



NordCLIMPACT

Reducing the impact on climate
through joint action in the Nordic NRA's

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Bob Hamel
Åsa Lindgren
Karoliina Saarniaho
Jon Kjær Jørgensen
Páll Valdimar Kolka Jónsson

Norwegian Public Roads Administration
Swedish Transport Administration
Finnish Transport Infrastructure Agency
Danish Road Directorate
Icelandic Road and Coastal Administration





Pall



Karoliin



Bob



Jon



Åsa



Building on NordLCA and NordLCA+

NordLCA and NordLCA+ deliverables

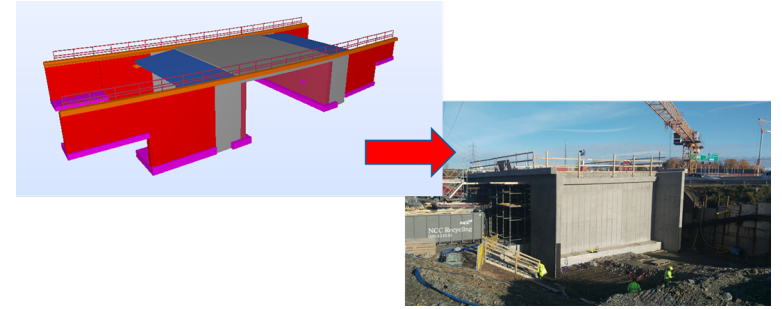
- Nordic guide for the use of LCA for infrastructure (website)
- Basis for tool and method improvement
- Basis for linking LCA to model-based projects (BIM)
- Yearly branch seminars

NordLCA and NordLCA+ benefits

- Nordic network of LCA experts in participating countries. Also consultants.
- Exchange of knowledge and tools
- Cost reduction by joint financing



NordCLIMPACT aims to



- *Promote informed decision-making, adhere to, and when possible, influence the implementation and development of EU taxonomy standards from the Nordic perspective, and cultivate best practices for sustainable infrastructure development.*
 - *Continue the valuable cooperation for example through*
 - Facilitating integration of LCA into general modelling of infrastructure and BIM
 - Contributing to more direct incorporation of LCA results in NRA's operations
 - Understanding EU Green Deal and its impacts on the operations of the NRAs
 - Enhancing the use of LCA and climate information in procurement
- ... in order to contribute to reduction of GHG emissions!**
- Continuing the coordinated updating and development of LCA calculations, tools and data

Goals and work packages

WP1: Modelling climate information

- Facilitate integration of LCA into general modelling of infrastructure and BIM

WP2: Next level of informed decision making

- Contribute to more direct incorporation of LCA results in NRA's operations

WP3: EU taxonomy in the Nordic NRA's

- Investigate how the EU Green Deal will impact the operations of the NRAs

WP4: Procurement strategies

- Enhance the use of LCA in procurement
- Continue the coordinated updating of LCA calculations, tools and data

WP1: Modelling climate information

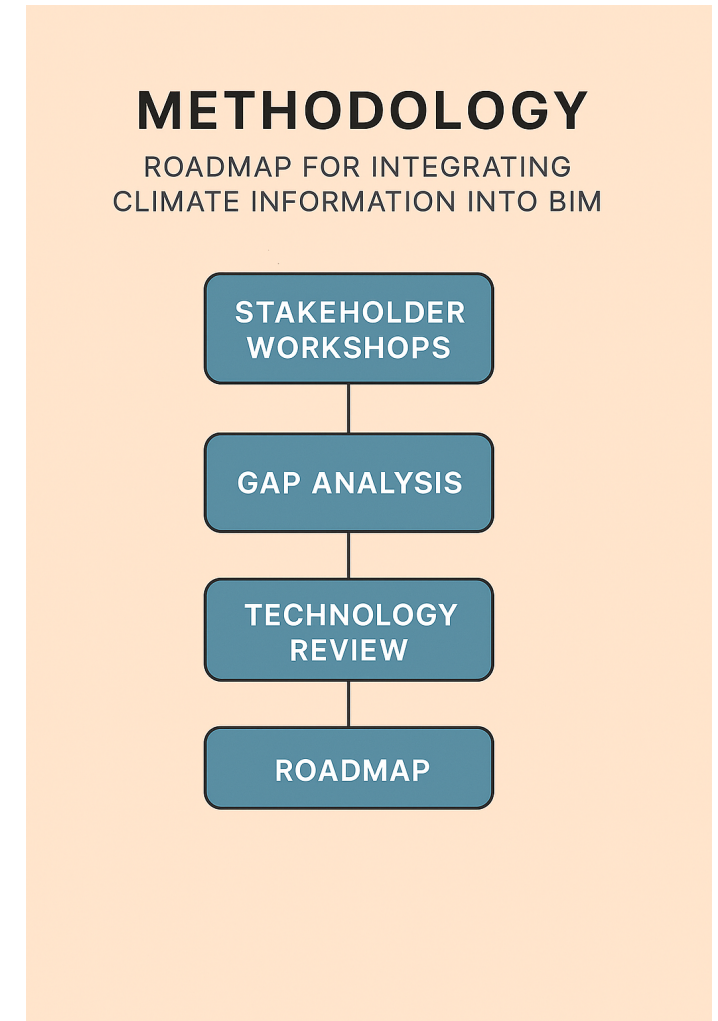
- Goal: enable *seamless integration* of LCA data in BIM for infrastructure design.
- Approach: develop a *common Nordic framework* supporting data-driven climate decisions.
- The project is divided into three connected parts:
 - 1 Roadmap for integration (completed)
 - 2 Harmonized terminology and approaches
 - 3 Standardized structures for public databases



WP1: Modelling climate information

Roadmap for integration – methodology and results

- Stakeholder collaboration across NRAs and key experts.
- Gap analysis: classification, LOD levels, data formats, EPD standards.
- Best practices from Sweco projects (InfraLCA, DIPP, TwinFinity).
- Technology review of major BIM tools → understanding APIs and dataflows.
- Outcome: *phased roadmap* showing concrete steps toward data integration.



WP1: Modelling climate information

From roadmap to implementation

- **Part 2:** Develop *harmonized terminology and methods* based on best practice review and academic collaboration.
- **Part 3:** Define *standardized database structures* for public climate data (EPD Denmark, Ökobau, etc.).
- Together, Parts 2 & 3 turn the roadmap into *practical, interoperable solutions*.
- Next steps:
 - Short term: Nordic working group, pilot projects
 - Mid-term: Nordic methodology, harmonize data
 - Long-term: Common climate data access, advanced use cases



WP2: Next level of informed decision making

Context

The use of results of LCA in the processes in the five Nordic NRA's, seen from a carbon point of view

Goal

Contribute to more direct incorporation of these results

Activities

- SWOT-analysis
- Land use (change) calculations
- Binding carbon budgets

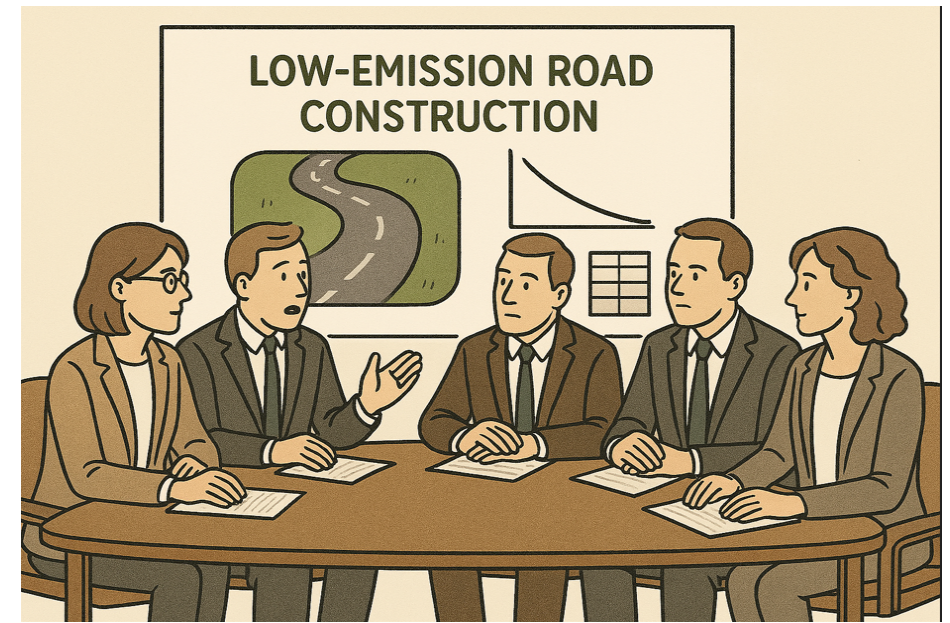


Illustration: Copilot

WP2: Next level of informed decision making

1. SWOT analysis "Enabling informed decision making"

Method

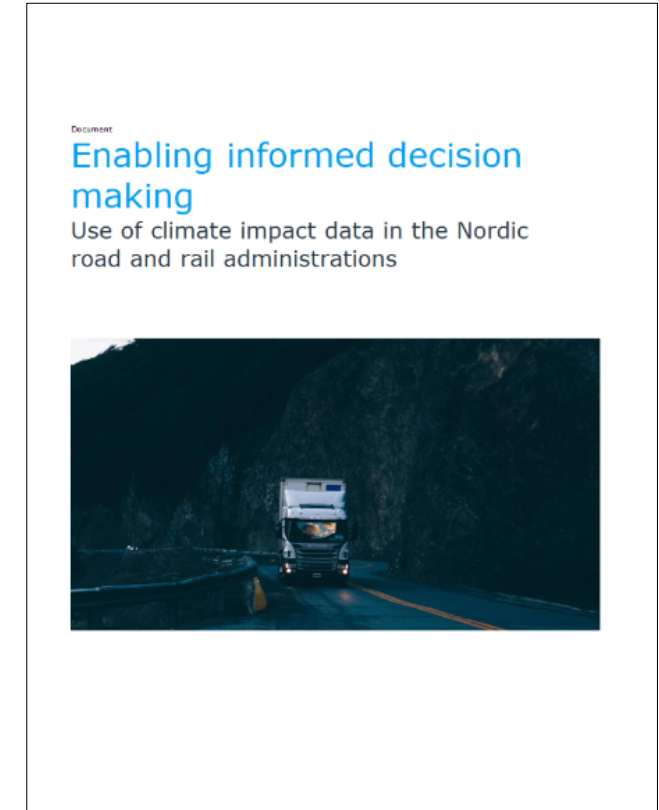
- Semi-structured interviews and a Nordic workshop

Results (so far)/ Key learnings

- Many good initiatives exist
- However, there are still actions that can be implemented to increase the degree of which LCAs are being included in decision making

Recommendations: establish

- Project carbon budgets with economic consequences
- National emission databases
- Sector climate neutrality target
- Climate target for operation and maintenance



WP2: Next level of informed decision making

2. Land Use and Land Use Change calculations (LULUC)

Status: Ongoing

Method: Desk top research and interviews

Goal:

- Learn from each other's experiences, and further develop methods for LULUC carbon assessments
- Identify possible needs for additional work and research



Foto: Per Kollstad

3. Consequences of binding carbon budgets

Status: Startup phase

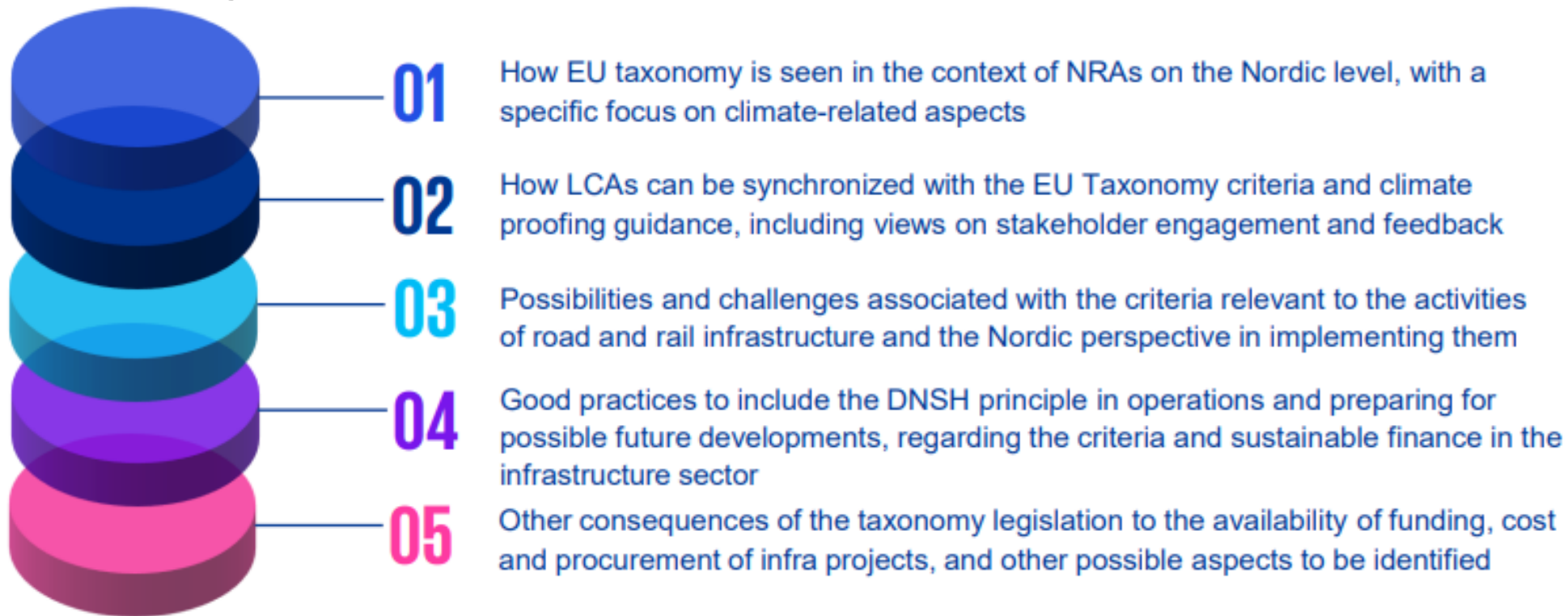
Goal:

- Examine the consequences of possible carbon budgets for NRAs

WP3: EU Taxonomy in the Nordic NRAs

Status: Ongoing (started in September 2025)

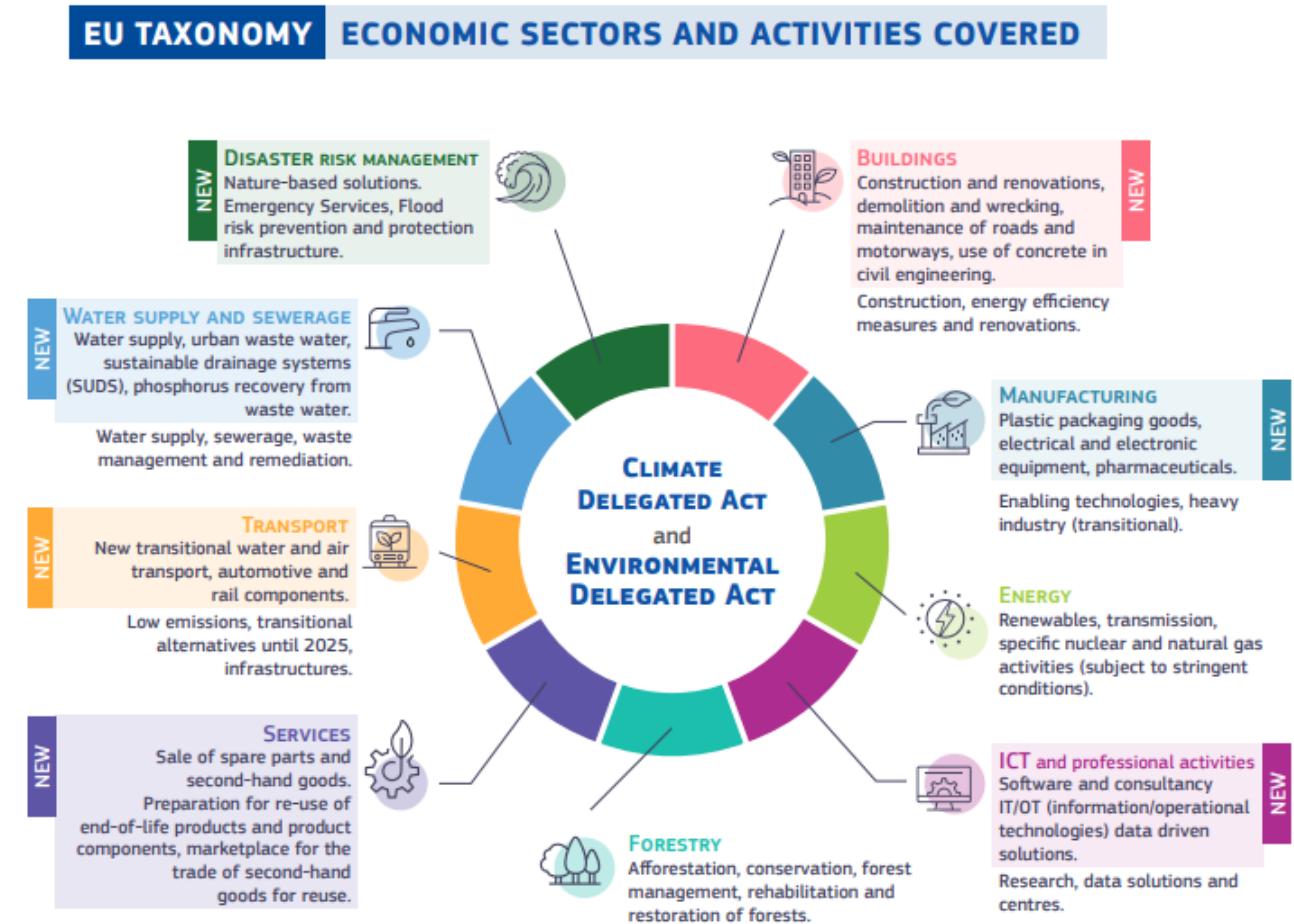
Goal: Common perspectives in the Nordics through better understanding of the following:



WP3: EU Taxonomy in the Nordic NRAs

EU taxonomy for sustainable activities is a key tool in the EU's efforts to channel financial flows towards **sustainable investments**. The objective of the taxonomy is to create a **classification system to harmonise the definition of sustainability**.

- The EU taxonomy is based on the **Taxonomy Regulation**, which came into force in 2020 and states that an economic activity defined as sustainable must contribute to one or more environmental objectives **without causing significant harm** to other environmental objectives.
- The fulfilment of these requirements is assessed by means of activity-specific technical screening criteria.



Source: European Commission

https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en

WP3: EU Taxonomy in the Nordic NRAs

The sustainability of infrastructure is viewed from several perspectives:

- The role of the infra as a source of GHG emissions and a user of natural resources and materials
- An enabler for sustainable activities for example through low-carbon transport, creating a market for secondary raw materials (circular economy), resource efficiency and innovative sustainable solutions
- Climate resilience and adaptation of infrastructure to the impacts of climate change
- Identifying and addressing other significant environmental impacts, including through "do no significant harm" principle.



The workshop on 8 October brought together National Road Authorities (NRAs) from Finland, Sweden, Norway, Iceland and Denmark to discuss the implementation and impact of the EU Taxonomy on road infrastructure projects. The agenda included sharing national experiences, reviewing technical criteria, and identifying common challenges and opportunities for harmonization.

WP3: EU Taxonomy in the Nordic NRAs

Overview of EU Taxonomy impacts



Funding linked to compliance

EU-funded projects (e.g., RRF, CEF) must demonstrate climate resilience and DNSH compliance; regulatory alignment increasingly influences financing and procurement.

Taxonomy alignment becoming standard

While not yet universal, full alignment is expected to become a prerequisite for public and private infrastructure funding.

Indirect obligations for NRAs

NRAs should aim to avoid hindering compliance as the affecting parties are e.g., contractors and suppliers.

Strategic importance beyond funding

Alignment strengthens access to financing, brand reputation, risk management, and competitive position.

Strong emphasis on climate mitigation & adaptation

Projects must integrate climate risks assessments, vulnerability analysis, and adaptation measures into design and planning.

Guidance and continues improvement

EU technical guidance is referenced, but deeper project-level assessments are needed.

EU Taxonomy can impact funding, costs and procurement

Funding

- **Taxonomy compliance is becoming a key funding criterion**, already mandatory in some EU programs and increasingly emphasized by major financiers
- **Public and private funding models are tightening sustainability requirements**, with DNSH and taxonomy alignment influencing eligibility and PPP structures
- **Alignment with EU taxonomy will be critical for securing financing**, while also strengthening brand reputation, risk management, and competitive positioning

Costs

- **Administrative costs will increase** due to new compliance, reporting, and procurement requirements.
 - **Additional expenses from gap analyses and stricter procurement processes**, adding to ongoing administrative work
- **Material and content quotas may raise construction costs**, depending on recycled material availability and compliance with technical or safety standards
- **Non-standard material or material traceability criteria** may introduce practical cost implications in procurement and supplier management
- **Overall cost escalation is expected**, driven by combined regulatory and material-related changes

Procurement and other

- Integration of taxonomy criteria can encourage market adaptation and maintain eligibility for future sustainable funding
 - Recommendation – Align procurement criteria with taxonomy requirements
- Long-term market impact as taxonomy criteria are mainstreamed
 - Market actors (suppliers, contractors, etc.) will face pressure to adapt, potentially gaining a competitive edge in sustainable infrastructure markets

WP4: Procurement strategies

- Examine how the Nordic road and rail administrations (NRA) can stimulate the Nordic consulting and contracting market towards greater climate emission reductions through procurement.
- A double-sided perspective:
 - how can the supplier market contribute, and
 - how can the NRAs not only steer but also support the suppliers in their efforts to drive CO₂ emission related challenges in various types of infrastructure projects?



WP4: Procurement strategies

Implications - market shaping and communication

Develop more flexible contracting procedures and contracts to avoid technology lock-ins in long-term projects



To open up for new, innovative CO2 solutions emerging



Coordinate with and mobilize market actors



Speed up the market growth for new climate neutral products

Improve the understanding of the drivers for sustainable public procurement

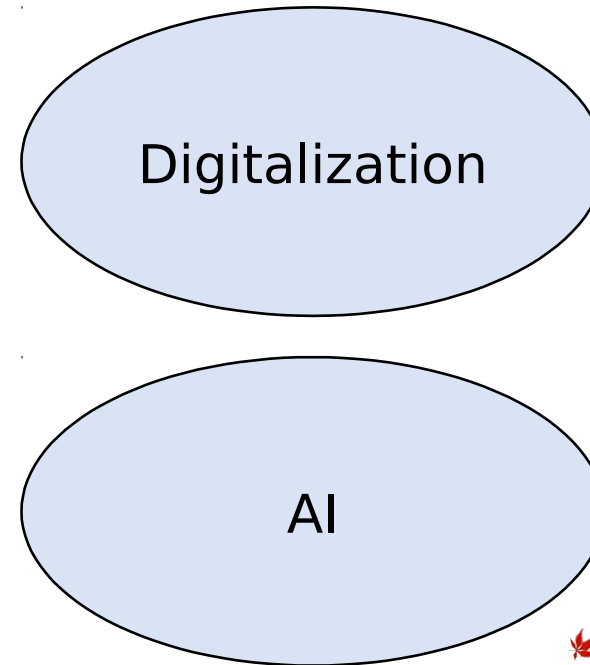


More effective changes

WP4: Procurement strategies

Internal and external communication

- Communication, interaction and information exchange with suppliers for driving supplier innovations
- Coordinate and aim for more similar long-term sector climate neutrality targets in the Nordics
- Standardize and uniform communication -> prioritized emission goals, technologies and requirements to all involved stakeholders within and between projects



Stay tuned

Final seminar 2026! Stay tuned ☐

Possible smaller, targeted seminars

All reports will be made available at:

[NordCLIMPACT – Reducing the impact on climate through joint action in the Nordic NRA's | Vejdirektoratet](#)



Thank you for your attention!

