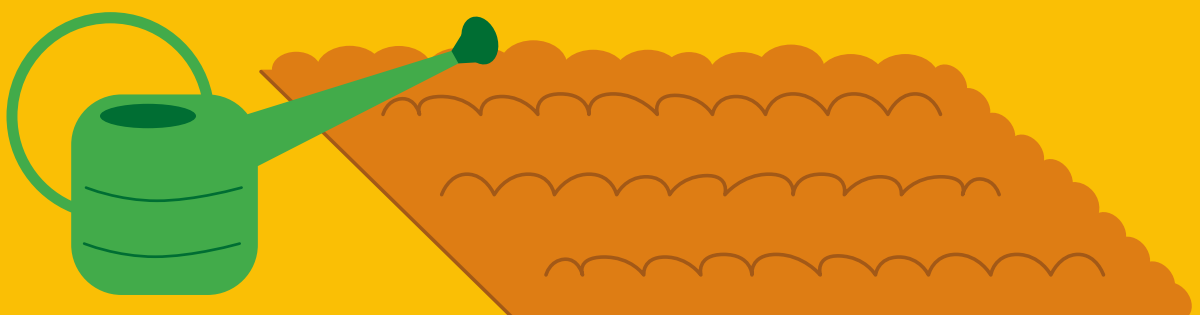


ADAPT

REGIONAL ACTION AGENDA CLIMATE ADAPTATION



COLOPHON

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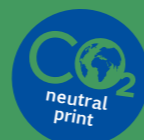
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YOUTH FOR CLIMATE ADAPTATION

With this Regional Action Agenda, we, Youth for Climate Adaptation Groningen, call upon local authorities and youth to take action in climate adaptation! Our group consists of youth who want to learn more about and are committed to climate adaptation to increase awareness of this topic. Why? Because climate adaptation is of fundamental importance to how our future will look.

As youth we are aware of climate change and how this impacts our lives, now and in the future. However, climate change can make us fearful. Take water shortages for example: We might be able to mitigate consequences today, but how will things look twenty years from now if climate change continues at the current pace?

Youth for Climate Adaptation focuses on how we, as a society, deal with these changes by adapting right now. We wish to inspire and enthuse people to participate so that, together, we can foster a climate-robust environment.

'WE MUST INVOLVE YOUTH IN THE CRITICAL DECISION THAT WILL DETERMINE THEIR FUTURE.'

Ban Ki-moon

In this Regional Action Agenda, we highlight current trends in our region and the opportunities that arise for local authorities and residents. Next, we share our recommendations and steps that we consider necessary in climate adaptation. This way we can make climate adaptation more self-evident. Act & Adapt. Will you?

Our goals

1. Creating awareness of climate adaptation

We consider it important that everyone becomes aware of the consequences of climate change, not only because it will have an impact on our future but also because it affects the present. Awareness is often created quite organically, for instance when people are confronted with increasingly dry summers with heatwaves in the city or shortages of water. However, as soon as such extremes disappear, the awareness of climate change tends to weaken. Therefore, it is important to continuously educate people about the consequences of climate change for their lives. This leverages concrete action.



'GETTING PEOPLE ON BOARD IS THE HARDEST THING THERE IS. BUT WITH OUR ENERGY AND ENTHUSIASM WE CAN MOTIVATE OTHERS TO PARTICIPATE. COLLABORATION BETWEEN THE MUNICIPALITY AND YFCA IS THE KEY TO THIS SUCCESS.'

Vera, YfCA ambassador



IN BRIEF

YOUTH FOR CLIMATE ADAPTATION GRONINGEN (YFCA)

WHO Youth between the ages of 15 and 27 (YfCA ambassadors).

WHERE From the provinces of Groningen, Friesland and Drenthe.

WHAT Involve youth in climate adaptation and allowing their voices to be heard.

HOW Through dialogue with organizations such as municipalities, regional authorities and water boards, but also other youth, we seek to show which actions are required to stimulate action in climate adaptation.

2. Highlighting the impact of climate adaptation

We want to address the many opportunities of climate adaptation. On a large scale, adaptation can have a major impact, for example through floodwater protection. On a local scale, it can have impact through reducing the consequences of heat waves, through absorbing water in places where it is required, as well as protecting against an excess of water. For this, it is important to not only focus on public spaces but also on private property, such as gardens. Examples of adaptive solutions at the private level are replacing garden tiles with plants and flowers and collecting water in rain barrels. Solutions like these do not have to be difficult to implement and yet can have an immediate impact on the local environment. Good practices on the local scale can have positive effects, leading to spillover effects on regional, national and even international scale.

Climate Adaptation Groningen

Youth for Climate Adaptation Groningen is part of Climate Adaptation Groningen, which was formed in 2020. This organization gathers and enhances knowledge of climate-adaptive solutions with the aim of stimulating both awareness and action. Unlike climate mitigation, climate adaptation has not yet received the attention it deserves. Climate Adaptation Groningen will put good climate adaptation practices on the map, with the aim of inspiring other regions and countries. To that end, it has organized a multitude of activities and events, culminating in the Climate Adaptation week of January 2021, for which it worked together with the Global Center on Adaptation. During this week, we presented our Regional Action Agenda at the international Youth for Climate Adaptation conference. Our region will be the first to have an action agenda on climate-adaptive solutions, written by youth from our region!



CLIMATE ADAPTATION: WHERE DO WE STAND?

We can no longer avoid it: the climate is changing. The consequences can be seen on a worldwide scale in the forms of extreme drought and increased flooding and forest fires. Here in the Netherlands we can also really notice the impact of climate change. We have longer dry periods and more heat waves, which is causing heat stress, particularly in urban environments. In addition, we experience an increased risk of flooding resulting from peak rainfall. The sea levels have also risen as a consequence of global warming. We will further experience these consequences, especially along the coastlines and close to waterways, as roughly half of our country is situated beneath sea level.

We now know it is no longer enough to merely reduce our emissions to combat climate change. We also have to adapt, and that is where climate adaptation comes in. Think about retaining water to reduce the impact of droughts or increasing the number and size of green spaces to reduce heatwaves in urban environments, the preservation of carbon sinks such as forests, salt marshes and swamps, and a range of other climate-adaptive solutions. These solutions are of pivotal importance for livability as well as biodiversity, and for our economy in the long term. Because imagine what the consequences and the costs of climate change would be if we do nothing at all.

Adaptation is not new – we have always adapted to changes in climate and weather. Our country, the Netherlands, has done this for many centuries, protecting ourselves from the sea. However, the degree to which this is to be done now, due to climate impacts becoming more extreme, is of an entirely different order. The stakes are higher, not

only on a global scale, but also on a national and regional scale.

Joining forces globally

Beside the fact that awareness of climate adaptation has increased across the globe in recent years, more and more climate-adaptive measures are being implemented as well. The main reason is that many parts of the world



'THE CLIMATE IS CHANGING ANYWAY; I AM CONVINCED OF THAT. SO WE HAVE TO ADAPT. CLIMATE ADAPTATION ALLOWS US TO RESPOND TO CHANGES, SUCH AS MORE DROUGHT AND MORE RAIN.'

Julia, YfCA ambassador



are more directly increasingly experiencing climate change. Take for instance the floods in Bangladesh, the forest fires in Australia, or extreme drought in Africa. There is an increase in awareness that something must be done about the problem as impacts of climate change have become more prominent. The Paris Agreement of 2015 has been a directive worldwide. This agreement has emphasized the negative consequences of climate change that have to be combatted, through both mitigation and adaptation. The Global Center on Adaptation aims to accelerate action in response to climate adaptation. This organization was established through collaborations of different parties across the world, including the Netherlands, and in particular, the municipality of Groningen. The United Nations also recognizes the importance of acceleration, and worldwide, parties are joining forces to increase awareness of climate adaptation.

National decisiveness

Adaptation has become more prominent in national policy. The Dutch national government stresses the importance for our country to prepare for climate change. In 2018, the Delta Decision on Spatial Adaptation (Dutch: Deltabeslissing Ruimtelijke Adaptatie) was drawn up, which states that the Netherlands has to be climate-proof and water-robust by 2050. All Dutch municipalities, water boards and provinces were required to demonstrate what tasks and measures they had implemented to this end before the end of 2020. The first step was measuring the problems through

local stress tests. Based on the outcomes of these tests, local plans will be formulated and implemented. Also, an administrative agreement on Climate Adaptation (Dutch: Bestuursakkoord Klimaatadaptatie) was signed in 2018. Furthermore, the focus is on mapping out the vulnerable areas, for which regions can apply for investment projects that can protect them from impacts of climate change. As we can see, the incentive for climate adaptation has considerably increased over the years.

Regional focus

Climate policy is often viewed as an important part in the environmental strategy (Dutch: Omgevingsvisie) of the municipalities. However, in many cases this tends to be about mitigation aimed at the energy transition. A few regions have included climate adaptation as a separate part in their environmental strategy. Some regions have already established regional adaptation strategies focusing on adaptation.

Our northern region is increasingly committed to taking concrete climate adaptation measures (see also chapter 3). The Groningen and Northern Drenthe region will publish the first regional adaptation strategy in 2021. Some of our municipalities are already on track to making climate adaptation an important aspect of climate policy. The water boards also play a key role in drafting climate adaptation policy, as they are responsible for maintenance of waterways and dikes, and the quality and quantity of the water inland. Increasingly, the focus in our region will be one of making ourselves more climate-resistant and climate-robust.



During the Climate Adaptation Week in Groningen (January 2021) the Netherlands hosted the Climate Adaptation Summit, an international conference on climate adaptation where leaders from all over the world came together.

OUR REGION: STRENGTHS, BOTTLENECKS, AND OPPORTUNITIES

In the past months we discussed climate adaptation with municipalities in the provinces of Groningen and in the northern region of Drenthe, the two water boards Noorderzijlvest and Hunze & Aa's, and the two provinces of Groningen and Drenthe. The conversations were exciting, and we learned a lot about climate adaptation in the region.

Based on the conversations, we have been able to examine and describe the strengths, bottlenecks, and opportunities of these local authorities. Firstly, concerning the topic of climate adaptation in the broad sense, but also more specifically concerning three themes in particular: heat and drought, water, and community involvement.

Do you work for a municipality, regional authority or water board? We hope that our synopsis will lead you to consider where your organization currently stands. When reading this chapter, you could keep the following questions in mind: what is my organization currently doing? Where can we improve? And what other organizations inspire us?

Climate adaptation in general

Strengths

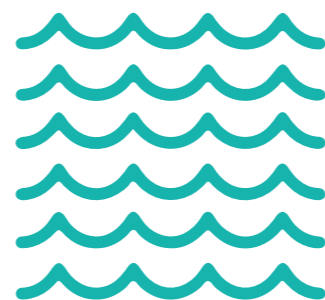
- Organizations increasingly look for more collaboration with other stakeholders that are important in climate adaptation, such as nature and landscape organizations.

A good example of this is the Groningen Groen manifest, in which the municipality of Groningen and eight nature and landscape organizations work together to strengthen the quality of our landscape and nature.

- Municipalities in particular increasingly take the topic of climate adaptation into consideration in the decision-making and planning of new neighborhoods, for example by including more green space in building plans.
- Public spaces are increasingly used in climate-friendly ways, through the incorporation of green and blue (water) space.

Bottlenecks

- Conflicting interests can result in climate adaptation becoming less urgent and slide down the list of topics to be dealt with in spatial planning. For example, climate-adaptive measures may conflict with other wishes such as new or more parking spaces in new neighborhoods.



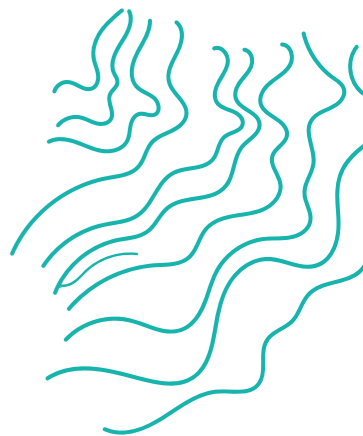
- Financing climate adaptation proves to be a recurring challenge for municipalities. As it stands, climate adaptation is often not the central focus, or foundation to start with, but is rather seen as an afterthought to other themes in spatial planning.
- Insufficient manpower at municipalities may have as a result that climate adaptation does not receive the attention it deserves. In many cases, there is no civil servant specifically tasked to work on climate adaptation. Also, those that do have relevant knowledge are often not present in conversations where climate adaptation is discussed.
- Municipalities own relatively little land, which can make it hard to take climate-adaptive measures. Many existing land tenures often already have a fixed use which to stakeholders may be difficult to combine with climate adaptation. Consider city centers, for example, where it will prove difficult to grow more trees and create more green spaces as these can come in conflict with existing cable and electricity infrastructure underground. Trees and green spaces may also reduce visibility of shops, which would lead to more conflicting interests.

Opportunities

- Make the greening of public space a key factor in municipal policies. A climate-adaptive municipality will not only protect nature and improve biodiversity, but also create an attractive and safe living environment for its residents.
- Learn from one another. For instance, water board Noorderzijlvest has drawn up a new 'blue environmental strategy' with a central position for climate adaptation. This strategy could be used as

a foundation for regional environmental strategies as well as local municipal versions.

- The overarching theme of climate adaptation could be sub-divided into multiple parts, such as climate change, livability, and biodiversity, which are easier to grasp within the working field of a government. The theme of climate adaptation itself could be used as a strong principle that provides a solid foundation for policy making.
- Climate adaptation should be a fixed aspect of policy making in new building plans. This will help to create more green spaces from the very first moment in the formulation of planning processes.
- With the expansions and changes to existing municipal boundaries, it will be key to put climate adaptation on the agenda from the beginning of policy making and to include it in the policy objective. This applies, for instance, to municipalities such as Appingedam, Delfzijl, and Loppersum, which will become the joint municipality of Eemsdelta, or the new municipalities of Westerwartier and Midden-Groningen.



'GIVING YOUTH THE OPPORTUNITY TO PARTICIPATE AND DECIDE, THAT IS WHAT I STAND FOR! A FOOT IN THE DOOR FOR YOUTH, THAT IS WHAT WE, AS YFCA, WANT TO CONTRIBUTE TO.'

Sharon, member of YfCA project team



- Knowledge exchange and increased collaboration on climate adaptation – between municipalities, water boards and regional governments – can lead to new insights and the creation of a climate-adaptive normal. This could include contacts with local governments outside the Netherlands.
- The population decline in rural areas can lead to shrinkage of neighborhoods and the demolition of houses, as is the case in Delfzijl. These demolished areas could provide an opportunity for climate adaptation, for example by creating new green spaces and applying climate-adaptive measures for new buildings and neighborhoods.

Heat and drought

Strengths

- In 2019 the municipalities had a stress test performed, in which they gained a better understanding of the impact that increased heat and drought would have on residents. Based on these results, adequate measures can be taken. For example, municipalities have gained insight into how existing green spaces can be planned and used, which provides knowledge about how heat stress can be avoided.
- Some municipalities are committed to circular agriculture, in which organic material is used to better retain water in the soil.

Bottlenecks

- The different stress tests have shown that urban environments experience the most heat stress. This is due to the amount of built environment and bricks (businesses, shops, housing) and the lack of green space, which have turned these environments into urban heat islands. The existing spatial uses make it difficult to create more green space.



'WE HAVE IVY ALONG PART OF OUR DORM. THAT SAVES US A LOT OF HEAT STRESS. I ALSO TRY TO TAKE SHORT SHOWERS USING A TIMER. SO YOU CAN ALSO DO SOMETHING ABOUT CLIMATE ADAPTATION AT HOME.'

Nelleke, YfCA ambassador

- Municipalities have observed an increase in stony gardens instead of gardens with plants. It is difficult to prevent this as these areas are private property. Residents often mention a lack of space as a counter-argument to greening of their gardens.
- Municipalities indicate that they cannot do much about water shortages in non-public spaces as these spaces are private property. In addition, the water levels are in part regulated by the water board.
- Multiple municipalities indicate that they wish to preserve green spaces, but also mention that this is not always possible as trees, for instance, may be ravaged by plagues or may extract too much water from the soil.
- Farmers are responsible for the reduction in heat stress among their livestock, by creating shade. The role the municipality could play in this is limited right now.
- Economies of scale have led to farmers producing more yield at increasingly lower cost. In addition, they are using more fertilizer and their land is often compacted by the use of large agricultural machines. This limits water infiltration and reduces the habitat of wild plants and animals. As a result, biodiversity has decreased.
- Agriculture, such as in the municipalities of Pekela and Veendam, is to a large



extent dependent on water from the large IJsselmeer lake in the Netherlands. This water played an important role in our recent (very dry) summers. The drought will lead to agriculture using and demanding more water, which will come at the cost of water usage elsewhere, such as in natural areas and private properties and households.

- There is subsidence in many municipalities, which in combination with rising sea levels will increase the chance of flooding. Moreover, subsidence leads to subsiding roads and dikes, and cracks in buildings. Subsidence is caused by external factors such as salt extraction, gas extraction, settling, and peat oxidation. Peat oxidation (the disappearance of the upper peat layer) will lead to additional CO2 emissions, which will further exacerbate global warming.
- It is not always clear for municipalities how heat stress in elderly care homes should be handled. This requires more research.

Opportunities

- It is possible to lay out public space in such a way that residents can be in a green space within five minutes, to escape the heat. The municipality of Groningen has already made this a planning objective.
- In the event of heat, ensure a better distribution of visitors over the existing public green spaces. In doing so, we can avoid big crowds in one place and emptiness in another.
- The greening of space can combat heat and drought. Planting and preserving

trees will provide more shade and therefore decrease heat stress. Shrubs and green strips also provide a cooling effect.

- Water stored in, for example, wadis and rain barrels, can be reused for the surrounding area in times of drought.

Things we noticed

Heat stress and drought are an important recurring problem within the municipalities. Stony areas in particular cause extra high temperatures in the summer months. This leads to an increase in public health problems. It is striking that some municipalities are more affected by this than others. Urbanization and soil sealing play a major role in this. More green spaces and less tiles and bricks are put forward as important solutions. Not only does this lead to a decrease in heat stress, but at the same time it offers solutions for another important theme within climate adaptation: water.



GOOD PRACTICE

OPERATION STEENBREEK

WHO Municipalities, residents, and companies.

WHERE In various municipalities throughout the Netherlands, for example in Groningen and Midden-Groningen.

WHY Soil sealing causes various problems, such as flooding (rainwater cannot enter the ground) and heat stress. The latter, for example, can be a danger to the health of the elderly. In addition, soil sealing causes a decrease in biodiversity.

WHAT Residents are encouraged to remove tiles and brick from their garden and replace them with plants. The municipalities do this in various ways. For example, some

give a discount when purchasing a rain barrel, or an action is organized to green the gardens in an entire street.

RESULTS Removing tiles from your garden and replacing them with plants solves various problems. For one, water can infiltrate the ground more easily, which means less flooding during heavy rainfall. Second, heat stress in the summer is counteracted, because the available green space absorbs the heat and provides shade. Third, biodiversity is also enhanced by a wider range of plant species in gardens, including plants that attract bees or butterflies, for example. In addition, more greenery contributes to improving air quality, because the concentration of particulate matter is reduced.

GOOD PRACTICE

EUVELGUNNE BUSINESS PARK

WHO Municipality of Groningen, water board Hunze and Aa's, water board Noorderzijlvest, Groningen-Assen region, Bedrijvenvereniging Zuidoost, and companies. The Groninger Landscape also plays a role in this.

WHERE On the Euvelgunne business park in the municipality of Groningen.

WHY During heavy rainfall, the water in the area could not drain properly and the sewerage system became overloaded. The aim of the project was to design the area in such a way that it could cope with flooding better, reduce heat stress and also look more attractive.

WHAT Two pilot studies are being carried out. The first pilot study investigates whether companies can disconnect from the sewer and use water on their own site. For example, rainwater is used to flush toilets, and green roofs and wadis are constructed to (temporarily) retain water. The second pilot study concerns the development of a sewer control model. The sewage water is highly diluted on the site and this causes problems. The model is used to investigate when the sewage

water should be pumped to the treatment plant and when it is better to discharge it immediately. In the area, a piece of nature is maintained through which part of the old river Hunze runs: the Hunze zone. It forms a green zone in the city. The fact that this piece is still there is mainly due to Thies Dijkhuis, a farmer who did not want to give up his land. Management has now been taken over by Het Groninger Landschap.

RESULTS The pilots are still in progress, but there are already several positive effects. Many of the companies in the park have now been disconnected from the public sewer. This way, less water ends up in the sewer, because it is collected on site. In addition, it is less hot inside and outside due to the large amount of greenery. There is also a wadi specially designed for more biodiversity. The part of the Hunze zone also contributes in several ways to the climate adaptation of the area. All the water from the surrounding business parks eventually ends up here. Furthermore, this piece of nature also absorbs heat in the summer and is good for the people working in the area; employees take a walk during their break, for example.



Water

Strengths

- The stress tests carried out in 2019 by the municipalities provided insight into the flooding experienced by residents. Based on the results, they can take targeted measures to combat flooding. For example, the municipalities gained insight into how green spaces are organized and used, and how they can construct water storage areas.
- Multiple water storage areas are being realized, such as in the municipalities of Westerkwartier and Midden-

Groningen. This is often combined with more nature development. These areas retain more water, resulting in less flooding downstream for local residents.

- Major dike improvement programs and the development of new innovations in the Ems-Dollart Region (such as the Double Dike and the Marconi Buitendijks projects) demonstrate that regional authorities have the knowledge, expertise and will to work on climate adaptation.
- Actions such as Operation Steenbreek and subsidies for rain barrels and

More green space means water infiltration and therefore less drought and heat stress.

green roofs improve water absorption. Furthermore, they bring many other positive effects such as energy savings (with green roofs), a reduction in heat stress, and habitat for insects. These actions show that several authorities are applying climate adaptation and that they are doing so in direct collaboration with residents.

- The sparse use of water is increasingly becoming an active part on the agenda. For example, the province of Groningen has indicated that it will focus on this topic as much as possible, including through a water regulation plan. It also works together with other provinces in order to learn from each other and create shared opportunities.

Bottlenecks

- In the stress tests, flooding often emerged as the greatest climate-related risk. During heavy rain showers, the drains discharge cannot handle the large amount of water, so water remains in the street in many places. In the worst cases this also causes damage to residents' homes.
- Investments in water storage may entail high costs, especially in the short term, as a result of which various municipalities have not invested in it (yet).
- Gardens are increasingly paved, consisting of bricks and tiles. The municipality has no direct influence on this because these lands are privately owned.
- It can take a long time before a solution is realized, as many parties are involved. Aligning these different interests and reaching compromises takes time.

Opportunities

- The existing focus is often still on the sewage system, but pipes in the ground can only drain a limited amount of water. For example, rainwater does not necessarily have to be discharged via the sewage system; this can also be done through water storage facilities and wadis. This way you collect the water, and you can tackle both water shortages and drought, as well as reduce the pressure on the sewage system.
- Sowing and planting green strips (which mainly consist of grass) with flowers, shrubs and trees will greatly enhance the local biodiversity. In this way, more water can also infiltrate into the soil. By giving

- nature more freedom, this will probably also save costs for green space management.
- Residents can be encouraged to create small façade gardens and green roofs and use rain barrels. This, and more green space in general, will reduce flooding during heavy rainfall. Water that is collected in rain barrels can also be used to water the garden in times of drought.
- Parking spaces can be replaced by green spaces depending on their use. This can be attractive in rural areas that are experiencing a population decline. In densely populated areas, parking garages can be partly greened by providing them with green roofs.

Climate adaptation not only happens on a large scale; it starts up close, in your own garden and street, with and for all residents. In this area there are many opportunities in the municipalities.



'IN MY IDEAL CLIMATE-ADAPTIVE CITY ARE MANY WADIS FOR WATER INFILTRATION, LOTS OF GREEN ROOFS AND CHILDREN BUSY PLANTING FLOWERS IN PUBLIC SPACES.'

Kristel, YfCA ambassador

Things we noticed

Some municipalities are already quite advanced when it comes to tackling flooding. The municipality of Assen, for example, has developed a water and sewerage plan that is well prepared for flooding. In a few other municipalities, however, the approach to flooding still requires attention. We also see large differences in green spaces and the number of trees in the different municipalities. More room for green space, in particular trees and shrubs instead of just a strip of grass, contributes to an increase in water absorption and at the same time also to biodiversity and the perception of and quality of life in the area. Similarities between municipalities can be found in actions such as Operation Steenbreek, but also in the bottom-up initiatives of small green gardens, rain barrels and green roofs. These examples show that dealing with water issues and climate adaptation is already possible on a small scale.



Community involvement

Strengths

- As a result of the Delta Programme (national program to protect the Netherlands against flooding and to ensure sufficient fresh water), municipalities have held many conversations with residents. These often highlighted the importance of climate adaptation, which contributes to awareness. The Delta Programme can therefore be seen as a starting point for putting climate adaptation on the map among residents.
- Various municipalities have expressed the intention to involve residents, including young people, in making municipalities more climate adaptive.
- Residents can claim various subsidies, with which they can, for example, purchase a rain barrel.
- Some municipalities focus on education in combination with actions for climate adaptation. As a result, children are more often in the outdoors and learn about climate issues, solutions, and biodiversity.

Bottlenecks

- Although the intention is to involve residents in climate adaptation, concrete actions aimed at raising awareness often miss the mark. Information provision is also often limited. As a result, little or no collaboration is established between residents and the municipalities.
- Climate adaptation is usually still at the bottom of the policy list, which is why it is often difficult to release sufficient subsidies for large-scale campaigns.
- Collaboration between residents, businesses and municipalities is not always easy to establish. Reaching the residents can be an issue. For example, the websites and social media of municipalities are often not up to date where climate adaptation is concerned.
- Climate-related actions often only reach people who are already involved or who are interested in sub-themes such as water retention, greening of space, or biodiversity. In short: the theme often exists within a bubble of interested parties and no new external target groups are reached.

- People working in green management of municipalities are not always well informed about agreements to make neighborhoods more climate adaptive. This means, for example, that the grass directly under the trees is mowed, which is often not necessary and reduces biodiversity.



'I MOTIVATE OTHERS TO THINK ABOUT CLIMATE ADAPTATION BY DOING, SAYING AND INVOLVING. I SAY WHAT I DO, AND I DO WHAT I SAY.'

Aaron, YfCA ambassador

Opportunities

- More can be done in the area of communication and awareness. The term climate adaptation can sometimes be difficult to understand for residents. With a clear explanation and specific actions, people will get a better feel for the term.
- Greater efforts can be made to cooperate with companies, NGOs, and private individuals. Climate adaptation acts as catch-all theme, with sub-themes such as water retention, greening of space, livability, value of homes, biodiversity, and so forth. Each party can play its own role in this and thereby achieve its own goals, despite the initial differences.
- Collaboration with residents at project level is paramount. In this way, municipalities can meet with residents who experience the most change from developments. Direct communication is essential for this.
- There are already many organizations that (want to) organize all kinds of actions. The municipalities can take a facilitating role in this process.
- There is a possibility to form more initiatives to involve young people and students in climate adaptation.

IVN Natuureducatie (nature education) is an organization that motivates schools and teachers to provide nature education for children.

Awareness of climate adaptation is important as it gives people a better feel for the topic, so that they think about their own actions.

Youth can help remove tiles and plant trees, or they can contribute to the design of a water storage area, such as in the municipality of Oldambt. A good example is also the Parcival College in Groningen: a group of students, also YfCA ambassadors, took action to make their school more climate adaptive.



Things we noticed

Based on several conversations, we notice that there is still a lot to be gained, especially in the area of communication to residents, and also when it comes to awareness of climate adaptation among residents. Some municipalities – for example Het Hoogeland and Groningen – view climate dialogues as an option to make this happen. Long-term commitment is important in both communication and awareness, because these are themes that will remain current.



GOOD PRACTICE

BLAUWESTAD

WHO Province of Groningen, municipalities of Winschoten, Scheemda and Reiderland (later merged into Oldambt), Hunze and Aa's water board, and the companies Ballast Nedam Bouw Noord, Geveke Development and BAM Vastgoed.

WHERE In the municipality of Oldambt.

WHY The area was used for agriculture, but young people moved away, leading to a population decline. Also, unemployment was high. To combat these issues, the area had to be made more attractive.

WHAT A new lake and nature reserve have been created, along with residential areas and recreational facilities.

RESULTS Although Blauwestad has not always had positive headlines over the years, the area certainly contributes to climate adaptation. The lake helps with water retention: if the water level is too high, four million cubic meters of extra water can be collected in it. The area also absorbs heat in summer, among other things. Blauwestad has a total of 2,000 hectares of nature, home to various animal species. This also makes the area good for the biodiversity of both flora and fauna.

TIME FOR ACTION!

These were the backgrounds to climate adaptation. Now it's time for action! Read more in the next part 'Act' and discover how you can participate yourself.



ACT

REGIONAL ACTION AGENDA CLIMATE ADAPTATION



7 RECOMMENDATIONS FOR MUNICIPALITIES



1.

ESTABLISH YOUTH COUNCILS TO JOIN IN THE DELIBERATION ON CLIMATE ADAPTATION

Why this recommendation?

Governments sometimes indicate that they are unable to reach young people. Furthermore, young people interested in climate adaptation would like to have their voices heard, but they often feel that this is not possible at the moment. Establishing a youth council can help in this respect. Looking for cooperation with young people is indispensable, because it is about their future. They also bring knowledge and experience, can offer a new view on things, and come up with creative solutions, for example through their strong digital skills and the insights they gain from the increased inclusion of climate-adaptive thinking and acting in teaching programs.

How can this recommendation be realized?

- Through promotion (for example on the street or via social media) young people can be made enthusiastic about getting a voice in local government through a youth council.
- Local authorities must approve youth councils and give them an official place within their organization.
- Organizations such as municipalities would like to have young people share their ideas about the climate, but often do not know how to get them around the table. We as YfCA can bridge that existing gap with local youths, mobilize them and link them to the municipality. In addition, these youth councils can also become part of YfCA.

When?

- In principle, a youth council can be realized in the short term. A municipality, province or water board appeals to young people and sets up a youth council.
- However, forming a youth council can also be a

long-term goal. We first look at the enthusiasm among young people to join such a council. In this process, YfCA can create awareness among young people: what is a youth council and what activities are involved? We can then help in making it attractive: why is it worthwhile as a young person to join a youth council that deals with climate adaptation?

- A concrete long-term goal could be: by 2022 all municipalities, provinces and water boards will have a youth council.

2.

MAKE YOUNG PEOPLE MORE AWARE OF CLIMATE ADAPTATION

Why this recommendation?

We can see that raising young people's awareness is an important step in tackling the growing climate problem. To encourage young people to take action, they must first understand exactly what climate change and climate adaptation is about and how they can make a difference as an individual. The aim of awareness is therefore to inspire young people to tackle the climate problem through climate-adaptive actions. These actions can be initiated by municipalities, provinces, and water boards in collaboration with YfCA.

How can this recommendation be realized?

- Awareness can be created by 'spreading the word', including on social media. For example, create a social media page on which you, as an organization, include climate adaptation as one of the topics via information videos, stories, and so on. Or use social media to encourage young people to share an event as much as possible with other residents in the area.
- We as YfCA can act as a catalyst by encouraging young



'GAINING KNOWLEDGE AND CREATING KNOWLEDGE FOR A BETTER WORLD, TOGETHER WITH OTHER YOUNG PEOPLE. THAT IS MY MOST IMPORTANT MOTIVE!'

Nathan, YfCA ambassador

people to follow the social media accounts of their municipality, province or water board.

- By organizing information evenings, campaigns, and active information (projects, assignments) in education. An important aspect of this is the cross-fertilization between universities, universities of applied sciences, vocational education, and secondary schools so that young people can learn from one another.

When?

- More awareness can be achieved in the short term by organizing an action and promoting it with the help of YfCA.
- In the long term, organizations must always respond to the fact that awareness among young people continues to develop. When it comes to climate adaptation and climate change, we must ask ourselves again and again: What are the best ways to reach young people?

3.

ENCOURAGE CITIZEN PARTICIPATION

Why this recommendation?

We know from our own experience that together you can achieve more when it comes to climate adaptation. Therefore, it is good to encourage citizen participation. Some municipalities are doing better in this respect than others. It not only concerns young people, but every resident in a region. On the one hand, this can lead to a longer process because you give more people a voice. On the other hand, more citizen participation is a good way of democratic decision-making.

How can this recommendation be realized?

- The municipality can make it clear through campaigns and information evenings that each individual person can really make a difference when it comes to climate-adaptive measures.
- The municipality can initiate actions, such as Operation Steenbreek (replacing brick and tiles with plants in gardens). Or they can think of assignments at primary schools for smaller children, such as a green tile that they are given to take home.
- The municipality can also organize campaigns to encourage, for example, consultation with the neighborhood, to ask whether more trees and turf can be placed, or to discuss whether other climate-adaptive actions are possible.
- Does it concern the participation of larger groups of

GOOD PRACTICE

GREEN ROOFS

WHO Residents and companies.

WHERE Throughout the Netherlands on the roofs of, for example, houses, garages and companies.

WHY There are many problems in urban areas, such as heat stress in the summer and flooding after rainfall.

WHAT Residents who have a small garden can still contribute to climate adaptation by installing a green roof. The construction of such a roof is done in three layers. First, a drainage layer that ensures that the rain-water flows away. The second layer consists of the soil in which the plants can grow, and finally the third layer of the plants themselves. Residents can install a green roof themselves, but there also are specialized companies. For this you can get a subsidy from the municipality of Groningen; 7,000 m² of green roofs have now been constructed in the city.

RESULTS Installing a green roof has several advantages. In the summer, the plants absorb heat, making it less hot indoors. This means that less cooling or air conditioning is required, which in turn saves energy. Furthermore, the roof slows down the drainage of rainwater, which means there is less flooding. It also helps to prevent overburdening of the sewers during heavy rain showers.



When?

This recommendation is mainly aimed at the long term. Building networks and continuing to expand the network field are developments that never stop.

5.

PRIORITIZE CLIMATE AND CLIMATE ADAPTATION AND INCLUDE THESE TOPICS IN POLICY

Why this recommendation?

The urgency of the climate issue is becoming increasingly visible, and this urgency must also be propagated by the policy pursued. It turns out that there are still municipalities that do not have a clear policy on climate and climate adaptation. Cooperation and coordination within municipalities also often leaves much to be desired. An example of this is the fact that some teams do not really know who is responsible for which topic. Since policy can only be implemented through cooperation, there is still much progress to be made here.

How can this recommendation be realized?

- Prioritizing climate adaptation can be achieved by integrating the subject into decision-making by municipalities, water boards and provinces. A good example of this is taking climate adaptation into account in new construction processes and zoning plans. The same applies to existing plans: these often involve long processes having started years ago and based on the standards

residents? In this case it is important to appoint representatives so that goals are achieved as quickly and efficiently as possible.

When?

- In the very short term, municipalities and provinces can partner up with YfCA as an intermediary to actually make residents enthusiastic about citizen participation in climate adaptation.
- The long-term starting point is that citizen participation develops over the years. How we involve citizens in climate adaptation must be constantly reviewed.

4.

MUNICIPALITIES, PROVINCES AND WATER BOARDS: EXPAND YOUR NETWORK

Why this recommendation?

- Networking is an important tool in climate adaptation, because it is a good way of exchanging experiences and

ideas. In our conversations with municipalities, water boards and provinces, we ourselves have contacted people who are experts in the field of climate adaptation.

- It is important to connect clubs and organizations that are already involved in climate adaptation and to enter into a dialogue about the possibilities.
- Many people are already working on sustainability, but climate adaptation is often a relatively new concept. It is important that these people become familiar with climate adaptation, so that the theme is put higher on the agenda.
- The aforementioned contacts often work in two directions: we too receive new ideas from others and learn more about youth representation and where there is potential for dialogue and action.

How can this recommendation be realized?

Networks can be expanded by entering into partnerships with other organizations. Municipalities, water boards and provinces can achieve this by building and maintaining networks with private individuals, schools, companies, and organizations involved in climate adaptation and the organization of climate adaptation. As mentioned, YfCA can also help to establish all kinds of contacts.



'WHERE I ALWAYS WALK MY DOG, I SEE SHEEP AS THE NEW LAWN MOWERS. THAT'S A GREAT IDEA, YOU DON'T NEED MACHINES TO WORK THE SOIL.'

Hinke, YfCA ambassador

of years ago, which often make little allowance for climate adaptation.

- It is important to monitor the progress made with climate adaptation and identify the areas in which there is still progress to be made.
- Collaboration within municipalities, water boards and provinces can be encouraged by helping employees to understand who is responsible for what when it comes to climate adaptation. As a result, employees will know who to turn to with questions.

When?

This recommendation focuses primarily on the long term, but steps must be taken in the short term to achieve this. As an example, the province of Groningen is already working on the question of how to better integrate climate adaptation into

policy. Our starting point is one in which climate adaptation cannot be seen as a separate part of a specific branch of government: it must be integrated into spatial policy in its entirety.

6.

INCLUDE CLIMATE ADAPTATION IN EDUCATION THROUGH PROJECTS AND TEACHING MATERIALS

Why this recommendation?

By including the subject of climate adaptation in education, knowledge can be expanded and shared. Future generations will become more aware of this topic. Furthermore, practical skills can be taught that are important for climate adaptation.

How can this recommendation be realized?

- Schools can involve climate adaptation in education by offering appropriate teaching materials and by making an overview of where it can be found. This could include: excursions into nature, lessons from guest teachers, and videos, games, assignments and projects that deal with climate adaptation.
- YfCA can offer lessons on climate adaptation in schools:

education by young people for young people. YfCA can also play a role as an intermediary in contributing ideas for municipalities, provinces, water boards and schools about the most suitable form of education. It is important that attention is paid to both practical and theoretical lessons.

When?

- Initiatives can be drawn up in the short term. This could include the deployment of climate ambassadors. These climate ambassadors can give guest lectures on climate adaptation in schools.
- In the long term, ways must be found to integrate climate adaptation as a regular topic into teaching programs.

7.

SET UP ACTIONS AND CAMPAIGNS THAT CONTRIBUTE TO CLIMATE ADAPTATION

Why this recommendation?

Local authorities can act immediately and measurably through actions and campaigns to realize a more climate-adaptive municipality. In this way, residents can also do their part to reduce the impact of climate change.

GOOD PRACTICE

GREEN SCHOOLYARDS

WHO Schools and companies.

WHERE In schoolyards throughout the Netherlands, for example at the Brederoschool in Groningen.

WHY Schools opt for a green schoolyard for various reasons. For example, because they want to prevent flooding caused by rain in the schoolyard. Or because they want to teach the children something about nature.

WHAT A climate-adaptive schoolyard can be constructed in many ways. A customized plan must be made for each school. For example, you can create green strips and vegetable gardens, create green playgrounds and plant trees. In some schools, the children themselves contribute to the design.

RESULTS A green schoolyard is not only good for climate adaptation, but also for the well-being of the students at the school. They come into contact with nature every day; they can learn a lot from this while playing. Some schools even teach outside from time to time! Furthermore, a green schoolyard ensures less drought, less flooding, more cooling through shade and the absorption of heat in the summer.



How can this recommendation be realized?

Actions and campaigns that contribute to climate adaptation can be organized by various parties. Various municipalities are already setting up campaigns to make public spaces greener, for example by planting bulbs or plants. Such actions can also be used to make public spaces more climate adaptive. Schools can also be involved in these types of actions, so that children become aware of the importance of climate adaptation. In addition, social media can be used to promote such actions and campaigns and to reach residents.

When?

This recommendation mainly concerns the short term. Action must be taken immediately to contribute to climate adaptation. Where possible, it can also be examined how actions or campaigns can have a long-term effect.

Things we noticed

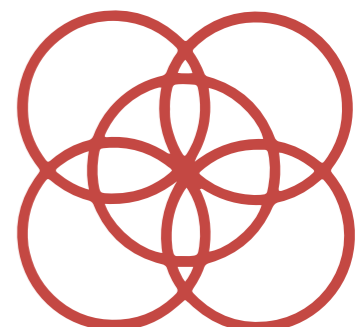
During the conversations, we noticed several things when it comes to contact with young people. First of all, it appeared that a number of municipalities have difficulty involving young people in their plans, because their municipalities are aging. In other words: young people are leaving for the city. It is crucial for these municipalities to focus carefully on recommendations 1, 2, 4 and 7.

What is more, YfCA found that not all organizations are active on social media. We recommend that these channels are actively used to reach young people. This includes using Facebook, Instagram, and WhatsApp. YfCA can ensure that these social media pages are seen by young people. This contributes enormously to awareness and in this way actions and campaigns are expected to be seen and attended more.



'THROUGH YFCA, YOUNG PEOPLE LEARN TO CONTRIBUTE BY BEING BOLD AND SIMPLY APPROACHING MUNICIPALITIES. IT IS HUGE MOTIVATING TO SEE THAT SOMETHING IS ACTUALLY BEING DONE WITH OUR INPUT.'

Eline, YfCA ambassador





ACT & ADAPT: WILL YOU JOIN US?

This Regional Action Agenda is the ideal starting point for taking action together. Together with youth who have become enthusiastic about our story. Together with local authorities who now want to take their responsibility. The question is therefore: will you join us? It is time to act and adapt now. Send an email to info@youthforclimateadaptation.org with "Yes, I want to join" and we will contact you as soon as possible. Also follow us at www.instagram.com/youthforclimateadaptation.

So, we are happy to roll up our sleeves and work with local authorities and other young people on climate adaptation. We have plenty of plans to share, connect and do.

Share

In the future our ambassadors will meet regularly to exchange knowledge and experience and thus learn from each other. Debates, excursions, and lectures form the basis, organized by the ambassadors themselves wherever possible. YfCA wants to use our knowledge and experience to actively involve young people in primary and secondary schools in climate adaptation. To determine the approach to this, an experiment is currently being carried out with students from Parcival College in Groningen. They investigate the options at their school for climate adaptation on their own initiative and actively acquire knowledge and experience.

Connect

We now know several parties who are also committed to education about climate issues. We would like to bring them together with schools that are not or hardly involved in this yet. This creates a connection, and they reinforce each other. Central to this is the development of a teaching package on climate adaptation. In addition, we would like to ask the government to encourage education about climate issues more. As YfCA we act as a positively activating think tank. We have two goals in mind: 1) creating awareness among young people and 2) involving young people in climate adaptation. Our contacts with authorities, including municipalities, allow us to share our knowledge gained at schools directly with policymakers. The voice of young people thus penetrates directly into practice. Good

initiatives can be tackled immediately and on a broad scale, preferably in collaboration with the young people involved. Therefore, a concrete question for authorities: are you prepared to actually use our input? We hope for a resounding yes!

Do

Young people who have become enthusiastic about, for example, climate adaptation lessons and would like to take action can join YfCA. Because in addition to connecting and sharing knowledge, our ambassadors also roll up their sleeves. Everyone can contribute ideas and participate in their own way. Think of harvesting and planting trees, building façade gardens, participating in cycling and walking tours, and so on. This is how we build the bridge between thinking and acting: Act & Adapt!

