

Illuminating the blind spots of hydrogen project development

JustH2Transit and Hydrogen Impact Forums

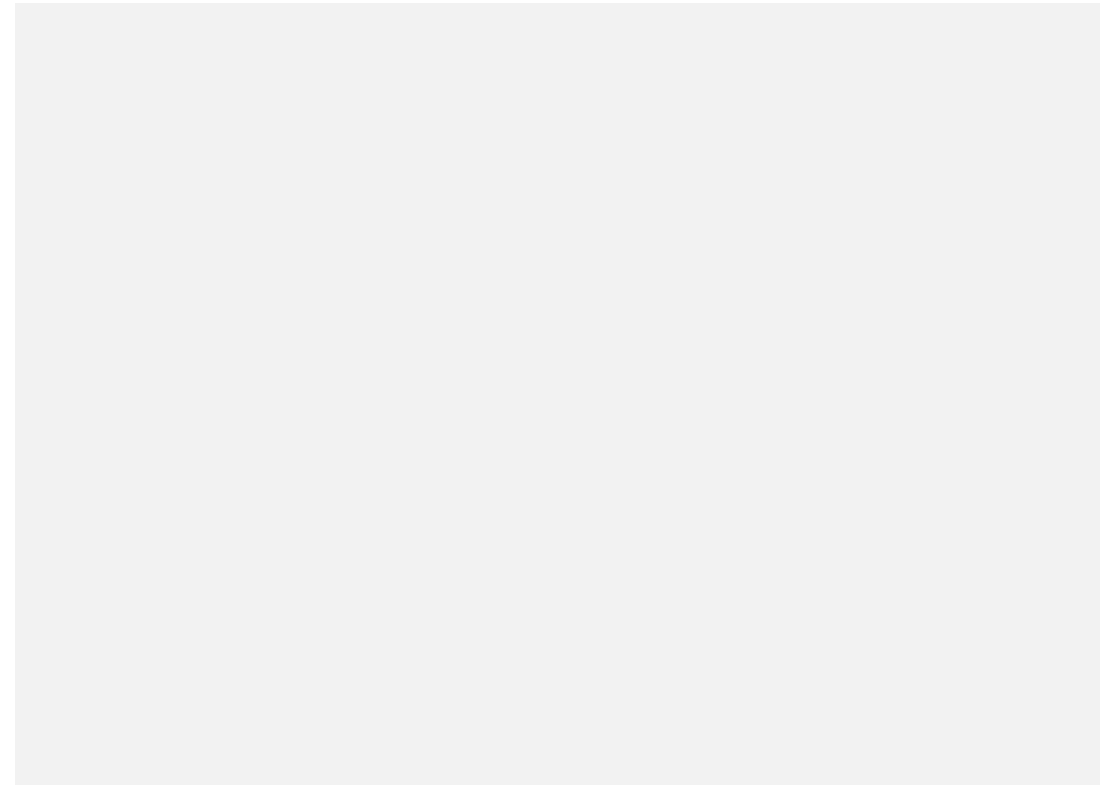
Luleå

20.01.2025

Minna Näsman, Akordi

The question

How do we ensure social engagement and an inclusive political decision process when creating a hydrogen society?



JustH2Transit: Strategic research to support a just and sustainable hydrogen transition

Part of JUST ENERGY program 2023-2029

In the JustH2Transit project, a total of around 50 energy technology experts, materials engineers, chemists, physicists, social scientists, economists, human geographers, management and bio- and circular economy professionals will create an overview of the hydrogen transition.



Consortium parties



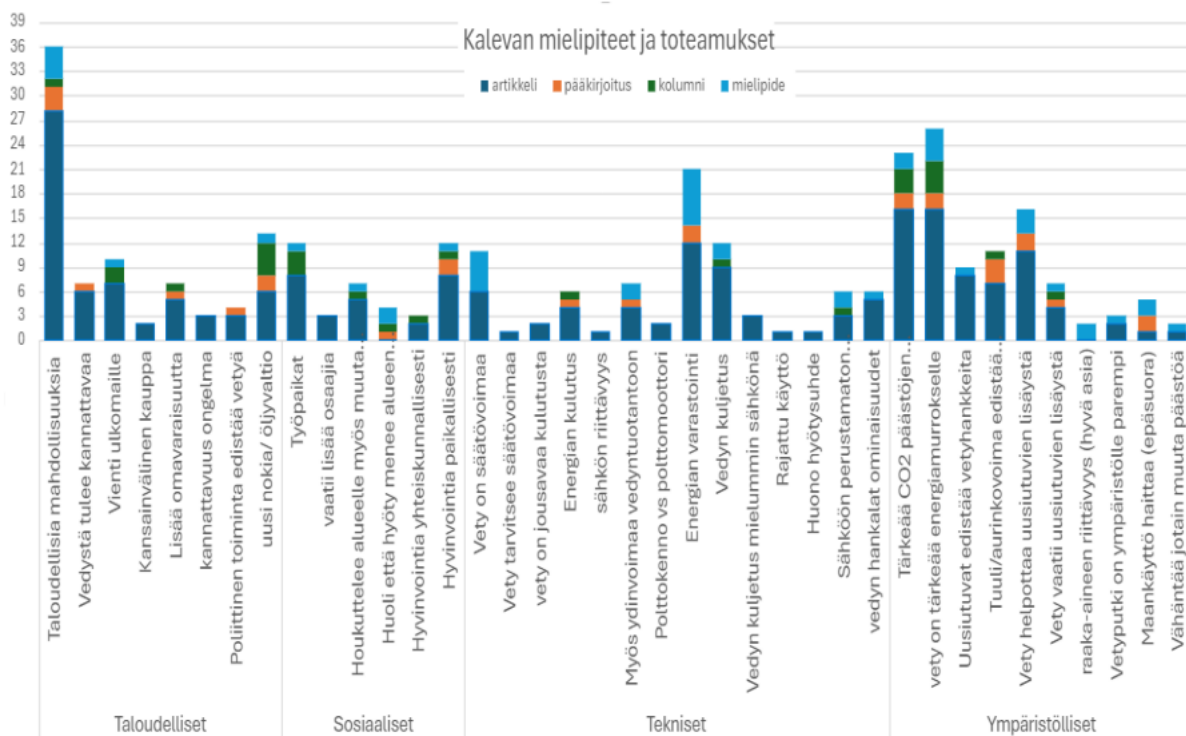
Financers



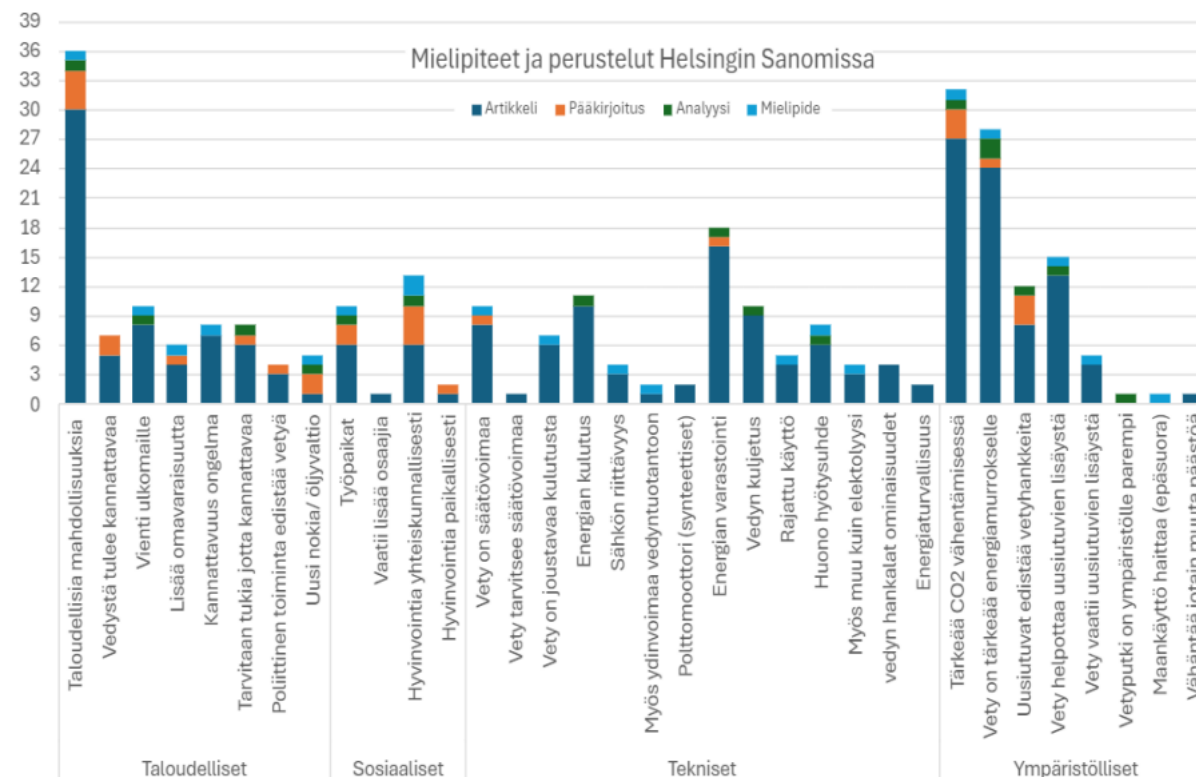
Impressions of H₂ (overly) positive 2021-2024

Regional newspaper focuses on local prosperity, gets excited about vision (new Nokia / oil state)

National magazine emphasises economic and environmental benefits for society



Kuvaaja 2. Mielipiteet ja perustelut Kalevassa.



Kuvaaja 3. Mielipiteet ja perustelut Helsingin sanomissa.

Source: unpublished discourse analysis of hydrogen-related texts in HS, Kaleva and Tekniikan maailma from 2021-2024, JustH2Transit

Most of the editorial references to hydrogen are benefits

Economic and technical benefits

- Economic opportunities
- Energy storage

Environmental benefits

- Important in reducing CO₂ emissions
- Important for the energy transition
- Facilitates the increase of renewables

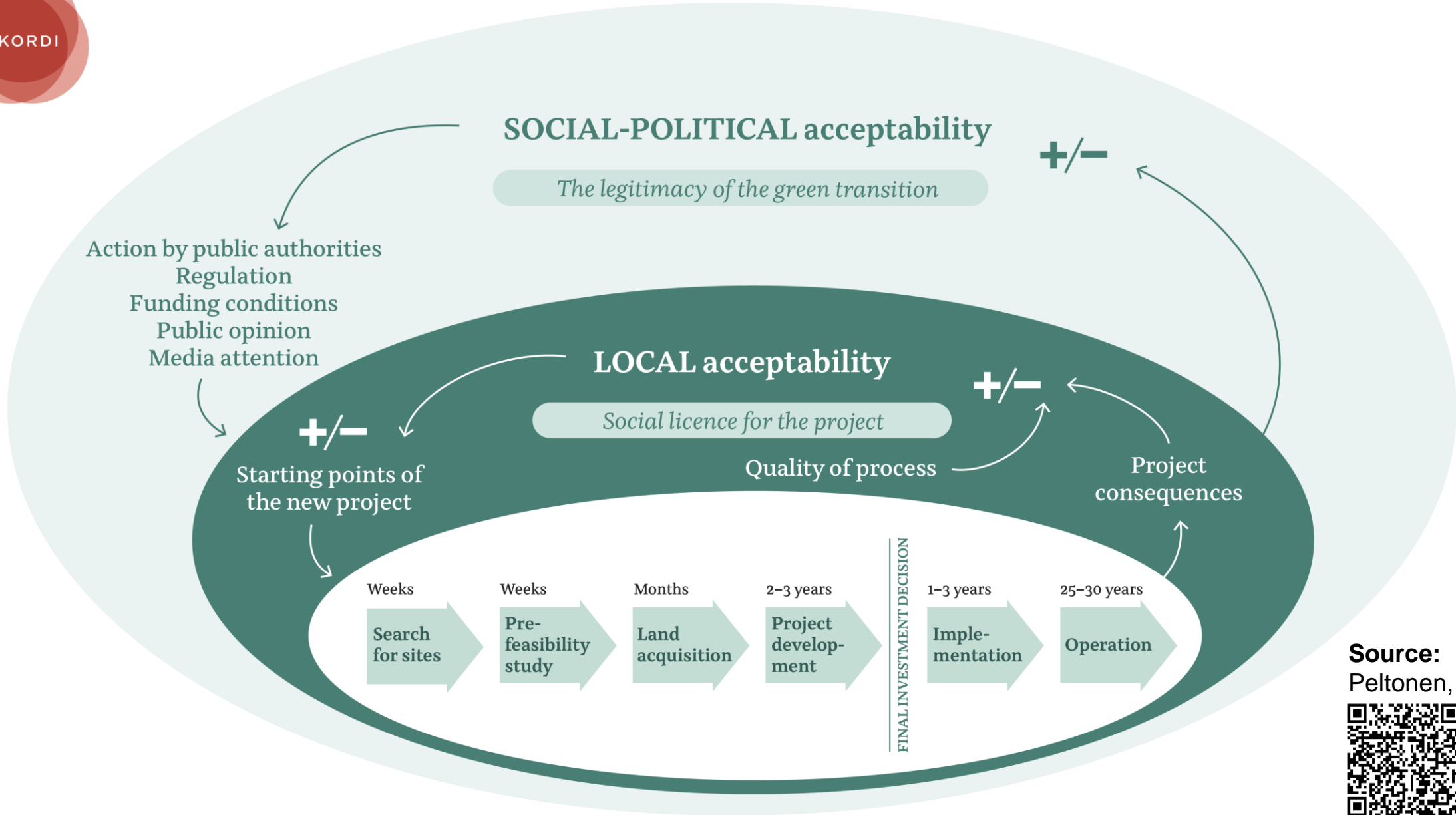
Potential areas of dissatisfaction can be discerned in the comments box

TOP 5

- Poor efficiency
- Profitability problem
- Limited use
- Difficult characteristics
- Concern about benefits going to other regions / abroad

“Now we must take great care to ensure that Finland and the Finns are not left empty-handed, as has occurred in extractive industries, for example. Finland is already largely a colony owned by others, benefiting others than ourselves.”

*Osmo Marttila, HS 2023,
377 well-argued votes*



Source:
Peltonen, L. 2023





Akordi

Finland's first environmental conflict prevention organisation, established in 2013

- Independent mediator = designs and conducts problem-solving processes that lead to binding collective decisions
- In November 2024, Akordi published a free guide, "Green Transition Playbook", which can be read and downloaded at:



Blind spots in hydrogen project development

- **Argument 1:**
Current praxis ("business as usual") ignores some obvious factors that have an impact on hydrogen project development
- **Argument 2:**
Taking those factors into account reduces the risks of the project
- **Argument 3:**
Dealing with these issues is a cost-effective way of smoothing the development processes

Argument 1: Obvious factors ignored

(Hydrogen) business as usual in 2025

- The social legitimacy of the energy transition is thought to be automatically transferred from the national to the local project level
 - Local opposition to projects is seen as irrational
- Large areas in Finland and Sweden are thought to be "empty" and therefore more suitable for building the necessary infrastructure than, for example, in central Europe
- The very idea of conflict is scary, so we avoid "waking a sleeping bear"
 - We cover our eyes from weak signals

The local perspective to any new land-use

- Even green transition projects are not sustainable unless they are implemented in a way that takes into account and respects local conditions
- We were here first
- We are here now and we have opinions too!

Argument 2: Recognising local realities reduces project risk

(Hydrogen) business as usual in 2025

- In the EU, it's been reported that around 10-20% of renewable energy projects may face legal appeals or delays
- Which other 10-20% risk categories are left unanalysed and unmanaged by development projects?

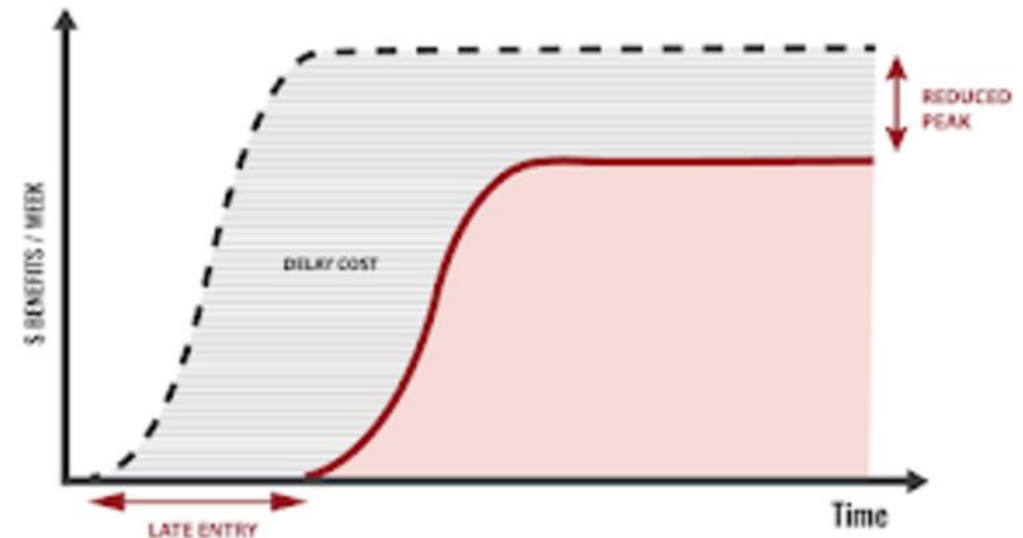
The local perspective to appeals

- The roles written for us are guest of the public meeting and written reply
- Our local knowledge is not sought and valued
- There is no opportunity to ask questions and hear answers in peace
 - In other words, we are not treated as equals for the implementation of the project
- The opportunity remains to resist unjust intrusion into our lives
 - Prolonging administrative processes is one main possibility
 - Stealing the scene with our protests in public meetings is the other

Argument 3: Deal with it! It saves you time and money

(Hydrogen) business as usual in 2025

- Complaints handling in Finland can extend project lead time by 20-30 months
 - Therefore, EU now focuses sharply on improving the performance of administrations
 - At the same time, we still largely turn a blind eye to the needs of those who actually prolong processes with their complaints
- In an emerging market with long life cycle projects, a delay reduces revenue and affects the first mover advantage



<https://www.henricodolfing.com/2019/11/what-is-real-cost-of-delay-of-your-project.html>

But how?!

Hydrogen Impact Forums

Round table discussion on the local impact of hydrogen projects

- Max 8-10 panelists, representing different perspectives on the local impacts of hydrogen transition in the region
- Participants to be selected in advance, with permission to record the discussion for research purposes
- **Seats to be secured for representatives of the civil society**

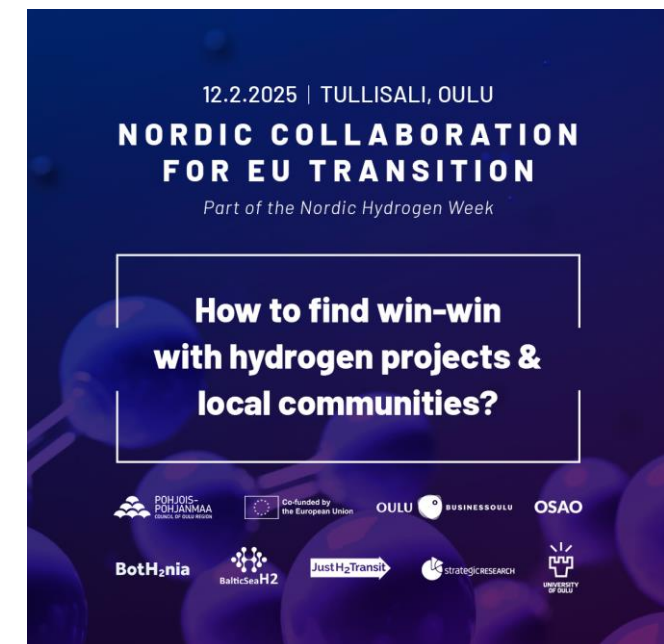
First in Pori on Dec 4 2024 as part of the New Energy Era? – event

The second, in **Oulu on 12 February 2025**, will be more extensive:

- Stakeholder meetings in three countries will provide information on the social acceptability of local hydrogen projects
- The key development challenges identified in the discussions will be presented to business representatives, followed by comments from policy makers from Norway, Sweden and Finland.
- Academic institutions will observe the impact of the development of hydrogen projects and formulate policy recommendations.



[Local impacts of hydrogen transition in Pori - blogpost](#)



FIVE SOCIO-TECHNICAL SCENARIOS

Crisis & Collapse / Decline & Collapse

- Multiple crises derails RE investments and green H2 efforts
- Disruptions to energy infra
- Investments focus on crisis sectors, with H2 usage being limited to fossil-based types.

CRISIS & COLLAPSE

Technology & Innovation / Transformation

- Clean H2 transit thrives with EU support
- Community-driven business models
- All components (land, water, workforce, infra) are available

PROSPERITY & FLOURISH

Strategy, Policy / Discipline

- Strong public support for clean energy (inc nuclear)
- National policies (carrots, sticks, compensations) stimulate hydrogen demand, mitigate high prices, and local benefit sharing
- Education programs and “open borders” to combat workforce shortage

PUBLIC POWER & STATE LEADERSHIP

Constraints / Limitations

- High green H2 prices and unclear definitions of “clean”
- Conflicts over natural resources escalate, H2 economy fuels energy poverty
- Shortage of workforce, slow permit processes
- Unresolved safety & security questions, lack of investments in infra

DIVIDED GAINS & DISPARITY

GROWING PAINS & STALLED PROGRESS

Business as usual / Continuation

- Role of renewables (RE) in H2 production is expanding slowly. Nuclear part of the pallet
- Green H2 used industrially, meeting existing demand

- Local land use conflicts arise. Companies fulfill mandatory engagement obligations
- Infra investments limited to RE and H2 plants
- Competition over workforce is hard



Case Inkoo



Problem:

A coal-fired power plant used to operate in Joddböle, Inkoo. The area is used for sand and gravel extraction and port activities. In 2022, a floating LNG terminal was anchored in the port.

From the perspective of landowners and national policy makers, it would be difficult to find a better location for the Norwegian company Blastr Green Steel's steel plant. However, some local people disagree - loudly.

Concerns:

- environmental impacts
- language and cultural change
- factors influencing Inkoo's vitality
- the municipality's decision-making capacity
- the participation opportunities and information needs of Inkoo residents
- the reliability of the project developer
- the role of the state

Akordi's recommendations:

- Production of transparent impact and monitoring data in cooperation with the local people, to address the **economic, social and cultural impacts of the project** on the local community. **EIA and planning processes don't deliver these.**
- Companies in Joddböle, together with key stakeholders and neighbors, would consider how to credibly **monitor the perceived (existing) negative noise and dust impacts** and what measures could be taken to potentially reduce them.
- The credibility of impact assessment data in the eyes of citizens can be improved by developing a **commonly agreed approach to addressing and validating** the emerging assessment information.
 - If needed, independent experts to be asked to assess the accuracy of the results or the sufficiency of the studies, especially for certain key issues.

Thank you!

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 Just Energy STN

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