES Policy Future? YES Policy Future? YES Policy Future? N/A	Youth long for investment where they live	Agree	Disagree Pass	
The urban norm needs to be challenged —young people must be able to choose to live, work, and people must be able to choose to live.	and therefore need to be included in societal	95%	0% 4%	
people must be able to choose to live, work, and 97% Preffered Future? YES Policy Future? N/A	dovelopment.	Δστορ	Nicagrae Pass	
	thrive throughout Norrbotten.			
Agree Disagree Pass	Land use and energy: Local food producers should receive public incentives and support.	Agree	Disagree Pass	D (() E 0 NO
91%		91%	<mark>1% 7%</mark>	
Disagree Agree Pass		Disagree	Agree Pass	
For all also all all the artificial in the state of	Food should mostly be imported.	94%	0% 5%	Preffered Future? NO Policy Future? N/A
FOOD SHOULD MOSTLY DE IMPORTED	1 334 Should History be imported.	94%	0% 5%	

REGIONAL FUTURE LITERACY LABS: STEP BY STEP PROCESS

The Regional Futures Literacy Labs (RFLLs) were conducted in the four case study regions of Norrbotten (Sweden), Lusatia (Germany), Stara Zagora (Bulgaria), and Katowice (Poland). In each region, a distinct transition community was involved. Each lab followed these steps:

- **1. Preparatory step:** The impacts of local, national, and EU sustainability transition policy measures were mapped.
- 2. First workshop: Communities and policy-makers met for the initial RFLL workshop to discuss the projected impacts of transitions and transition policymaking on communities. At the end of the workshop, communities decided on the scope of upcoming deliberations.
- **3. Second workshop:** Community members discussed their expected and preferred futures in relation to sustainability transitions.
- 4. Futures analysis: An analysis of the conversations enabled the visualization of the futures that communities expect to happen—referred to as plausible futures—as well as the futures they would prefer—referred to as preferred futures.
- **5. Policy comparison:** A comparison between these community futures and policy impact projections —referred to as policy futures—

provided insights into communities' opinions and positions on local, national, and EU policymaking.

- **6. Third workshop:** Communities developed these positions into policy statements.
- 7. Public deliberation: The policy statements were then submitted for public deliberation in each case study region. The e-democracy tool Pol.is enabled the public to vote on and comment on the statements.
- 8. Fourth workshop: In the final RFLL workshop, communities translated the outcomes from earlier steps into practical recommendations for policymakers at various levels of government.





SETTING THE SCENE

Why are community-led sustainability transitions important?

Sustainability transitions involve deep socioeconomic changes that impact communities in diverse and unequal ways across Europe. These transitions can bring both opportunities and challenges, especially in regions with slower economic growth. For transitions to be fair and effective, they must be designed through place-based, community-led policymaking that empowers citizens, increases awareness, and builds resilience. Active citizen involvement ensures policies are accountable, inclusive, and tailored to local needs—especially those of underrepresented groups.

What is the current status of sustainability transition in Norrbotten?

Norrbotten, Sweden's northernmost region, is known for its arctic landscape and as the traditional homeland of the Sami people. It is also Europe's largest iron ore producer, with mining accounting for 10% of local jobs. Technological innovation is reshaping the industry, positioning Norrbotten as a key player in Sweden's green industrial shift.

This transformation could add 2–3% to Sweden's GDP by 2030, generate up to 160 billion SEK annually, and create 20,000 jobs. However, it requires public investment of up to 260 billion SEK—only a fraction of which is currently secured. Key challenges include energy access, infrastructure, housing, and workforce shortages.

Beyond these material needs, the transition must address social inequalities. Rural areas in Norrbotten face demographic, geographic, and economic pressures. A just transition requires the inclusion of civil society and marginalised voices, which are often absent from current processes.

Why is the rural community less engaged in Norrbotten's transition?

Transition efforts have largely centered on urban areas and been driven by government bodies and industry, sidelining rural municipalities. Despite their deep understanding of local environments and innovation potential, rural residents often lack the resources, access, and trust needed to participate in policymaking. These barriers hinder their engagement in shaping the region's future.

HORIZON EUROPE'S **DUST PROJECT** & THE REGIONAL **FUTURE LITERACY** LABS

The DUST project, funded by Horizon Europe, aims to democratise territorial responses to sustainability transitions by increasing citizen participation and trust. Through Regional Future Literacy Labs, the project fosters inclusive, place-based dialogue between citizens and policymakers in transition-vulnerable regions.

These labs help citizens imagine and prepare for the future, increasing their capacity to adapt. They aim to:

Raise awareness of local policy impacts



Provide a forum for expressing hopes and concerns

Build trust between citizens and institutions

Integrate local knowledge into policy



Promote proactive citizen involvement in policy co-creation

The labs follow an eight-stage structure, using both in-person workshops and the digital engagement tool pol.is.



ANNEX

Complete list of analysed policy

- » Bodens kommun, (2025), Översiktsplan 2025,
- » Bodens Kommun, (2023), Strategisk plan 2024-2026, Kommunfullmäktige 2023-10-16 § 121
- » Näringsdepartementet, (2022), Rapport från samordnaren för samhällsomställning vid större företagsetableringar och företagsexpansioner i Norrbotten och Västerbotten, Sveriges Regering
- » Region Norrbotten, (2020), Strategy Smart Specialisation Norrbotten, Print: Luleå Grafiska 2020:2, ISBN: 978-91-986069-0-4
- » Region Norrbotten, (2019), Regional utvecklingsstrategi f\u00f6r Norrbotten 2030, Tryck: Lule\u00e3 Grafiska 2019, ISBN: 978-91-984222-8-3
- » Tapia, C. Cedergren, E. Löfving, L. Moodie, J. Sanchez-Gassen, N., (2021), Potential territorial impacts of the transition to a climate neutral economy in Gotland, Norrbotten, and Västra Götaland - Support to the preparation of Territorial Just Transition Plans in Sweden (REFORM/SC2020/118), Nordregio
- » Tillväxtverket, (2024), Nyindustrialiseringen och samhällsomvandlingen i Norrbotten och Västerbotten,
- » Nyindustrialiseringen och samhällsomvandlingen i Norrbotten och Västerbotten -Tillväxtverket (tillvaxtverket.se)

Complete list of seed statements

Housing and essential services

Kollektivtrafiken bör byggas ut för att bättre knyta samman landsbygdsområden i Norrbotten.

- » Infrastruktur och policyer bör stödja och förbättra tillgången till privata fordon för invånare i Norrbotten.
- » Kollektivtrafiken bör byggas ut för att bättre knyta samma stad och land i Norrbotten.
- » Kollektivtrafiken bör skalas ned i landsbygden i Norrbotten och pengarna borde läggas på andra områden.

Kollektivtrafiken bör stanna på fler platser på landsbygden för att fler ska kunna använda den.

» Man borde införa expressbussar som enbart stannar i större hubbar för att personer snabbare kan röra sig från a till b.

Kollektivtrafiken på landsbygden i Norrbotten fungerar bra som den är.

- » Tågtrafiken i Norrbotten måste bli mer förutsägbar (vara i tid) för att fler ska vilja använda den.
- Detkrävsettnytänktikollektivtrafikplaneringen
 den behöver inte byggas ut, utan istället bli mer flexibel.
- » Man borde kunna åka på samma biljett med flera olika kollektivtrafik-operatörer.

Kollektivtrafiken ska inte enbart möjliggöra resor till arbete, utan även till fritidsaktiviteter och vardagssysslor.

» Det viktigaste är att kollektivtrafiken möjliggör pendling till och från arbete istället för resor till fritidsaktiviteter och vardagssysslor. Kollektivtrafiken bör stanna på fler platser på landsbygden i Norrbotten för att fler ska kunna använda den.

» Man borde införa expressbussar som enbart stannar i större hubbar och för att personer snabbare kan röra sig från a till b.

Bostadspolitiken bör uppmuntra utveckling av småhus och villor i landsbygdsområden i hela Norrbotten.

- » Bostadspolitiken bör främja storskaliga bostadsprojekt i Norrbottens urbana områden/huvudorter och städer.
- » Kommunen borde köpa upp tomter och bygga bostadsområden som är planerade för gemenskap och social tillvaro.

Ett ökat bostadsbyggande är en av de viktigaste komponenterna för att säkra en rättvis grön omställning i Norrbotten.

» Det behövs inte byggas fler bostäder i Norrbotten.

Det borde finnas krav på banker att det måste låna ut en viss andel till landsbygdsområden där man i nuläget har svårt att få lån för att köpa eller bygga

- » Det borde inte finnas några krav på banker att låna ut till specifika områden, marknade bör reglera detta själv.
- » Staten borde gå in som garant och lyfta en del av risken vid lån för att öka bostadsbyggande i området där det är svårt att få lån för att bygga.

Det borde vara enklare att få bygglov i attraktiva områden i landsbygden.

- » Attraktiva områden bör skyddas från byggnation
- » Strandskyddet måste ses över för att öka bostadsbyggande i attraktiva områden på landsbygden.
- » Strandskyddet måste vara kvar för att skydda miljö, biodiversitet och allas tillgång till vatten.

Man borde undersöka möjligheter för innovativt ägande som lösningar för bostadsbyggande på landsbygden.

- » Man borde fokusera på att bygga billigare hyreshus på landsbygden.
- » Man borde utveckla pilotprojekt kring bostadsbyggande f\u00f6r att testa ekonomisk g\u00e4ngbarhet.

Det är ett stort problem med ödegårdar på landsbygden i Norrbotten.

- » Odegårdar på landsbygden är inget problem eftersom det ofta är familjehem som används några månader om året.
- » Man borde inventera ödegårdar på landsbygden och undersöka hur man kan minska antalet.
- » Man borde skapa engagemang för att hantera och restaurera tomma byggnader på landsbygden.

Fritidsboenden urholkar landsbygden

» Fritidsboenden är viktiga för landsbygden.

Det borde finnas en distinktion mellan bostads och fritidshus i form av beskattning.

- » Fritidsboenden är viktiga för landsbygden.
- » Det ska inte finnas någon extra beskattning för de som äger fritidshus.

Man borde begränsa att personer som inte är bosatta i Sverige äger fritidshus.

- » Man borde underlätta f\u00f6r personer som \u00e4r bosatta utanf\u00f6r Sverige att k\u00f6pa fritidshus i Sverige.
- » Det borde finnas en distinktion mellan personer som är bosatta i Sverige och personer bosatta utomlands när det kommer till ägande av fritidshus.

Man borde möjliggöra för mindre skolor med färre elever i olika åldrar på landsbtgden.

» Skolor borde främst finnas i urbana områden där man kan ha större klasser med elever i samma ålder.

Skolor behövs i mindre samhällen.

- » Det är inte en prioritering att ha kvar skolor i små samhällen.
- » Skolor bör framförallt finnas på landsbygden och barn i urbana områden borde åka till dem.

Statusen för lärare måste öka för att höja kompetensen på lärare på landsbygden.

» Man borde sänka kraven om behörighet för lärare och istället fokusera på hur pedagogisk personen är.

Lika och högkvalitativ tillgång till sjukvård bör garanteras för alla, oavsett bostadsort.

» Sjukvården bör koncentreras till urbana områden.

Telemedicin och digital patientvård bör prioriteras och fortsätta att få finansiering och utvecklas.

» Hälso- och sjukvård bör fokusera på fysiska vårdcentraler och vårdlösningar, medan

- telemedicin och digitala hälsotjänster bör täcka landsbygdsområden i Norrbotten.
- » Det borde finnas tillgång till både fysisk och digital sjukvård på landsbygden.

Regionen borde erbjuda sjukstugor i mindre samhällen i Norrbotten.

- » Äldreboende borde vara en punkt personer på landsbygden kan ta enklare prover.
- » Det är inget problem att resa till större städer för provtagning där det finns mer resurser.
- » Det borde finnas fler ställen på landsbygden där man kan ta enklare prover.

Genom en kampanj borde man lyfta det Norrbotten och Västerbottens bidrar med i form av energi och export för att omvärdera hur mellersta och södra Sverige ser på Norra Sverige.

Skatteintäkter från gruv- och energibolag i Norrbotten bör samlas in och fördelas av regionala myndigheter (region och kommun).

» Skatteintäkterna från gruv- och energibolag bör samlas in och fördelas av staten.

Land use

Lokala livsmedelsproducenter bör få offentliga incitament och stöd.

» Staten bör fortsätta att gynna storskalig livsmedelsproduktion.

Offentliga myndigheter bör prioritera upphandling från lokala livsmedelsproducenter livsmedelsproduktion.

Offentliga myndigheter bör prioritera upphandling från industriell livsmedelsproduktion. Maten bör vara lokalt producerad.

» Maten bör till största delen importeras.

Lokala timmerindustri bör få offentliga incitament och stöd.

» Staten bör fortsätta att gynna storskalig livsmedelsproduktion.

Solenergi bör inte vara en prioriterad energikälla i Norrbotten.

» Solenergi bör utvecklas och stödjas i Norrbotten.

Förnybar energi bör driva transportmedel.

» Transportmedel bör fortsätta använda fossila bränslen.

Svenskägd mineralutvinning bör fortsätta att expandera med strikt regler för att minska miljöpåverkan för att möta den globala efterfrågan på råvaror.

» All mineralutvinning bör begränsas kraftigt i Norrbotten för att skydda lokala ekosystem och samhällen.

Planerade storskalig vindkraftverken bör ställas in i Norrbotten.

» Fler vindkraftverk bör byggas i Norrbotten.

Culture

Kulturen i landsbygdsområden bör utvecklas genom offentlig och private investeringar i teater, film och konst.

» Kulturcentrum bör enbart finnas i urbana områden. Kultur har en naturlig del i skolorna i Norrbotten.

» Undervisningen i skolorna i Norrbotten bör fokusera på kärnämnen och inte på kultur.

En ökning av engelsktalande invånare och mångkulturella traditioner bör stödjas.

» Landsbygdssamhällen bör bevara lokala svenska traditioner framför mångkulturella influenser.

Traditionella könsroller bör inte längre definiera landsbygdssamhället.

» Traditionella könsroller bör upprätthållas i landsbygdsområden.

Landsbygdsamhället är i dag karakteriserat av jämställdhet.

» Traditionelle k\u00f6nsroller b\u00f6r ses \u00f6ver.

Vardagslivet i Norrbotten bör vara starkt påverkat av AI och digitalisering.

» Begränsningar bör införas för expansionen av AI och digitalisering.

Democratising jUst Sustainability Transitions

> Scan the QR code to find out more about our project!





En vision för Norrbotten enligt den regionala politiken

A vision for Norrbotten according to regional policy



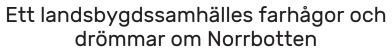












A rural community's fears and dreams of the Norrbotten region

Ett landsbygdssamhälles önskade framtid för Norrbotten

A rural community's preferred future for Norrbotten