Summary

Digitalisation is having an extensive and growing impact on North Holland, for both our residents and our businesses. This development is generating increasing data traffic and demands a strong digital infrastructure. Data centres constitute an essential part of this digital infrastructure. However, they have a huge impact on the landscape and use a lot of energy and water.

We want to minimise the impact on these elements by ensuring that data centres generate sustainable energy where possible, use sustainable energy on real-time basis, that the residual heat (in the environment) is used, that circular design is applied in the development of buildings which blend into the landscape and that the data centres are leaders in our province in terms of energy and innovation. The first step in achieving that aim are this Data Centre Strategy and the ambition described below. We can and will only achieve this aim in collaboration with our partners, such as municipalities, water boards and not least the data centre industry itself. We therefore expressly invite the industry to put its sustainability ambition into practice because that contributes to support for the establishment of data centres. This strategy is an important step in promoting the establishment and sustainable development of data centres in North Holland.

Our ambition:
Most sustainable and innovative data centre hub in Europe

We see it as our task to juxtapose the converging perspectives: North Holland is an attractive location for data centres. In view of their importance for the digital economy, we want to guide the developments, so long as there is sufficient consideration for the impact of data centres on the landscape, energy provision, water use and the use of the residual heat. In our data centre strategy, we therefore focus on a threefold ambition:
• Strong basis for growing digital economy
• Clustered growth with attention for landscape
• Leader in sustainability and innovation

This ambition means a great deal of effort from the parties involved because of the extent of the ambition, and the challenges are as extensive as they are complex. Therefore, the aim is an important long-term goal.

Our management options
The North Holland data centre strategy offers the provincial framework for the developments and ensures a level playing field in the whole province. In this, we see 2 management options: regulating and stimulating. In the regulating track, we mainly have spatial instruments. As a province, we can primarily regulate the spatial establishment of data centres, for example by indicating where data centres may and may not be located and imposing requirements on their integration in the landscape. For many sustainability subjects, like water and electricity con-sumption and the use of residual heat, European or national laws and regulations are in force, and this strategy follows the stimulating track.

Provincial focus on data centres

Our ambition is focused on good spatial integration and the sustainable development of data centres. Along these lines (space & sustainability), we formulate our provincial focus (see table 1). To summarise, this is:

- *Include Rules in the Environment Regulation:* by specifying locations and designating business parks in Haarlemmermeer, Hollands Kroon and Amsterdam where data centres may be developed and making it compulsory to have an urban development and visual quality plan. Outside these designated areas, no new data centres may be built.
- *Management based on the Environmental Management Act:* via permits, monitoring and enforcement we ensure compliance with the rules.
- *Uniform conditions for establishment:* together with the municipalities where data centres may be built, we develop the conditions, in terms of both space and sustainability.

- *Agreements with the data centre industry:* we work together and reach additional agreements with the data centre industry about sustainability performance.
- *Stimulate innovation and sustainability:* we conduct and stimulate research relating to sustainability and focus on knowledge sharing.

Implementation and organisation

After adoption, this data centre strategy will be enshrined in the Environment Regulation and put into practice via provincial initiatives and partnerships with other parties involved. We invite the 3 designated municipalities to include rules that are in line with the datacenter strategy in anticipation of the NH2022 Environmental Regulation. The province will monitor the implementation of the strategy and adjust it where necessary. In doing so, it will join the data centre consultation in the Metropolitan Region Amsterdam (MRA).

Table 1. Overview of the provincial focus on data centres

	We focus on:	We do this based on:

Space
See chapter 3.
Spatial assignment and integration of data centres
	• Locations - clusters
	• Integration
	• Spatial use
		Rules in the Environment Regulation
		➜ Choice of location by designating business parks in Haarlemmermeer, Hollands Kroon and Amsterdam and ban on building data centres elsewhere
		➜ For these clusters, drawing up an urban development plan and visual quality plan is a condition, in which the elements to be fulfilled by the plans are established. These plans must be drawn up before a new development emerges.
		➜ Data centres may only be built in or next to business parks
		➜ Developments must comply with provincial policy, such as the Landscape and Cultural History Guideline
		
		Establishment conditions
		➜ Compulsory agreement about establishment conditions between province and municipalities about where data centres may be built, focusing on:
		  • Impact on the environment
		  • Multifunctional use of space
		  • Urban development plan and visual quality plan
		
		Additional agreements and cooperation
		➜ Further cooperation and alignment with municipalities about where data centres may be built
		➜ Agreements with the industry

	We focus on:	**We do this based on:**
Sustainability See chapter 4. Sustainability and innovation	• Energy consumption • Sustainable energy • Residual heat • Water use for cooling (in relation to water availability) • Water safety and nuisance • Wastewater quality	**Environment Regulation** ➜ **Article 6.62** Motivation requirement zoning plan (description of the way in which the risks of climate change, including water safety, excess water and water availability, are considered) **Establishment conditions** ➜ Draw up establishment conditions concerning energy and water with municipalities. These conditions are based on maximum focus on energy savings, re-use of residual heat in surrounding buildings, sustainable energy generation and sustainable water use. **Permits, monitoring and enforcement** ➜ Via permits, monitoring and enforcement, government authorities can focus on compliance with the rules in the zoning plan and environment. This concerns the application of recognised measures based on the Best Available Techniques. ➜ Reach agreements with Environmental services **Additional agreements and cooperation with municipalities, the data centre industry and other partner organisations** ➜ Research and pilots ➜ Sustainable procurement ➜ Connect the industry with the ecosystem for innovation, work and development ➜ Agreements with the industry