



NEW ZEALAND  
FOREIGN AFFAIRS & TRADE  
Manatū Aorere

DECEMBER 2024

# Infrastructure NZ delegation visits Denmark

MARKET INTELLIGENCE REPORT

# Summary

- Infrastructure New Zealand visited Denmark on 16-17 May to identify best practices and models across the Danish infrastructure sector with potential application to New Zealand.
- Denmark has a strong record of successfully undertaking major infrastructure projects, both publicly and privately funded. A long-term approach to infrastructure planning and delivery by a succession of coalition governments has contributed to this success.
- A recurring theme was the importance of political consensus in providing a stable foundation for long-term infrastructure planning and investment.
- There is strong social licence for this approach with Danes generally proud of what their high-income taxes provide them in terms of lifestyle and the quality of their built environment.
- Denmark uses an innovative mix of funding methods for infrastructure financing, as illustrated by the Copenhagen land and metro development model.
- Viewing climate change as an opportunity has enabled Denmark to take a long-term approach to addressing environmental issues, while building in short-term measures to address immediate resilience issues.
- Denmark's systemic approach to economic development, and the partnerships created at political, local government and business levels, offer insight into models that are delivering good results

# Report

The New Zealand Embassy in Stockholm accompanied an Infrastructure New Zealand (INZ) delegation to Copenhagen from 16-17 May. The delegation was hosted by Arup and Ernst and Young (EY), and met with Danish organisations Danmarks Nationalbank, By & Havn, City of Copenhagen, Sund & Bælt – Femern A/s, Copenhagen Metro, Arup, Ministry of Transport, and the Danish Water and Wastewater Association.

The delegation's objectives were to: identify best practices across the Danish infrastructure sector, share insights, and stimulate discussion about their potential application to New Zealand. INZ's report notes that Denmark had a lower GDP than New Zealand for a long time but is now significantly ahead, and has undertaken major infrastructure projects, especially in transport, both publicly and privately funded, and delivered these at a scale much greater than New Zealand.

---

## Danish economy

Danmarks Nationalbank gave a presentation on the Danish economy. Danish GDP per capita is among the highest in the world (US\$74,000 in 2022), and the economy is export focused (43% of GDP) with a heavy weighting to pharmaceuticals (Novo Nordisk) and shipping (Maersk). Taxes are high and the government sector is large, with free health care, education, and social benefits. A budget law requires the fiscal deficit not to exceed 0.5% of GDP, resulting in a strong AAA credit rating. State guarantees or direct state loans are provided to state-owned companies raising debt to fund infrastructure projects. This allows capital to be raised at effective sovereign interest rates.

---

## Broad-based, long-term political coalitions are key to Denmark's infrastructure success

A recurring theme was the importance of political consensus in providing a stable foundation for long-term infrastructure planning and investment. The Danish political system, with many political parties and where minority and coalition governments are the norm, requires parties to work together. This, combined with a four-year mandate period, provides a good platform for infrastructure planning and delivery.

In 2021, the coalition government developed the Infrastructure Plan 2035, aimed at reducing emissions in the transport sector by reducing traffic congestion, improving public transport, and facilitating a green transition encompassing road, rail and cycling infrastructure. The Infrastructure Plan includes a Public Transport Plan, which all the

political parties agreed to, and a Road Plan, which all parties except the Greens agreed to.

Implementation of the Plan is governed by a weekly cross-party meeting, and all approved projects are legislated, making them difficult to repeal. If the government changes, the Plan does not. As a result, infrastructure issues rarely feature in elections, and long-term planning and execution are enabled and efficient, without “politically based start-stop interventions”.

---

## Connecting the national vision with delivery and funding, and public agreement on what is important

Denmark has clear national infrastructure visions that are captured in policy and reflected through hierarchical planning frameworks. There is cohesion across sectors, and investment plans support implementation and drive progress towards the overall vision. INZ’s report notes that “Danes are generally proud of what their high-income taxes provide them in terms of lifestyle and the quality of their built environment”. With Copenhagen as an example, the delegation learned that urban life is dominated by a positive approach focused on what makes “a good life”, for example high-quality compact city living (and preventing urban sprawl), great architecture and design, and being able to swim in clean water. INZ considered this approach an opportunity for New Zealand to frame infrastructure development and planning as an effort to preserve what is important to the New Zealand lifestyle.

---

## Innovative funding methods

Another key takeaway was that New Zealand should look to expand sources of funding for infrastructure. Denmark uses innovative private infrastructure financing, such as the Copenhagen land and metro development model. The Copenhagen Metro is owned by three public entities (Danish State, City of Copenhagen and the City of Frederiksberg). With five metro lines radiating away from the city circle, it carries 120 million passengers a year. Autonomous electric trains depart every 1.5 minutes, 24 hours a day and have a 99%+ reliability rate. Capex costs for Metro have been funded by land sales, including the development of the initial metro line south of Copenhagen in 2002, which cost €6 billion. The risk lies with Metro, but it is funded by a government loan with operational surpluses repaying the loan over a 40-year period. Similar to Auckland, Copenhagen has a population of around 1.4 million.

Denmark has also delivered significant user-pays/public-private mega projects, including the Great Belt Fixed Link to Norway, the Øresund Fixed Link to Sweden, and



the Fehmarn Belt Fixed Link to Germany. The projects are managed by state-owned companies responsible for planning, construction, and financial management, with funding raised through state guaranteed loans and repaid by tolls. It's anticipated that the tolls will remain once the loans have been repaid. According to the Danes, these projects justify a user-pays approach due to their inability to be funded from the state budget, the public's familiarity with paying for travel, lack of free alternatives, and the associated significant travel time reductions from using these routes.

By & Havn (B&H), a public development corporation owned by the Danish Government (5%) and the City of Copenhagen (95%) offers another innovative funding system for infrastructure and development. The local government rezones land, increasing its value, including for old industrial areas, and then borrows against this increased value, using the capital to fund metro construction or local infrastructure. The company uses land sales and lease agreements to service debts. B&H engage in joint ventures with pension funds and developers to build high quality housing to attract residents to new areas. Their projects, including the areas Ørestad and Nordhavn, take a long-term, intergenerational perspective, integrating the UN Sustainable Development Goals (SDGs), and focusing on liveable urban spaces and sustainability.

---

## Climate adaptation - an opportunity

Viewing climate change as an opportunity has enabled Denmark to take a long-term approach to addressing environmental issues, while building in short-term measures to address immediate resilience issues.

Commitment to incorporating the UN Sustainable Development Goals into planning is central to this approach. Following a major cloudburst event in 2011, Copenhagen developed a comprehensive water management plan, following the natural flow of water. This plan involves surface infrastructure projects with an implementation period of 20-30 years.

A longer-term view to address storm surges and coastal erosion has led to the development of a 50-year solution: Lynetteholm, a major reclamation project at the mouth of the harbour in Copenhagen. It is also a major urban development project that will finance new metro lines and a new bypass. It is a large-scale project that addresses three problems: financing infrastructure; protection against flooding; and reducing pressure on the housing market by providing housing for an estimated 35,000 new residents. It should be completed in 2070.

In the 1970s, Copenhagen faced severe pollution issues, and by 1993 the city was bankrupt. However, the city leaders' vision to make the river and harbour swimmable again, the concept of 'Blue Urban Space' and 'turning the city towards the water', created momentum for urban renewal. The thriving waterfront areas are now synonymous with Copenhagen, and the city is currently growing by approximately 500 inhabitants per

month.

In a session on water management with the Danish Water and Wastewater Association (DANVA), the delegation learned that metering is very high and there is consumer acceptance of charging. This allows the municipal or community owned water services companies to recover all of their costs from users (based on metering) and there are no tax grants to the water sector. Not only does this approach generate revenue, more importantly it drives consumer behaviour and promotes water conservation.

Infrastructure New Zealand's report notes that while the user pay model and the structural separation of water companies from municipal balance sheets have been successful, pricing will come under pressure in the future as capex requirements increase to address the increasing investment required for climate adaptation.

---

## Key takeaways

There are a number of areas where Denmark has found innovative strategies and solutions to infrastructure development that may be applicable to New Zealand. The visit was an opportunity for Denmark to showcase its commitment to innovation, climate change, and the UN Sustainable Development Goals. Denmark's ongoing economic success, including the runaway profitability of Novo Nordisk, make funding less of a challenge than for many other countries. But Denmark's systemic approach to development, and the partnerships created at political, local government and business levels, offer insight into models that are delivering good results.

---

# More info

## More reports

View full list of market reports from MFAT at [www.mfat.govt.nz/market-reports](http://www.mfat.govt.nz/market-reports)

If you would like to request a topic for reporting please email [exports@mfat.net](mailto:exports@mfat.net)

To get email alerts when new reports are published, go to our [subscription page](#).

To learn more about exporting to this market, New Zealand Trade & Enterprise's comprehensive [market guides](#) cover export regulations, business culture, market-entry strategies and more.

## To contact the Export Helpdesk

email [exports@mfat.net](mailto:exports@mfat.net)

call 0800 824 605

visit [Tradebarriers.govt.nz](http://Tradebarriers.govt.nz)

### Disclaimer

This information released in this report aligns with the provisions of the Official Information Act 1982. The opinions and analysis expressed in this report are the author's own and do not necessarily reflect the views or official policy position of the New Zealand Government. The Ministry of Foreign Affairs and Trade and the New Zealand Government take no responsibility for the accuracy of this report.

### Copyright

Crown copyright ©. Website copyright statement is licensed under the [Creative Commons Attribution 4.0 International licence](#). In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to the Crown and abide by the other licence terms.