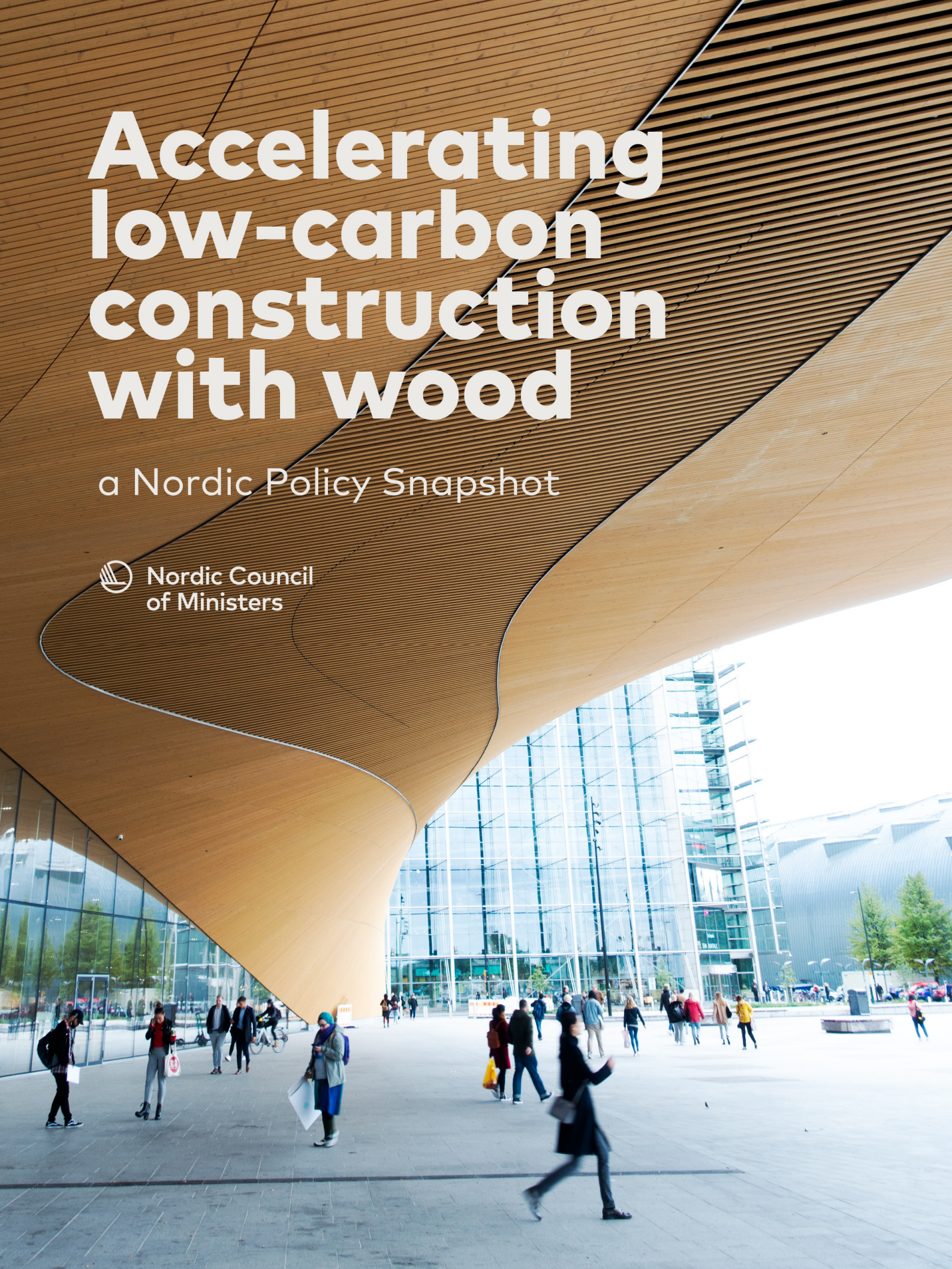


Accelerating low-carbon construction with wood

a Nordic Policy Snapshot



Nordic Council
of Ministers



Contents

Introduction	3
Wood and Construction in the Nordics	5
A low-carbon timeline for Nordic	7
Joint Nordic Challenges and Opportunities	9
Deep Dives	13
Finland	14
Denmark	19
Norway	24
Sweden	29
Iceland	34
About and Further Reading	38

Introduction

"The Nordic goal of being global leaders and advocates for climate action... cannot be reached without enabling a rapid change in our ways of building"

Nordic Declaration on Low Carbon Construction and Circular Principles in the Construction Sector – Nordic Ministers responsible for Construction and Housing – October 2019

Realising the Nordic vision of a carbon-neutral and circular built environment will be all but impossible without addressing the emissions from construction materials and processes that make up 11% of global emissions¹. Sustainably sourced wood, as the only major renewable building material and a resource that the Nordic region has in abundance, has the potential to make a significant contribution to reducing carbon emissions from construction, supporting the **shift towards a circular and bio-based economy** while being mindful of biodiversity.

Multi-storey wooden buildings are now discussed as an exciting solution to the dual challenges of housing shortages and low-carbon construction at every level of government in the Nordics, but **there remains a great deal to be done to achieve the scale needed.**

Across the Nordic region the utilisation of wood in construction varies significantly, and many decades of efforts on harmonisation of building codes have largely yielded few tangible results. As such, there is a great deal still to be learnt from Nordic neighbours.

A Nordic Policy Snapshot

- What are the policies and initiatives in place that have helped to spur timber construction?
- What is hindering progress?

1. World Green Building Council

- And are planned new policies sufficient to see the change needed?

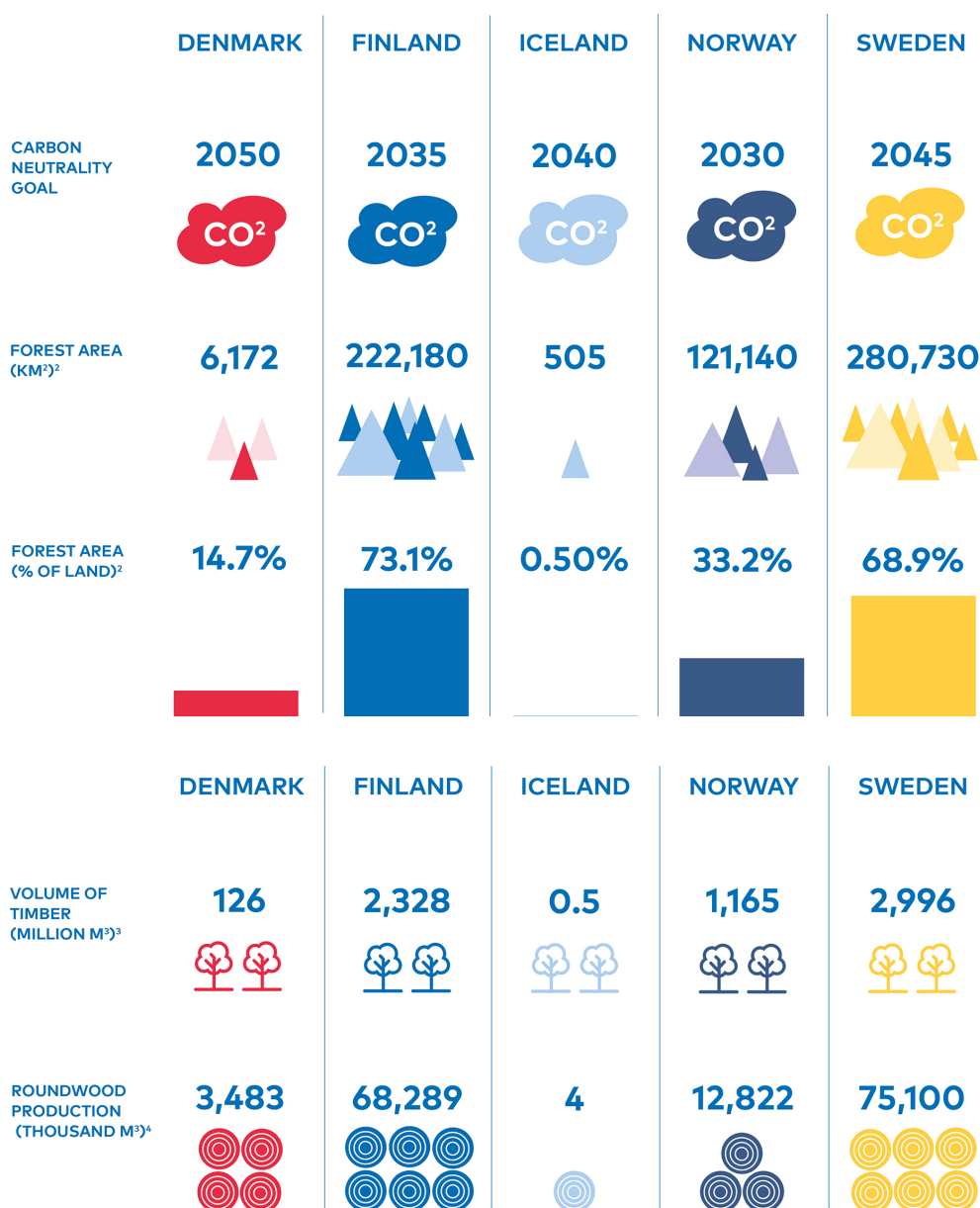
These are the questions that this policy brief sets out to answer.

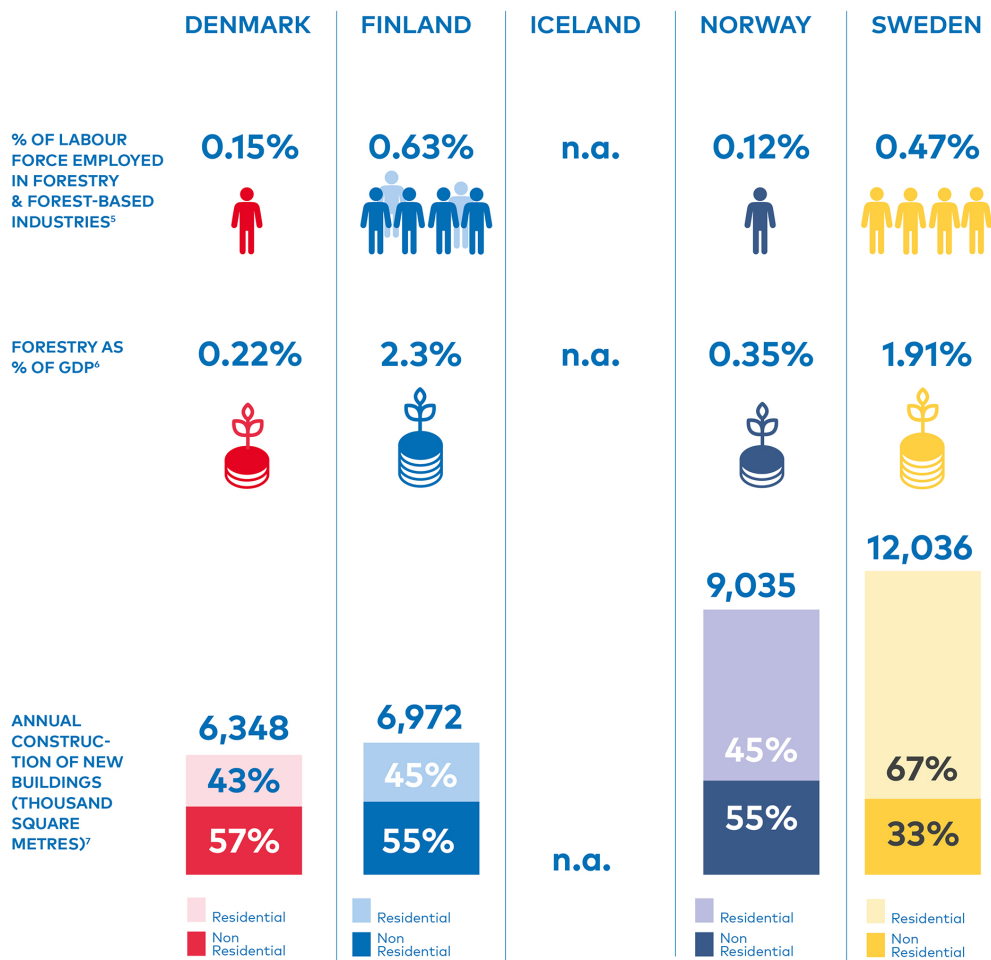
Whilst the Nordic region has many shared characteristics, it is important to understand the different needs and abilities of each country before coming to conclusions at a regional level. This policy snapshot gives a run-down of each Nordic country, taking the temperature of the policies, initiatives and underlying characteristics of each nation, tying together into the common challenges and opportunities that the Nordics face together to accelerate the use of wood in construction. We present not the typical recommendations for policymakers, but instead **six unanswered questions** that must be addressed going forward.

Please note that while the authors have attempted to gather the most up to date picture of the policy landscape across each Nordic country for this publication, it represents only a snapshot in time in 2020. For the most recent policy developments, especially around building regulations, we would recommend checking with each relevant national body.

Wood and Construction in the Nordics

While the Nordics have much in common, there are important differences between Nordic nations and regions by nature of geography and demography. Here we present an overview of some important facts about wood and construction in the Nordic countries.





² World Bank, 2016

³ Eurostat, 2015

⁴ Eurostat, 2018 (DK 2016, Iceland 2017)

⁵ Own calculation based on Eurostat 2018 and World Bank 2018

⁶ Own calculation based on Eurostat 2017

⁷ United Nations Statistics Division; Statistics Sweden, 2017

A low-carbon timeline for Nordic Construction

A timeline of climate targets and selected forthcoming lifecycle policies in the Nordics.



Voluntary sustainability class test phase begins

2020



Declaration requirement on emissions from production and construction phases (A1-5)

2022



Sustainability class test phase ends

2023



Sustainability class to become mandatory



Limits on lifetime building CO₂ introduced

2025

45% target of public construction in wood



Proposed limits on emissions from production and construction phases (A1-5); declaration requirement on phases B&C

2027



Proposed 40% emission reduction from production and construction phases (A1-5) (2027 baseline)



Proposed 80% emission reduction from production and construction phases (A1-5) (2027 baseline)

2030



Carbon Neutral



70% emission reduction (1990 baseline)

2035



Carbon Neutral and Fossil Fuel Free

2040



Carbon Neutral

2043

2045



Carbon Neutral and Fossil Fuel Free

2050



Carbon Neutral



80-95% emission reduction (1990 baseline)



80% emission reduction (1990 baseline)



Photo: Unsplash.com

Joint Nordic Challenges and Opportunities

Reducing emissions while building healthy, green and liveable Nordic towns and cities is possible through increased use of wood in construction. The Nordics have some excellent examples of this and policies in place to deliver towards those goals, but meaningful scale is still to be reached.

To achieve the shared Nordic vision of a low-carbon and circular construction sector that uses more wood, we believe that the **following six questions must be addressed by the industry and policymakers.**

One

How to better support the local bioeconomy and fill supply chain gaps whilst integrating digital technology in the Nordics?

The Nordics can deliver large amounts of sustainably sourced forest-based construction materials; a prerequisite for a genuinely sustainable wood construction industry. Additionally, the region stands at the forefront of digitalisation.

The challenge: Nordic production capacity to turn those raw materials into building elements such as CLT and glulam cannot keep up with demand, forcing projects to source from elsewhere with associated increase in costs and emissions. Digitalisation must be integrated through the entire supply chain to reap the benefits that it can offer in traceability and LCA.

Two

How to create pathways to legally-binding emission limits and agree on the required methods and data?

As LCA-based regulations and climate declarations are forthcoming across the Nordics, greater knowledge on the climate impact of construction and materials is being developed in the industry. Additionally, strong pan-Nordic collaboration on harmonising methods is well underway.

The challenge: without a long-term vision to legally-binding emission limits, as well as agreement on the tools, data and methods for calculating lifecycle emissions, progress here will falter and industry's potential to get ahead and utilise that to their advantage will be capped.

Three

How to better link and align Nordic expertise, build and share competencies towards a shared vision and become greater than the sum of our parts?

The Nordics have world-leading knowledge and skills, with formidable competences in sustainable forestry, design, architecture, engineering that are being applied to advancing wood in construction. This is a powerful export and makes the region well-placed have wider influence at European and global levels.

The challenge: these competences are not evenly distributed in the Nordics, greater integration, coordination and knowledge-sharing is needed, especially among the many intermediaries in the sector.

Four

How to adjust building regulations to make it easier for innovative new building materials to penetrate the market?

Performance-based and material neutral principles have become a cornerstone of Nordic building regulations, meaning that at least in theory wood can compete with other materials on a level playing field.

The challenge: there is still a tendency towards conventional and polluting materials and ways of working. The handling of regulations sometimes lacks the flexibility to deal with the nuances of wood for example, making the process more cumbersome for new low-carbon materials to gain approval.

Five

How to enable all local municipalities to build more in, and develop capacity in municipalities less experienced in low-carbon construction?

Nordic Municipalities have proven to be crucial actors in accelerating low-carbon wood construction locally. There are many good examples how local strategies in procurement, collaboration and clustering can be powerful tools.

The challenge: municipalities could move even further and faster with greater freedom and creativity in the tendering process, and despite some leading hotspots, ambitious local action is not widespread, with great regional disparities.

Six

How to better calculate and finance the carbon removal potential of Nordic forest products and bio-based buildings?

As frontrunners in tackling the climate emergency, with abundant knowledge and resources, the Nordics are already well underway in transitioning to a low-carbon, circular, and increasingly bio-based built environment.

The challenge: there still lacks agreed methods on calculating the carbon sequestration and storage that wood in construction represents and linking that to financial mechanisms that fund carbon removals, which would change the economic case for building in wood substantially.



Unsplash.com



Unsplash.com

Deep Dives

While there is consensus across the Nordics that wood can play a central role in reducing emissions from construction, each country has taken a different approach to achieving that goal.

In this section we deep dive into the policy approaches taken in each Nordic country, noting strengths and weaknesses, and allowing Nordic neighbours to compare notes and learn from each other going forward.

Finland

Denmark

Norway

Sweden

Iceland



Oodi, a new library and multifunctional citizens' forum. Credit: Tuomas Uusheimo

Finland

Key challenges and successes

1. The national Wood Construction Program's position in central government is unique amongst the Nordics, and has yielded impressive and holistic policy results.
2. Despite a small uptick in recent years, wood multi-storey buildings are still struggling to achieve significant market penetration in the residential market.
3. Work to include the carbon handprint of buildings in LCA could be critical in dramatically changing the case for wood construction in the coming years.

National wood snapshot

Forests have more political, cultural and economic importance in Finland than much of the rest of the Nordics, accounting for 2% of GDP but over a fifth of export earnings. Finland's forestry sets the gold **standard in producing sustainable forest products**, with high levels of digitalisation, through use of big data and digital tools. While Finland has been quietly getting about the work of building in wood for many years, uptake of wood in multi-storey buildings remains slow. Experience suggests however that attitudes are changing towards wood and the cost argument is being debunked time and time again.

The policy landscape

At a national level, there has been a demonstrated long term commitment to improving the market penetration of wood over the past 20 years, through the funding of multiple initiatives and ambitious target setting. For example, the government recently set a goal that 45% of all public construction in 2025 should be from wood, up from only 15% in 2019. At the heart of national policy efforts is a dedicated Wood Construction Programme within the Ministry of the Environment, which provides **a central guiding force to advance the wood agenda** both within and outside government. The results of those efforts are starting to pay dividends in the past few years, with a marked uptick in wood's share in construction.

Below is a breakdown of some of the key policy areas in Finland, that are enabling or hindering wood in construction:



Regulation

Like the rest of the Nordics, performance-based and material neutral building regulations have been mainstreamed in Finland for some time. Updates to the building codes in 1997 and again in 2011 have permitted wood construction up to four then eight floors without having to meet additional fire requirements.

One point of difference on fire regulation in Finland is the ruling principle of protecting people and evacuation times. This is different to Sweden's approach for instance, which makes harmonising such regulations cross-border tricky.

Finland has been slightly ahead of the curve having published a roadmap for low-carbon construction back in 2017, which included a goal to incorporate LCA into the building codes by mid-2020s.

Public spending on construction of new buildings in Finland is around €1.5billion annually, and policy has been developed in the form of voluntary green public procurement (GPP) criteria for low-carbon public buildings to harness the power of public procurement to accelerate the use of wood. These will be updated in the future to keep GPP at the forefront of ambition.

Competences

As well as the many strong education institutions in Finland that are working with wood in construction through vocational and academic programs, competence building is also taking place within the industry and at a municipal level. For example, the government has funded a successful training programme for structural engineers to bring them up to speed with new materials and methods in construction. This has proved a useful way to shift out of conventional ways of working.

An additional focus of the National Wood Construction Program has been to increase know-how at a local level and support municipalities in their decision making processes.

Research and Development

Finland's many strong research centres and applied science universities that have a focus on developing skills and knowledge for the next generation of wood construction are also leading on R&D in the field, particularly around circular construction.

Another success of the national Wood Construction Program has been to launch R&D projects in collaboration between industry, academia and the authorities.

Marketing and Advocacy

Another role of the Environment Ministry's Wood Construction Program is the promotion of wood both within government and more widely. This ensures that there is a voice speaking for wood construction at the governmental table so to speak. In addition, there are trade associations and other bodies that do good work to promote wood in construction nationally, although international presence and representation could be improved to strengthen the export of timber construction expertise from Finland.



What policies are on the horizon?

Following on from the government's low-carbon construction roadmap, **compulsory LCA-based emission limits on new buildings should be introduced by 2025** or earlier in a timeline that is currently being developed. This should help to strengthen the case for wood, while work on establishing a common database to work from is ongoing. By 2025, the aim is also that 45% of public construction should be in wood.

A second key area in which Finland is leading the way on policy development is around the building 'handprint' concept, which aims to formalise the positive carbon impacts of new construction (through carbon storage or renewable energy generation for instance). It is proposed to integrate this into the LCA methodology, which could be **a game-changer in assessing, accounting for and ultimately financing avoided emissions.**

Oodi

Oodi is a homage to traditional Finnish wooden construction, a new library and multifunctional citizens' forum for 2.5 million visitors a year that pushes the boundaries of large wooden public buildings.

[Read more about Oodi and other cases of Nordic good practice in wood construction](#)



Credit: Tuomas Uusheimo



Lisbjerg Bakke. Credit: Vandkunsten Architects

Denmark

Key challenges and successes

1. The 'sustainability class' is a well-rounded policy that with further development – through the establishing of limits on lifetime CO₂ emissions for example – could lead to greater utilisation of wood.
2. Challenges remain in fire and height limits for wood buildings, which should be addressed going forward.
3. There remain underleveraged competences in engineering, architecture and design, and greater efforts could be made to direct these skills towards wood in construction.

National wood snapshot

Compared to its Nordic neighbours, Denmark's forestry and wood-based industries are small, with the volume of timber and roundwood production around 5% of that in Finland, for example. As such, forestry doesn't account for a huge proportion of the economy of jobs in Denmark. Despite a handful of good examples, mass timber construction in Denmark has until now lagged a little behind other parts of the Nordics, although **that is beginning to change**.



The policy landscape

Tackling carbon emissions in Denmark's construction sector has been rapidly rising up the political agenda, with wood's underutilised role in the material mix gaining particular traction since 2019. Discussions in parliament and government are ongoing, through a growing number of hearings and consultations examining the potential policy levers to build more with wood, but substantial wood policy is yet to be decided upon.

Below is a breakdown of some of the key policy areas in Denmark, that are enabling or hindering wood in construction:

Regulation

Denmark's building codes are, at least on paper, performance based and material neutral, but wood still faces some additional barriers in this area.

To meet fire safety requirements when building higher than four storeys, individual technical assessments are needed in planning due to a lack of pre-accepted solutions, and wood buildings must withstand longer burn times (120 minutes) than other materials (60 minutes). On site acoustic testing during the construction phase is required in Denmark, as opposed to being able to model acoustics to meet regulation at the design stage. These factors can be seen to have hindered the development of wood construction, as they create greater risk and costs for developers.

Municipalities are proving to be critical actors in Denmark for driving an increased uptake of wood in construction, especially through public procurement. However, regulation is somewhat restrictive in allowing local authorities to stipulate LCA demands in the tendering process for example, which could lead to more public buildings in wood.

Competences

Denmark has strong competences in architecture, design, and urban planning, which have not been fully leveraged to accelerate wood in construction.

Limited policy has been introduced to develop competences for wood construction, and while interest is growing at a student level, teaching competences within Danish institutions could be stronger to meet this demand and equip the next generation with skills and knowledge for wood. Additionally, industry must take greater responsibilities for building competences in house.

Research and Development

There are a handful of university departments - mostly engineering - working on LCA, but Denmark is not home to any notable wood-focused research centres driving home-grown R&D.

Marketing and Advocacy

Given the small size of Denmark's forestry sector, it is home to numerous organisations and networks aiming to accelerate the development of wood in construction nationally through marketing and advocacy. Several notable Danish stakeholders are also involved in wood in construction network projects at a European level.



must deliver a 70% reduction
in carbon emissions
(1990 baseline)

Policies are on the horizon

The dominant forthcoming policy in this area in Denmark is **the introduction of 'sustainability class' for construction**, beginning a test phase in 2020. The 'sustainability class' is a holistic attempt to improve not only the climate impact of buildings through LCAs, but also other issues including resource use, indoor climate, natural light etc. The initiative is initially voluntary, but may become mandatory by 2023, with no indication given to date of LCA-based emission limits being imposed. This policy has buy-in from industry and gives a clear pathway in the short term, but greater certainty is needed on the long term goals, and how the industry will develop sufficient competences.

Additional discussion is currently underway to raise the current floor limits for timber construction in regard to fire regulation, which would surely remove one barrier to building more with wood.

Lisbjerg Bakke

Lisbjerg Bakke is a vision of what sustainable social housing in Denmark can look like. The hybrid timber construction of 40 apartments is an open source design that anyone can access, and has 70% lower climate emissions and 28% lower lifecycle costs compared to the Danish standard.

[Read more about Lisbjerg Bakke and other cases of Nordic good practice in wood construction](#)



Credit: Vandkunsten Architects



Lade School in Trondheim. Credit: Carl-Erik Eriksson

Norway

Key challenges and successes

1. Norway leads in R&D and innovation, as demonstrated by some of the ground-breaking timber buildings that have been built in recent years, but now faces the challenge of scaling across the construction sector.
2. With increasing demand for wood construction elements, it's crucial that production using locally and sustainably sourced wood grows as well, to ensure that the benefits reach across the entirety of the Norwegian wood value chain.
3. A long-term pathway must be set out to give clarity on the future of climate declarations and future emissions reduction targets within the sector, ensuring that national ambition matches that shown by regions and municipalities.

National wood snapshot

Norway's forests, while covering less land area and being less productive than Sweden and Finland's, remain an important resource to the development of a growing bioeconomy. Wood's potential to reduce construction emissions hasn't gone unnoticed in Norway, which has some excellent lighthouse projects including the world's current highest timber-framed building, Mjøstårnet, and **wood is now the leading construction material in schools and kindergartens**. Imports of building materials – including wood – are increasing, highlighting the importance of further developing local wood supply chains to meet growing demand.



The policy landscape

Wood in construction doesn't receive the same central focus in the Norwegian Government's policy as in Finland for example, instead being included in the fringes of government strategies on bioeconomy, forestry and climate mitigation. However, Norway's world-leading goal of carbon neutrality by 2030 and the fact that 10% of national emission stem from construction materials has brought renewed attention to wood solutions in construction. **Local and regional actors in Norway have been particularly crucial** in the development of wood construction, and have a great deal of autonomy to push down construction emissions through the use of wood.

Below is a breakdown of some of the key policy areas in Norway, that are enabling or hindering wood in construction:

Regulation

Norway no longer strictly limits the number of floors that can be built in wood, having moved more towards performance based regulation regarding materials. Despite this, fire regulations are still proving problematic for some wood construction projects to meet the requirements.

While national regulation has not been hugely helpful in advancing wood in construction, the flexibility of local and regional planning authorities to go further has yielded some impressive results. This has primarily been achieved through masterplans, and the ability for planning authorities to introduce requirements that mandate use of renewable building materials for example.

Norway has recently introduced the NS 3720 standard to bring a common way of working with climate assessment of buildings, but any moves towards climate declarations or limits are still under discussion.

Competences

Norway has several established and successful centres for research and teaching around wood construction that are leading on building competency. Experiences suggest that student uptake on wood-related courses is increasing, demonstrating a positive growth in interest amongst the industry's next generation.

Research and Development

R&D and stimulating innovation have been at the cornerstone of Norway's policy efforts to increase wood in construction, primarily through the bioeconomy and forestry strategies.

The government, under the auspices of Innovation Norway and the National Research Council has run numerous projects aimed at increasing value through the entire forestry chain, notably including the 'Wood-based Innovation Program', an initiative to increase competitiveness of timber-framed multi-storey buildings and value-added processing in for that sector.

Marketing and Advocacy

Norwegian wood trade associations have long established relations within the construction sector, and have been effective at promoting wood solutions in construction as well as guiding municipalities through the process of building with wood. These organisations have however not focused many efforts on advocating for policy changes at a national level.

Other initiatives and partnerships, such as the 'wood ambassadors network' which is partly funded by the regions and municipalities has helped to forge new connections across the value chain and brought wood into consideration on many construction projects.



What policies are on the horizon?

Regulation of construction emissions and climate declarations is still under consideration at the time of writing. While it is clear that new technical declarations are forthcoming, it is currently unclear exactly how carbon emissions will be integrated into this. There is promise however, given the established standards for calculation and interest in creating joint Nordic LCA databases. It is expected that **over time climate declaration requirements and eventually scaling emission limits will be introduced.** The question remains on the ambition of the timeline that the government will set in that regard.

Lade School

Lade School in Trondheim is demonstrating how municipalities can use the power of public procurement in driving change towards wood throughout the construction supply chain, reducing costs and meeting climate goals along the way.

[Read more about Lade School and other cases of Nordic good practice in wood construction](#)



Credit: Carl-Erik Eriksson



Kajstaden. Credit: C.F. Møller

Sweden

Key challenges and successes

1. A full roadmap for the rollout of the climate declarations and legally binding limits and reductions is needed to strengthen this policy and enable the industry to adapt accordingly.
2. With growing demand for wood construction elements not only nationally but also for export, Sweden must grow its production capacity to keep its leading position.
3. Swedish success in wood construction could be better transferred through greater efforts for Nordic harmonisation and cooperation.

National wood snapshot

Sweden has the most forest area and highest wood production of any Nordic country, which has a large importance for the jobs and economy with over 25,000 people employed in forestry and forest-related industries in 2018. There has been a strong drive for wood in construction over many years in Sweden, which today is seeing **significant uptake in multi-storey buildings**. This is especially true in residential construction, which makes up a greater proportion (around two thirds) of the market than in the rest of the Nordics, although wood is still considered an underutilised resource.



280,730 km²
forest area (2016)



75,100 km³
annual roundwood
production (2018)

The policy landscape

Sweden is often held up as an example internationally for the steps it has taken to realise the potential of wood in the construction supply chain, while developing local bioeconomies and cutting carbon emissions. This has been enabled by a pro-wood policy landscape over many years, but **wood could still play a greater role in the material mix**, and is an issue that is attracting renewed interest at a ministerial level, and new policy developments.

Below is a breakdown of some of the key policy areas in Sweden, that are enabling or hindering wood in construction:

Regulation

Sweden's building codes are both material neutral and performance based, and experience suggests that wood constructions do not face any significant additional hindrances from a regulatory perspective.

One key enabling factor in Sweden's wood construction progress has been the lifting of any height limits on wood buildings over 15 years ago, which sent a clear signal to developers and designers to go all in for large multi-storey wood buildings. Other factors such as the ability to use digital models at the design phase to meet acoustic requirements rather than laborious on-site testing have been further enabling policies for forest-based materials to gain traction in the market.

Competences

The most notable way in which Sweden has developed competences through the supply chain is in the unique collaborations between industry, academia and local government. This is built upon a base of several education institutions with strengths in wood and construction.

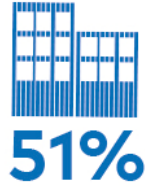
Such developments are no accident, but rather the result of targeted public funding to establish and support specialist centres of excellence.

Research and Development

R&D in Sweden is driven by substantial public funding for research into the practical application of material science of wood across the value chain. The most effective examples are collected in clusters around related expertise that lead to new and innovative ways of working.

Marketing and Advocacy

With the importance of the forestry sector to the Swedish economy and jobs – as well as the country's sheer size – there are many organisations and initiatives working to promote and advocate for wood in construction. Sweden has done more than most other Nordics countries in marketing its wood solutions to a wider international audience, and has reaped the benefit from that in export of knowledge and goods.



increase in wooden apartment
blocks built from 2018 to 2019

What policies are on the horizon?

The most significant current policy development is the introduction of a requirement from 2022 for all new buildings to submit a **climate declaration on emissions** from production and construction phases (A1-5). This must be completed and cleared by the local municipality before construction begins. Initially simply declaring the emissions is all that will be required, and it is proposed that emission limits will have to be met from 2027, with 40% and 80% reductions by 2035 and 2043 respectively. Additionally, more stages of buildings' lifecycle emissions will be gradually introduced into the declarations.

The result of this clearly laid out timeline is expected to be a greater knowledge in the sector on CO₂e emissions per m², which can put wood on a more even footing with other materials.

Kajstaden

Kajstaden is Västerås' new landmark nine-storey timber tower, which has reduced material emissions by 44%, and created a business model that is spreading all over Sweden.

[Read more about Kajstaden and other cases of Nordic good practice in wood construction](#)



Credit: C.F. Møller



Flatey Farm. Credit Límtré Virnet

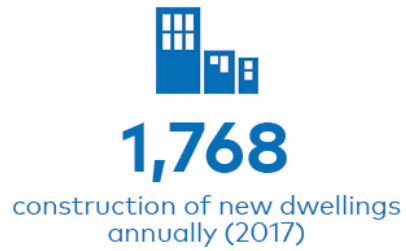
Iceland

Key challenges and successes

1. Once a roadmap towards a sustainable construction industry for 2030 is set out, it may have the power to change the case for use of different materials in the mix and the slow introduction of more wood.
2. Iceland's construction mindset and ways of working remain in concrete and steel - building competencies and knowledge in other materials remains a significant barrier.
3. Without a domestic forestry industry to speak of, there are fewer voices speaking for wood, making it much harder to advocate for its use as a modern, low-carbon building material.

National wood snapshot

Iceland is an outlier in the Nordics when it comes to forestry and forest-based industries in that they are almost negligible. While a tiny amount of forestry takes place, it is very much at a pilot stage in terms of producing anything suitable for construction. **Iceland imports almost all of its building materials**, with the exception of mineral wool, causing difficulties when it comes to accounting for the emissions related to materials produced elsewhere. Despite the fact that timber construction elements, with a high strength-to-weight ratio, offer an effective solution in this regard, uptake of wooden multi-storey buildings in Iceland is very low.



The policy landscape

Iceland has done a great deal of work in policy development over the past decades to reduce operational emissions from buildings to almost zero through renewable heat and power. This means that although emissions embedded in materials may be high, **overall building emissions are generally low when seen from a LCA perspective.** Unlike in other Nordic countries, Iceland has not actively pursued policy to encourage the use of wood in construction.

Today's building regulations in Iceland are not material specific, but performance based, and have been simplified in recent years. The lack of penetration of wood construction can be attributed to **a lack of knowledge, experience and competence in building with wood in Iceland**, although several research and pilot projects are beginning to examine its potential.

Lacking a domestic forestry industry doesn't help here, as there aren't the additional drivers towards wood in the form of trade associations and other third parties.



What policies are on the horizon?

Work is underway to develop a roadmap for sustainable construction in 2030, which should include some aspects of LCA. It is as yet unclear whether forthcoming legislation will require climate declarations as in other Nordic countries.

In the government's latest climate plan, **renewed research efforts were announced to push towards a circular and low-carbon construction** sector in Iceland, bringing together new partnerships to achieve this goal.

Flatey Farm

Not far from Iceland's largest glacier, Vatnajökull, Flatey Farm has used a large timber-framed building to refresh their dairy farming operations, with reduced carbon emissions and increased welfare for animals and employees.

[Read more about Flatey Farm and other cases of Nordic good practice in wood construction](#)



Credit Límtré Virnet

About and Further Reading

This publication was prepared in late 2020 by the Nordic Wood in Construction Secretariat, through analysis of national policy documents and interviews with experts in each Nordic country. Additional insights were gained from a series of expert roundtable dialogues, and learnings from the secretariat's activities from 2018-2020.

Acknowledgement must go to all those who have given input to this work, and those who have taken part in interviews and roundtable dialogues; your insights have been invaluable.

Further Reading

- [NoMu Wood](#)
- [Nordic Dialogue Forum for LCA, climate and buildings](#)

Finland

- [Method for the whole life carbon assessment of buildings \(2019\)](#)
- [Roadmap for low carbon construction \(2017\)](#)
- [National Wood Construction Program](#)
- [Puuinfo](#)

Denmark

- [The voluntary sustainability class for construction](#)
- [Træ i Byggeriet](#)
- [Træinformation](#)
- [Report: Climate Impact from 60 Buildings \(2020\)](#)

Norway

- [National strategy for the Forest and Timber Industry \(2015\)](#)
- [Bioeconomy Strategy](#)
- [Bygg21](#)
- [Trefokus](#)

Sweden

- [Climate Declarations for Construction](#)

- [Swedish Wood](#)
- [Trästad](#)
- [Bioeconomy Region](#)
- [A climate neutral value chain in the construction sector: roadmap](#)

Iceland

- [National Climate Plan: Climate impact of construction](#)

The Nordic Wood in Construction Secretariat

The team behind this report, the Nordic Wood in Construction Secretariat, is an initiative commissioned by the Nordic Council of Ministers and the Swedish Government, and hosted by EIT Climate-KIC, with an aim to support and accelerate the use of wood in construction in the Nordics. They do this by improving regional dialogue, knowledge-sharing and collaboration on wood in construction, and sharing Nordic solutions with the world.

About this publication

Accelerating low-carbon construction with wood

– a Nordic Policy Snapshot

Nic Craig

Nord 2021:005

ISBN 978-92-893-6901-5 (PDF)

ISBN 978-92-893-6902-2 (ONLINE)

<http://doi.org/10.6027/nord2021-005>

© Nordic Council of Ministers 2021

Layout: Gitte Wejnold

Cover Photo: Unsplash.com

Nordic co-operation

Nordic co-operation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, the Faroe Islands, Greenland, and Åland.

Nordic co-operation has firm traditions in politics, the economy, and culture. It plays an important role in European and international collaboration, and aims at creating a strong Nordic community in a strong Europe.

Nordic co-operation seeks to safeguard Nordic and regional interests and principles in the global community. Shared Nordic values help the region solidify its position as one of the world's most innovative and competitive.

Nordic Council of Ministers

Nordens Hus

Ved Stranden 18

DK-1061 Copenhagen

Read more Nordic publications: www.norden.org/publications