

The transition towards a sustainable society

Slide 1 Welkom heten in het Noors (fonetisch):

Jartelie wellkommen til Nederland

Slide 2

It is my privilege to welcome you all to the province of North Holland. Basically, we are neighbours. We share the same sea on our shores, although our shores are sandy where yours are rocky. The same subject, in a different context. This is the same for the subject I will talk about: sustainability. Sustainability in the context of this province, and I'm most interested in how sustainability in your region is shaped. I believe that exchange of experiences and visions will enrich us both.

Slide 3

The province of North-Holland is one of twelve provinces in the Netherlands. A Dutch province fulfils responsibilities of regional importance and is the connection between the national government and the local municipalities. We cooperate with other provinces but have our own responsibilities and characteristics. The province of North-Holland is located in the northwest of the Netherlands, with two main harbours (Amsterdam, Den Helder), some major cities (Amsterdam, Haarlem, Alkmaar), the national airport (Schiphol) and an industrial area at the west side of Amsterdam with a major steel production facility (Tata). The northern part of the province is a more open area with peatland, polders and agriculture. Here you can find innovative agricultural businesses (Seed valley).

Slide 4

The province is typical Dutch. You can find fields of tulips, polders, windmills, historical city centres, museums with well-known paintings, the occasional farmer on clogs (wooden shoes) and dikes. These dikes are important for protection against the sea. With the sea level rising due to climate change, the maintenance of dikes and dunes, is clearly a matter of concern. Without them nearly the whole province would submerge, as the province is largely located below sea level. This makes us committed to reduction of the use of fossil fuels, to limit CO2 levels that are the main cause of climate change.

Slide 5

Sustainability has become an important theme in policy worldwide, thanks to your former prime minister Gro Harlem Brundtland and her report from 1987 on "Our common future". The approach towards a sustainable society has changed since then. In recent years a real transition of society has emerged, a transition towards circular economy and the use of non-fossil energy. Last year the province decided on policy for our role in this transition.

Slide 6

Energy transition

Since our society is carbon based, the transition towards fossil free energy has a major impact. The role of the province is supporting this transition. We defined our role in 8 clusters:

1. Datacentres
Another major transition of society is the digitalisation. This means there is a need for large datacentres, which use a lot of electricity and produce heat. This heat can be used for heating houses and greenhouses. Good special planning is needed to locate these centres and the transport of heat.
2. Offshore wind energy
We have a long shoreline and a lot of wind. The energy produced by windmills at sea will be brought to land, either as electricity or hydrogen. The large amount of energy has to be spread across the country, thus demanding an upgrade of the transport system.
3. Tata steel production facility

Steel production demands a lot of energy and uses carbon in the production process, with a lot of CO2 production. Fortunately, we have the most innovative steel manufacturing plant in the world situated in our province. Their transformation is a challenge we are supporting. The produced heat can be used in the area and the CO2 emissions of their process can be a resource for chemistry, like making synthetic hydrocarbons.

4. Construction sector

To make the transformation successful we need to change our buildings and many installations. This is a major operation, since it effects nearly all buildings and heating installations, domestic and industrial.

5. Greenhouses

The horticulture in greenhouses is a very innovative industry. The use of energy and loss of energy is rapidly declining due to smart innovations. Instead of only consuming energy, the sector has started to be producers of energy.

6. Transport and logistics

It is obvious that our way of transport will change, as it is already changing. For example, it is connected to digitalisation of society and people ordering goods over the Internet that have to be delivered.

A different approach is our support on investigations for transforming roads to energy producing surfaces, like SolarRoad.

7. Port of Amsterdam

The facilities of this port contain large amounts of coal storage. These facilities will be transformed within decades towards sustainable energy storage and transshipment (biomass, hydrocarbon).

8. Airport Schiphol

Similar to the seaport the airport will have to make a major transition.

Circular economy

Slide 7

The basic idea behind circular economy, is that linear economy is a dead end. After decades of linear success, it is quite a change of thoughts for society. In the way we think about economy, to appreciate the change and make the actual transition. In 2017 the province carefully decided on its role to support the transition of “turning things around”, towards circular economy. We decided to support the process of changes within society without defining the actual outcome on forehand. We call this creation tracks, the outcome is created in the process. We defined six creation tracks.

Slide 8

1. Innovation and entrepreneurship

We have several programs for start-ups and companies with new ideas, to help them develop their circular business. We have a guidance program (PIM), a competition program (GO!NH), a start-up support program (Start up in Residence), a sustainable energy program (PDENH) and funding especially for innovations.

Just the other day we had the first day of a three day training program to help businesses to transfer their business to circular (Circo business design tracks).

2. Chain of resources

Inspired by the Ellen McArthur foundation we focus on waste minimisation. By bringing companies together they discover that waste of the one is a resource for the other. In the region of IJmuiden we selected 50 out of a 1000 companies that could cooperate. Going to talk with them and bringing them together is now in progress. In a similar way the city of Haarlem managed to get businesses on an industrial site to work together in transforming their rooftops into an energy plant. Just by bringing them together some 32.000 solar panel are being installed now.

3. Spacial planning

Circular economy can be demand space for storage of goods, for logistics or environmental and safety reasons. In our vision for the future we make strategic reservations for industrial activities, that might be necessary for the circular transition.

4. Clean production of resources

Biomass and building materials are the two areas of focus in this creation track. In agriculture most of the biomass is re-used in the production. But there is still other biomass like from mowing roadsides, from greenhouses and remains of wastewater treatment plants or remains after fermentation of biomass. We are investigating to see what product can be made from this remaining biomass, like fibres for paper or building material (GrassBloxxx) of salt liquid for de-icing roads in winter (Grass2Grid). We are developing an experimental farm site as a field lab (Green Capital Farm).

After demolition of buildings and other constructions, most of the remains contain very usable resources, after separation them. To separate and re-use or recycle the goods, new locations will be created to support storage, separation and logistics. From the remains of the pulverised concrete and bricks there is a company now recreating new bricks (StoneCycling).

5. Circularity provincial organisation

Practice what you preach. As a province we have an office with a staff of about 1.300 people. From coffee to furniture we can ask for sustainable produced or circular products. The province also maintains an infrastructure of roads and bridges. For maintenance and replacement of infrastructure we can be a launching customer, through demanding circular design and construction. In cooperation with other national, provincial and local governments we can make a change.

6. Change legislation

We have strict laws to prevent pollution by dumping of waste. However, this is also limiting the possibilities for circular economy. It has proven to be to difficult to reclaim "waste" to be a resource. The law is outdated and has to be renewed. We invited businesses to report such limiting law. Although thousands of visitors responded on Twitter, only four conflicts were reported. This is partly due to another conflict, the risk of sharing a business idea that other people can use as well.

Slide 9

We are on a journey. The journey itself is already a reward. Knowing that the journey must lead to a better, sustainable society with a healthy, circular economy. As a province we support the journey, the transition, and the changed society it will bring. We have an open mind on the result, and trust the creativity en innovative power within society, to find solutions to the problems we are facing today, or in the near future. We take part in the process with guidance, support and some finances.

I hope you have an inspiring time in our province and hope you will inspire us equally.

Slide 10