Care-Peat workshop
Policy and Strategies on Peat Rewetting in the Netherlands
7 October 2020

This workshop was part of the Interreg Care-Peat project (deliverable D3.2) and organized by Natuurmonumenten, in cooperation with the Dutch Coalition Natural Climate Buffers. The workshop aimed to list current policies, strategies and approaches in the Netherlands and identify priorities for the future. The 2,5 hrs workshop was – because of Covid19 restrictions – held on-line via MS Teams. The participants agreed that the workshop should not be a one-off activity as it provided valuable ideas and energy for follow-up actions. The planned next steps are included in this report.

Participants

John Tukker, Paul Vertegaal, Arnoud Popping, Kirsten Haanraads & Willem Hellevoort (all Natuurmonumenten); Vera Geelen, Janneke Ottens & Boukelien Bos (all Staatsbosbeheer), Hans van der Werf & Monique Plantinga (both Friese Milieu Federatie), Ykeline Damstra & Jasper Hugtenburg (both ARK), Celine Roodhart (Vogelbescherming), Theo Vogelzang (LandschappenNL), Sytske Rintjema (It Fryske Gea), Wim Wiersinga (VBNE), Roel van Gerwen (Landschap Noord-Holland), Paule Schaap (provincie Friesland), Jos van de Staaij (provincie Noord-Brabant), Chris van Naarden (ministerie van LNV), Gert Jan van den Born (PBL), Jos de Bijl (Stroming, also on behalf of WWF NL), Gerard Litjens (Stroming, chair) and Arnold van Kreveld (Stroming, report).

Participants have their origin in nature management, environmental action and landuse orientated governmental authorities and institution. Goals and URL's of these organizations are (very) briefly summarized in Annex 1. Because of the circumstances (Covid19) the size of the group was limited.

Screenshots of the on-line meeting

Top quotes

The question is no longer whether or not groundwater should start rising, the question is how and when.
Hans van der Werf

Reducing emissions from peat should focus on groundwater levels, not on surfacewater levels.
Roel van Gerwen

Pressure drainage is a typical REGRET measure; it doesn't solve the problem and it delays implementation of fundamental solutions.
Theo Vogelzang

Good revenue models and financial compensation schemes for farmers are urgently needed.
Monique Plantinga

Changing landuse on peat soils is still the elephant in the room.
Theo Vogelzang

Presentations

The workshop started with 4 presentations (Annex 3-6):

- *Paul Vertegaal – Interreg Care-Peat and the aims of this workshop.*
  An introduction to Care-Peat, the Coalition Natural Climate Buffers (CNK) and the scope and targets of this workshop. The workshop is a co-production of Care-Peat and CNK.

  The targets were:
  - Listing current policies and relevant initiatives
  - Listing promising strategies
  - Identifying key policy omissions and implementation hurdles
  - Formulating proposals for policy/lobby, management and research

  The scope of the workshop was extended to all kinds of peatlands (fens, bogs, nature reserves and peatlands in agricultural use) but limited to policies and measures focusing on both climate mitigation and biodiversity (win-win).

- *Hans van der Werf – Peatlands policies and developments.*
  The National Climate Agreement is ambitious on peat, but the target (reduction CO_2-emissions from peat with 1 Mt/yr in 2030) is seen as feasible. Emission reductions can often be linked to other targets such as nitrogen-reduction, biodiversity, landscape values and water management. Central in the implementation are provincial strategies. The province of Fryslân has taken the lead, others are slow to follow. Urging provinces to step up their efforts is a clear priority.

- *Gert Jan van der Born – Peatlands in the National Climate Agreement.*
  The climate targets are a game-changer when discussing land-use in agricultural areas on peat. It has been clear for decades that the way these areas are managed is a dead-end street, but until recently this has not led to action on a meaningful scale. That is now changing rapidly. Additional arguments for urgent action came from studies predicting enormous damage to infrastructure if soils sink further. The National Climate Agreement looks at technical measures as well as natural solutions. Implementation of measures is site-dependent. PBL has assessed the amount of reduced greenhouse gas emission as a result of the National Climate Agreement. In this presentations the figures for measures on peatlands were presented. More research is needed to get a better grip on the effectiveness of the various measures.

- *Roel van Gerwen – Promising strategies.*
  The Peat Innovation Programme tests a large number of measures in the field. Although a complex issue, a number of conclusions can be drawn. From a monofunctional agricultural-economic point of view reducing CO_2-emissions will lead to lower incomes resulting from more extensive agricultural practices. For economically profitable alternative crops, like paludiculture, the market still has to develop further. Hence, someone must pay to compensate for these income losses. A second conclusion is that (logical) assumptions on effectiveness or business models often proof to be false making it dangerous to base measures on assumptions. Nevertheless the Peat Innovation Programme led to experience with interesting measures of which some are indeed effective. A site-specific approach with a mix of meaSures is clearly the way forward.

Priorities for future action

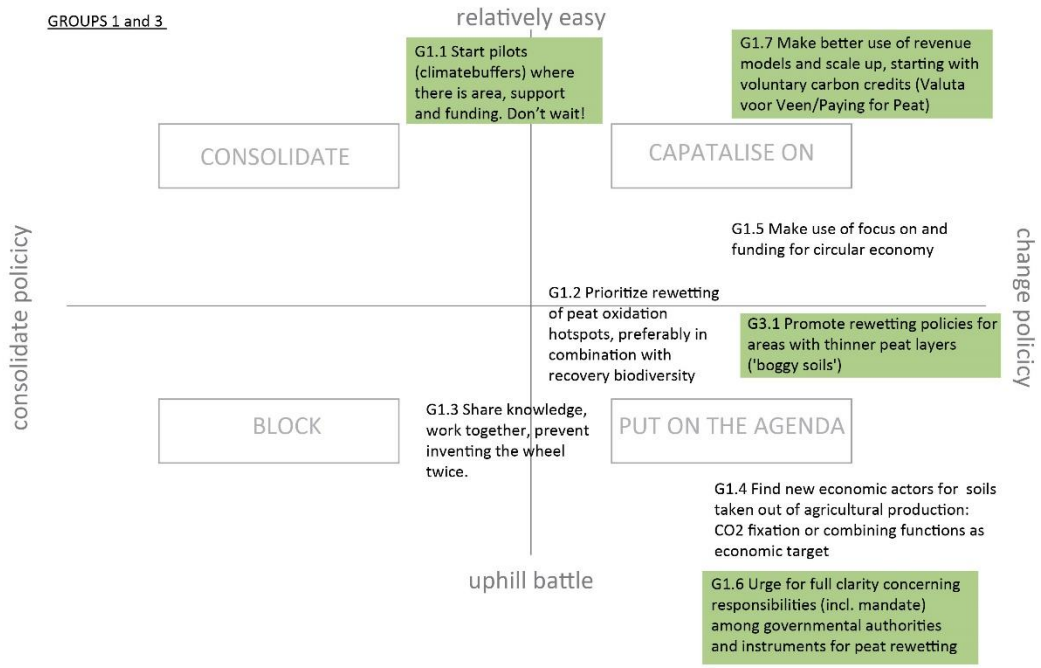
After a short break the actual workshop started. Kirsten Haanraads introduced a simple methodology to quickly identify priorities for future action. Simply put; the participant split up in 4 groups and suggested necessary policy/lobby, management and research activities. These were positioned in a figure, with:

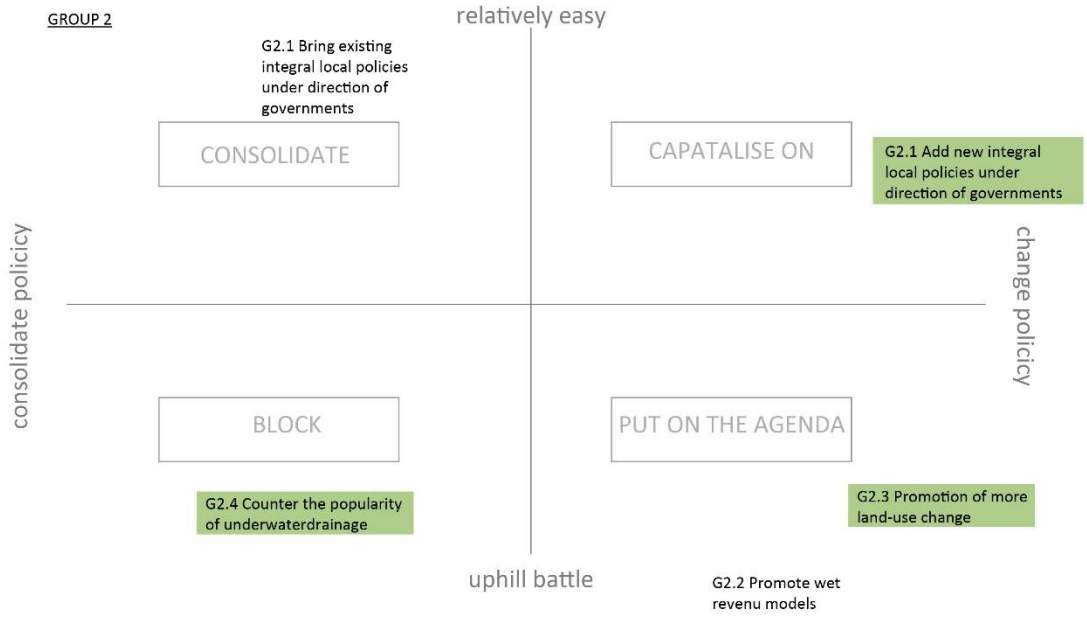
- on the horizontal axis from left to right: consolidating policy to changing policy.
- on the vertical axis from bottom to top: uphill (struggle) to downhill (ride).

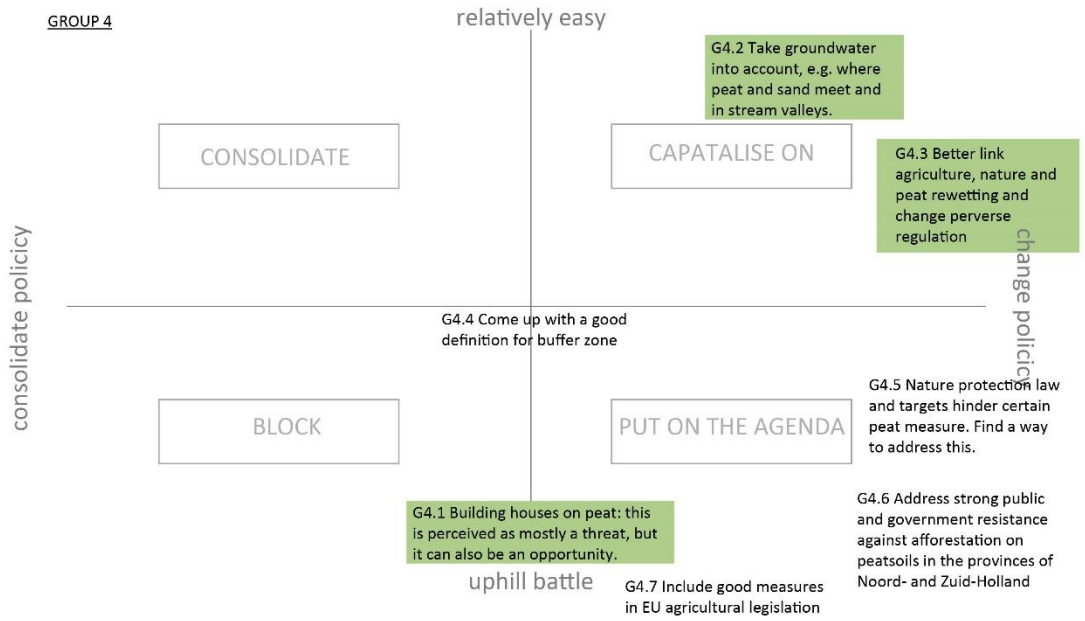
  - This results in the following fields, clockwise, starting from top left (consolideren): consolidate – capitalise on – put on the agenda – block.

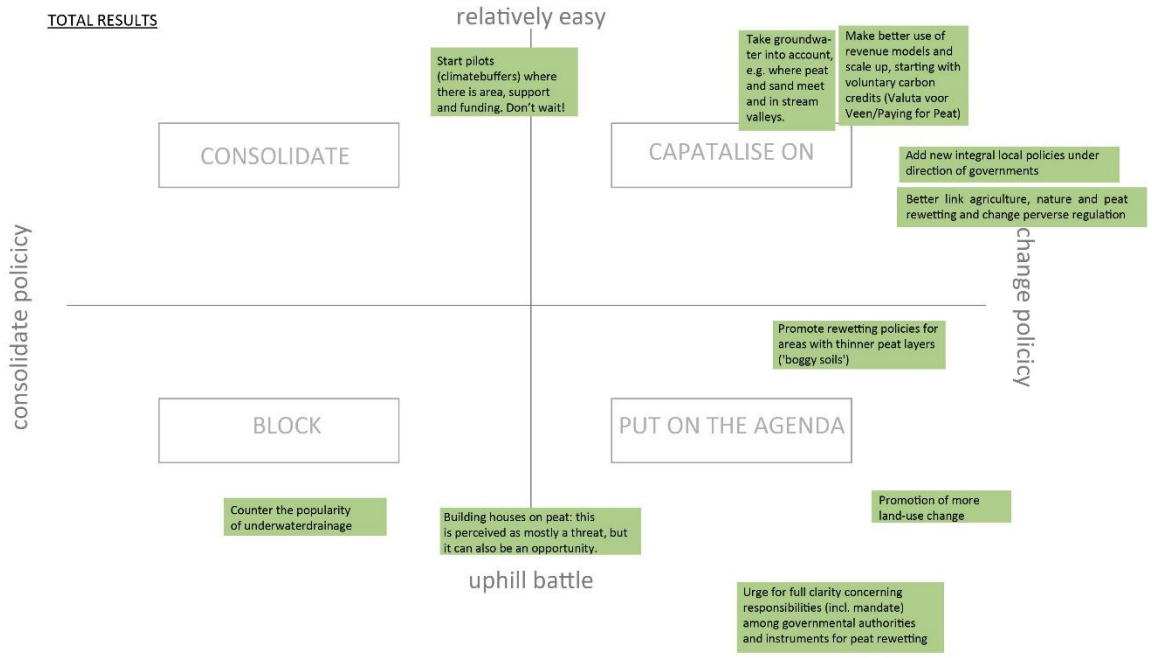
The top 3-4 per group are highlighted in green. The joint results of groups 1 and 3 are jointly presented in the first figure, followed by the results of group 2 and group 4. The last figure shows the results of all 4 groups.

The composition of the 4 groups can be found in Annex 2.


GROUPS 1 and 3
relatively easy
G1.1 Start pilots (climatebuffers) where there is area, support and funding. Don't wait!
G1.7 Make better use of revenue models and scale up, starting with voluntary carbon credits (Valuta voor Veen/Paying for Peat)
CONSOLIDATE
CAPATALISE ON
G1.5 Make use of focus on and funding for circular economy
consolidate policicy
change policicy
G1.2 Prioritize rewetting of peat oxidation hotspots, preferably in combination with recovery biodiversity
G3.1 Promote rewetting policies for areas with thinner peat layers ('boggy soils')
BLOCK
G1.3 Share knowledge, work together, prevent inventing the wheel twice.
PUT ON THE AGENDA
G1.4 Find new economic actors for soils taken out of agricultural production: CO2 fixation or combining functions as economic target
uphill battle
G1.6 Urge for full clarity concerning responsibilities (incl. mandate) among governmental authorities and instruments for peat rewetting


GROUP 2
relatively easy
G2.1 Bring existing integral local policies under direction of governments
CONSOLIDATE
CAPATALISE ON
G2.1 Add new integral local policies under direction of governments
consolidate policicy
change policicy
BLOCK
PUT ON THE AGENDA
G2.4 Counter the popularity of underwaterdrainage
G2.3 Promotion of more land-use change
uphill battle
G2.2 Promote wet revenu models


GROUP 4
relatively easy
G4.2 Take groundwater into account, e.g. where peat and sand meet and in stream valleys.
CONSOLIDATE
CAPATALISE ON
G4.3 Better link agriculture, nature and peat rewetting and change perverse regulation
consolidate policicy
change policicy
G4.4 Come up with a good definition for buffer zone
G4.5 Nature protection law and targets hinder certain peat measure. Find a way to address this.
BLOCK
PUT ON THE AGENDA
G4.1 Building houses on peat: this is perceived as mostly a threat, but it can also be an opportunity.
G4.6 Address strong public and government resistance against afforestation on peatsoils in the provinces of Noord- and Zuid-Holland
uphill battle
G4.7 Include good measures in EU agricultural legislation


TOTAL RESULTS
relatively easy
Start pilots (climatebuffers) where there is area, support and funding. Don't wait!
Take groundwa-ter into account, e.g. where peat and sand meet and in stream valleys.
Make better use of revenue models and scale up, starting with voluntary carbon credits (Valuta voor Veen/Paying for Peat)
CONSOLIDATE
CAPATALISE ON
Add new integral local policies under direction of governments
Better link agriculture, nature and peat rewetting and change perverse regulation
consolidate policicy
change policicy
Promote rewetting policies for areas with thinner peat layers ('boggy soils')
BLOCK
PUT ON THE AGENDA
Counter the popularity of underwaterdrainage
Building houses on peat: this is perceived as mostly a threat, but it can also be an opportunity.
Promotion of more land-use change
uphill battle
Urge for full clarity concerning responsibilities (incl. mandate) among governmental authorities and instruments for peat rewetting

Most desired actions

Below please find the top ten actions (marked in green in the figures above).

Start pilots (climate buffers) where there is area, support and funding. Don't wait

A national peat rewetting policy should be clear and smart enough to result in concrete local projects and measures. Often existing field projects more effectively (than more abstract policies) motivate others to follow up. Nature management organizations and water boards can initiate such field projects, as they have proven already with 'natural climate buffers'. They should continue to do so, now with added focus on peatland areas.

Make better use of business models and scale up, starting with voluntary carbon credits (Valuta voor Veen/Paying for Peat)

Most methods which lead to rewetting of peatland in synergy with profit for biodiversity demand more extensive farming or working with 'wet crops' (paludiculture). Either way, this results in a lower income as the end-products of wet crops still are, because of the experimental scale, not as competitive as traditional agricultural products. Furthermore, they (and nature managers too) face higher costs, such as the use of less efficient machinery on wetter, weaker soils. To overcome this (economic/financial) obstacle, additional revenues from public and private parties are needed. Some of them have been developed already, like Valuta voor Veen (Paying for Peat: voluntary carbon credits), the challenge now being to better inform farmers about these instruments.

Urge for full clarity concerning responsibilities (incl. mandate) among governmental authorities and instruments for peat rewetting

As the Care-Peat review on peat rewetting policy has unveiled, in The Netherlands the necessary instruments are scattered among different authorities, laws and governmental levels. The result being that none of them is able or eager to take the lead, possibly because they are afraid of the complexity and the liability for failures. To avoid that they keep waiting for each other or, worse, play pass-the-parcel, this should be solved on the national level.

Add new integral local policies under direction of governments

This requires a strong government approach: Within the Netherlands, the implementation of national policy is decentralized towards regional and local governments. This results in fragmented approaches, varying from government to government. Challenges like combatting climate change and nature protection are a national assignment though and request an overarching and interlinked framework, which is now missing. The result is that local government are holding back in their implementation.

Counter the popularity of underwater drainage

Many farmers are interested in the technique of underwater drainage as a means to manage the ground water level of their fields. This pipe-drainage technique is not only suitable for the discharge of groundwater, but it facilitates the inflow of surface water into the soil as well. With underwater-drainage the water level can be set higher or lower depending on the season and weather conditions. Although this might seem an appropriate way to cope with peat oxidation, many nature protection organizations are not happy with it. This is because

they consider the underwater drainage as an halfheartedly solution; after all, the ground water is still kept at a too low level to combat peat oxidation successfully. Also, the water use is about 20-40% higher than of natural rewetting via rain and ditches. Furthermore this technique may result in a further decrease of biodiversity due to a loss of physical diversity caused by installing this intensive pipe draining system. Nature protection organizations would rather see that farmers are counselled to transform their practices into more extensive ways of farming.

Promotion of more land-use change

Successful examples of combining farming practices and peat conservation are still too rare to counter the popularity of technical solutions, which are only successful in the short term. Land-use change would, however, provide a long term and stable solution for both the peat as for the land users. The implementation of land-use change is more time consuming and a more complicated process. On the other hand, the National Climate Agreement as well as the national policy for nitrogen reduction, 'Programma Natuur', explicitly mentions this a one of the roads to go. It should be promoted that responsible parties really help realizing this on a significant scale.

Take groundwater into account, e.g. where peat and sand meet and in stream valleys

When restoring peat, it is not just about the water quantity, the quality is important as well. Rainwater, nutrient-rich water and mineral-rich groundwater have different characteristics. Rewetting peat in natural areas also has risks, like bruising with rushes (Juncus effusus) a.s.o. and poorer manageability (carrying capacity). Using high quality groundwater can avert some of these risks. Plus it has an added advantage: the development of (rare!) groundwater-dependent nature. Opportunities are found on the transitions from High to Low Netherlands, for example from the "Drents Plateau" to the surrounding peatlands.

Better link agriculture, nature and peat rewetting and change perverse regulation

There is still perverse regulation benefitting agricultural practices with negative impacts on peatlands and on finding structural solutions (for agriculture as well). It is better to look at agriculture, nature and peat rewetting in combination. For example combining agriculture with meadow birds and peat rewetting. Or practicing rather intensive agriculture on higher and drier grounds and rewetting lower areas and combining this with more extensive agriculture and nature.

Building houses on peat; this is perceived as mainly a threat, but it can also be an opportunity

The Netherlands aims to build a million new homes before 2030. This will have an enormous impact and may economically be the main driver on land-use. It is likely that some of these houses will be built on peatlands. Traditional building on peatlands is a threat, as water levels are lowered. Perhaps building (and the available funding) can be an opportunity; e.g. by building high apartments on artificial mounds and rewetting the surrounding area giving the apartments a spectacular view.

Other recommendations

Provincial strategies

Not included in the figures above - but seen as a priority in the presentation of Hans van der Werf and supported as a priority for future action in the discussion - is pressuring provinces to come up with good provincial strategies, and to do so quickly.

National Knowledge Program Peatland Subsidence

The priorities identified in this workshop are not well-included in the National Knowledge Program Peatland Subsidence. It seems worthwhile to try and include some of these priorities.

Main discussion points

Land-use and underwater drainage

A number of participants agreed that it would be unwise to shy away from promoting land-use change. Promoting underwater drainage as a means of maintaining agriculture on peat soils was seen as a measure that does not address the root of the problem. On the contrary, it is an investment that will only postpone taking the fundamental measures that are necessary. Nevertheless, some of the participants have experiences that could turn out to be positive for biodiversity as well (meadow birds).

Nature protection

Nature and landscape protection can also be an obstacle. Firstly, in existing protected areas changing land-use may well result in changes in species composition. If this affects strictly protected species this is prohibited. Secondly, there is strong opposition to forests on peat soils – even if they are a natural climax stadium – and this also blocks the in many areas most effective solution (from a CO_2 point of view). Arguments against afforestation are cultural, but also based in protection (e.g. of meadow birds).

Research and action

Research was identified as very important, but at the same time it was noted that promoting research can be used as a way to postpone action. Considering the ambitious 2030-target research should not get in the way of no-regret actions that contribute to rewetting of peatlands.

Follow up

Participants agreed that there is a lot of dynamics on this issue and found it really useful to share experiences. The concrete results and energy during the workshop strongly suggest the usefulness of follow-up actions. Natuurmonumenten promised to send to all participants:

- this report
- the presentations
- a proposal on follow-up activities; for this entire large and diverse group and/or for smaller subgroups on certain issues; Natuurmonumenten will discuss the organization of this follow-up in the Coalition Natural Climate Buffers.

Annex 1 – Organizations with participants in this workshop

ARK Natuurontwikkeling
ARK Nature is an organization that has pioneered rewilding since its founding in 1989. Our main focus is rewilding via a bottom-up approach, based on natural processes and linked to regional economic and social development. ARK Nature is one of the founding partners of Rewilding Europe. ARK is partner of the Coalition Natural Climate Buffers.
Web: https://www.ark.eu/en

Coalitie Natuurlijke Klimaatbuffers CNK
The Coalition Natural Climate Buffers (CNK) consists of eight nature organizations: Birdlife Netherlands, Staatsbosbeheer, World Wildlife Fund NL, ARK Nature, Waddenvereniging, Natuur en Milieu Federaties, LandschappenNL and Natuurmonumenten. Since 2008, the coalition has been working to create natural climate buffers in its areas. Natural processes are given space, allowing the areas to grow with climate change. Climate buffers play a role in retaining and collecting water, preventing water shortages, moderating heat and reducing carbon dioxide in the atmosphere. In this way they improve the quality of life in the Netherlands. Related concepts are: "Nature based solutions" and "Building with nature".
Web: https://www.klimaatbuffers.nl

Friese Milieu Federatie FMF
As one of the twelve Dutch provincial Nature and Environment Federations the FMF is committed to the National Climate Agreement and the sustainable development of the province of Fryslân. Mission: FMF strives for a healthy environment, rich nature and a beautiful landscape, together with our members, together with our partners and together with the Frisian citizens. FMF's umbrella organization Natuur en Milieu Federaties is partner of the Coalition Natural Climate Buffers.
Web: https://www.fmf.frl/

It Fryske Gea
It Fryske Gea is the provincial society for nature conservation in the province of Fryslân (Friesland). Its objective is conservation and development of nature, landscape and cultural heritage. IFG takes care of more than 60 different nature reserves with a total area of 20,000 hectares. IFG is a member of LandschappenNL.
Web: https://www.itfryskegea.nl/organisatie/

LandschappenNL
LandschappenNL is an umbrella organization and represents the interests of the Provincial landscape societies and Landscape management organizations. The partnership also contributes to the national visibility of our 20 provincial organizations. Its aim is protecting, managing and developing the Dutch landscape, nature and cultural-historical heritage. The joint provincial organizations represent more than 79,000 volunteers, 114,114 hectares of protected nature, more than 800 monuments and have a support base of around 300,000 donors. LandschappenNL is partner of the Coalition Natural Climate Buffers.
Web: https://www.landschappen.nl/

Landschap Noord-Holland
Landschap Noord-Holland is the provincial society for nature conservation in the province of Noord-Holland. Its mission is making Noord-Holland more beautiful, together with others. LNH takes care of 96 nature reserves with a total area of 4,500 hectares. Improving biodiversity and making the landscape climate resistant belongs to its objectives. LNH is a member of LandschappenNL.
Web: https://www.landschapnoordholland.nl/

Ministerie van LNV
The ministry of Agriculture, Nature an Food quality is responsible for the national policy on these themes. Its vision "Agriculture, nature and food: valuable and connected" describes the change that is needed from the current agricultural system, in which the emphasis is on cost price reduction, to a system that aims the careful handling of scarce raw materials. Concerning the chapter Land use this ministry is financing important parts of the implementation of the National Climate Agreement.
Web: https://www.rijksoverheid.nl/ministeries/ministerie-van-landbouw-natuur-en-voedselkwaliteit (Dutch) https://www.government.nl/topics/themes/nature-and-the-environment (English)

Natuurmonumenten
Natuurmonumenten owns and manages more than 100,000 hectares of natural areas in the Netherlands. Its mission: We stand up for all the nature that is left. And for the new nature that is yet to come in the Netherlands. Not just in the areas we manage, but also beyond. Because we go a step further. In a way that suits the Netherlands of today. Natuurmonumenten calls on all Dutch people to jointly create, demand, care for and protect new nature. Natuurmonumenten is partner in the National Climate Agreement. Natuurmonumenten is chairing the Coalition Natural Climate Buffers.
Web: https://www.natuurmonumenten.nl/

PBL
PBL Netherlands Environmental Assessment Agency is the independent national institute for strategic policy analysis in the fields of the environment, nature and spatial planning. PBL contributes to improving the quality of political and administrative decision-making by conducting outlook studies, analyses and evaluations in which an integrated approach is considered paramount. Policy relevance is the prime concern in all of our studies. We conduct solicited and unsolicited research that is independent and scientifically sound. Climate change, sustainability and land use planning belong to its advisory scope. PBL also advised the partners of the National Climate Agreement.
Web: https://www.pbl.nl/en/

Provincie Fryslân (Friesland)
Regional authority of the (bilingual) province of Fryslân (Friesland), in the North of The Netherlands. As a Province it has a special legal authority in the field of spatial planning and nature conservation. Large parts of the province consist of peatlands, used as agricultural production area or protected as nature reserves. The provinces are partners in the National Climate Agreement.
Web: https://www.fryslan.frl/

Provincie Noord-Brabant
Regional authority of the province of Noord-Brabant, in the South of The Netherlands. As a Province it has a special legal authority in the field of spatial planning and nature conservation. Peat soil is occurring in some bog areas and in smaller river valleys (brook peat). The provinces are partners in the National Climate Agreement. Web: https://www.brabant.nl/

Staatsbosbeheer
Staatsbosbeheer is commissioned by the Dutch government to strengthen the position of nature in the Netherlands. As a leading national public body and as land owner and manager of a sizeable amount of nature reserves SBB works to conserve and develop the Netherlands' characteristic green heritage. Mission: Together with society, we are committed to ensuring that current and future generations are able to experience the many essential values of nature, balanced with sustainable use of our protected areas. SBB is coordinating the Coalition Natural Climate Buffers.
Web: https://www.staatsbosbeheer.nl/english

Stroming
Stroming is a private consultancy which was at the origin of influential new concepts (including Living Rivers, Natural Climate Buffers, Living Border Meuse and Temporary Nature) that contribute to a more natural, safer and more livable Netherlands. Mission: Stroming connects people with accessible existing nature of nature development. In doing so, we link up with social and economic drivers such as raw materials extraction, water issues, spatial transitions (agriculture, energy, housing), climate adaptation and ecosystem services.
Web: https://www.stroming.nl/

VBNE
The Dutch Forest and Nature reserve owners association (VBNE) unites six groups of members nature management organzations, among them Staatsbosbeheer, Natuurmonumenten and LandschappenNL. Together they represent 90% of the Dutch nature reserves. The VBNE's central theme is to facilitate the continuous increase in professionalism of its members' forest and nature management. VBNE is partner in the National Climate Agreement.
Web: https://www.vbne.nl/english/

Vogelbescherming Nederland (Birdlife Netherlands)
Vogelbescherming Nederland is the Dutch Partner of BirdLife International, a worldwide Partnership of non-governmental conservation organisations that seeks to conserve all wild bird species and the priority sites (Important Bird Areas) and habitats on which they depend. Vogelbescherming Nederland aims, through birds, to help conserve biodiversity and maintain the quality of life on Earth. Vogelbescherming Nederland is partner of the Coalition Natural Climate Buffers.
Web: https://www.birdlife.org/europe-and-central-asia/partners/netherlands-society-protection-birds-vbn

WWF Netherlands
WWF-NL is part of the international WWF and in recent decades has grown into a worldwide network of conservationists, local population, governments, the business community, donors and volunteers. People with the same passion for nature and the willpower to protect it. Our mission is as challenging as it is clear: to work on a world in which people live in harmony with nature. A vital and resilient nature, which we can proudly pass on to the generations to come.
Web: https://www.wwf.nl

Annex 2 – Composition of the 4 break-out groups

Group 1
- Paul Vertegaal (chair)
- Ykeline Damstra
- Celine Roodhart
- Roel van Gerwen
- Monique Plantinga

Group 2
- Kirsten Haanraads (chair)
- Theo Vogelzang
- Janneke Ottens
- Boukelien Bos
- Paule Schaap
- Chris van Naarden

Group 3
- Jos de Bijl (chair)
- John Tukker
- Willem Helleboort
- Vera Geelen
- Hans van der Werf
- Gert Jan van den Born

Group 4
- Arnold van Kreveld (chair)
- Arnoud Popping
- Systke Rintjema
- Jasper Hugtenburg
- Wim Wiersinga