

Closing speech Sybilla Dekker, chair supervisory board Knowledge for Climate “Climate adaptation research and value creation”

Ladies and gentleman,

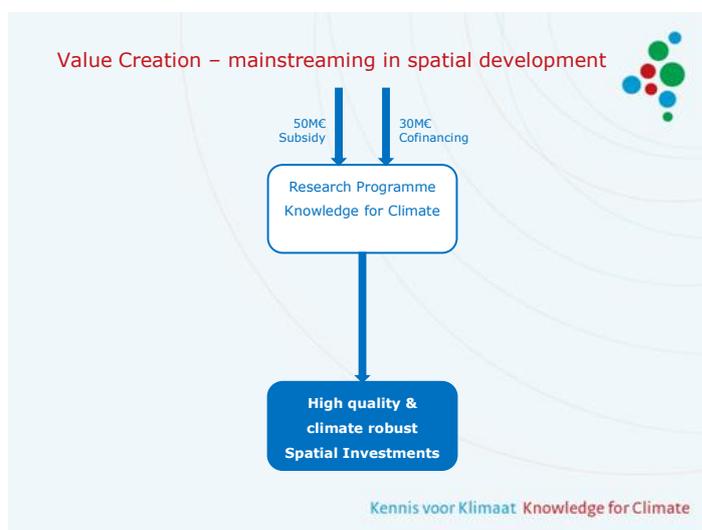
The goal of Knowledge for Climate is explore how The Netherlands can be made Climate Proof. Through this program, some 300 researchers, consultants, policy makers and entrepreneurs are engaged in this endeavour on a daily basis. This Midterm Assessment today has given us a preview of results.

Are we on the right track?

Today we have seen great ideas and excellent research being presented. But the question is: will we, in the end, make a difference when it comes to investments in urban and rural development, in infrastructures and flood safety, in drought mitigation measures and public health issues. And if so, how can we measure the impact of these significant human and financial investments.

I believe there are *three domains* where this research program makes a difference and can make an even bigger difference. *Value creation* is the word I would like to use to explore the impact of our program, Knowledge for Climate.

The first domain is that of the **high quality and climate robust spatial investments** in the Netherlands. This is where Knowledge for Climate has been established in the first place. The central goal of the programme is to generate knowledge to support climate robust investments in spatial development, including the build environment and infrastructure. The means are: research and innovation, driven and supported by regional and local stakeholders: government and private sector.



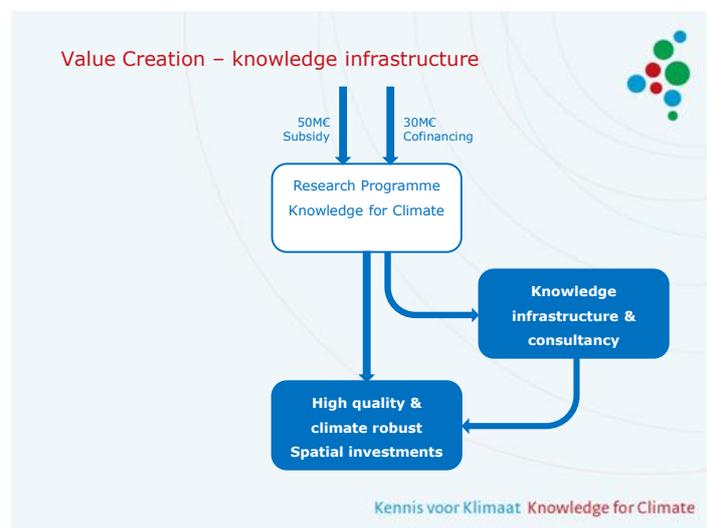
Climate change may be considered a reality by all of us here today. The need to take it into account in spatial development is self-evident. However, the harsh reality is that in day to day practice the notion of climate change has to compete with so many other issues that seem equally relevant to the planners, designers and decision-makers. It is good to see that this programme is focusing on the issues of today and explores how climate proofing ideas and solutions can be integrated in the plans and designs, rather than leading the way. Although the programme still has two years to go, we have seen today quite a number of examples where innovation in stead of linear thinking has generated designs that are much more climate robust than traditional approaches.

This is what we start to see today in the first outlines of the regional adaptation strategies of the Hotspots. By bringing cutting edge research on climate adaptation and the local knowledge and ambitions together in these Hotspots, climate adaptation is reaching a stage of *mainstreaming* with spatial development.

The Urban Hotspots for example show us how researchers, architects and engineers bring innovative concepts on climate adaptation in the urban development. The Supervisory Board of Knowledge for Climate, that I have the pleasure to chair, paid a visit to Rotterdam last month. We were impressed by how this city is engaged in our research and simultaneously in the rapid *implementation* of the results, while developing a world-leading climate proofing strategy for the region. Be it green roof tops against urban heat stress, or safe and well integrated flood defences, and water storage systems.

And it is not only at a local level. The knowledge for climate researchers and their research groups actively support the national Delta Program. The input of the Knowledge for Climate research community into this program is most productive. The leadership and the managers of the Delta program are very happy with the active new ideas and practical approaches generated by the Knowledge for Climate research program.

But there is more. Knowledge for Climate research is also meant to be *a long term investment in the knowledge infrastructure* of our country. This I consider to be the second domain of value creation by Knowledge for Climate.

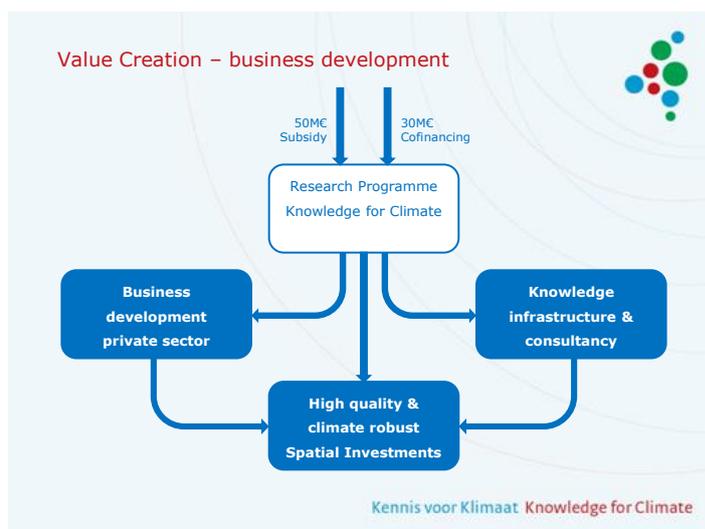


The parallel goal of the program is to create a long-term basis for an economically effective interaction between research and society. It should act as a change agent. The disciplinary approaches in science and the sectoral research organization we have developed in the past are no longer adequate to solve today's problems. The research programme is aimed at creating a more inclusive research approach, by engaging stakeholders and by working across disciplines and across sectors. Especially in long-term spatial planning this is essential.

Cooperation across the sectoral knowledge institutions is well developed in this programme: the researchers of Deltares on water, Wageningen University on green issues, TNO on underground issues, Utrecht University on urban issues, the Vrije Universiteit Amsterdam on instruments for risk assessment and spatial decision making and the Met-office on climate scenarios do work closely together. In total 55 PhD students, 25 postdocs and their professors are engaged in exploratory and applied research. Especially the PhD's and post docs in this multi-disciplinary programme provide a long-term asset for our country over the decades to come. They will still be there in 30 years when we are likely to have a warmer climate, with hotter cities and higher seas. Through their multidisciplinary approach these institutes are becoming world leaders in research for adaptation.

And, most relevant for the long term position of our international engineering companies and consultancy firms such as HASKO-DHV, Arcadis, Grontmij and many others including urban planners such as Bosch-Slabbers and the Urbanisten. They all participate in the research program and absorb both the research results and the academic researchers. An important asset of the program is the human knowledge base with long term return on investment.

And last but not least a third domain has been articulated by the board of the program: how to ensure that the new knowledge is *generating new business in the private sector*.



Ten years ago our research community did not worry about such things. The market would pick it up automatically once you publish your great results. Now we are increasingly aware of the need to strengthen the interface between research and product development. Fortunately the consultancy firms and contractors and start-up companies actively participate in the research. And the program

has developed specific activities to support market development. I understand that the board of the program wants to step up its activities in this domain now that research results and innovative ideas are emerging from the program.

I believe indeed that the Knowledge for Climate is producing a number of groundbreaking ideas, concepts and products. And the program can help to develop the market for such innovative approaches through *creating awareness*, in accelerating *paradigms shifts* and in *standardization*. This might sound somewhat academic, but let me give you some practical examples.

Concerning awareness:

Research of Knowledge for Climate has raised the awareness that thousand of people in Rotterdam are living outside the dike protected areas without realizing that they are not insured for flooding . I am sure that you can tell what the opportunities are that insurance companies see in this respect... The notion of multifunctional unbreachable dikes is gaining ground through the many projects supported by the program. Like wise the concept of multi-layer flood protection systems.

Regarding paradigm shifts:

Knowledge for Climate research is indicating a paradigm shift from climate adaptation as a *driver for change to mainstreaming climate* adaptation with other issues, such as spatial development. A water storage underneath a greenhouse near The Hague was incorporated in the expansion plans of a horticultural industry, opening up new opportunities in multifunctional land-use both for company as well as for the water board and the municipality.

About standardization:

Currently, farmers in the Zeeland are participating in a Knowledge for Climate research project to improve the use of existing fresh groundwater resources and create new freshwater reserves. If this project succeeds, which is very feasible, it will increase the self-sufficiency of farmers and reduce their dependence on external freshwater supply.

We see important objectives in the business development aspect of the Knowledge for Climate research. In the next two years we will focus on this type of value creation even more, by exploring the opportunities of translating our unique research results into new businesses.

Ladies and gentlemen,

I realize that I have only touched upon a very few examples. It does not do justice to all the other wonderful examples that we have seen today. What I do want to emphasize is that value creation is very important. Particularly in times of these, when we all have to think twice where to invest our money in, it cannot be stressed enough where the added value of well thought-out programmes like Knowledge for Climate lies.

I think this Midterm Assessment did not only show that we are making a difference, but it also made clear where our attention should focus on in the next two years: *from_research to innovation in order*

to reduce the cost of adaptation. This applies for all three domains of value creation that I introduced to you this afternoon.

First, the finalization of the regional adaptation strategies and the contributions to the Delta Program are of the utmost importance in that final phase of the programme.

Second, we focus on optimization of scientific research results, also in the international debate.

Third, generating new business arrangements based on our innovative research results will have our special attention in the two remaining years of Knowledge for Climate.

It is only that limited amount of time that we have got to bring our knowledge and experiences to the people and places that can use it. I urge you not to be shy and to think of innovative ways to get your message across. Inspire other with your valuable work and let yourself be inspired by others.

In this respect, I would especially like to thank our reviewers today, for their time and efforts they put in the review and for being here today. Your reflections from both national and international, and from scientific and societal perspective are a major contribution to further increase our added value towards the end of the programme.

As the chair of the Supervisory Board of Knowledge for Climate I can assure you that we will be witnessing the progress of your research with an even greater interest now that we are heading for the wrapping up in 2014. I am looking forward to seeing you then.

I wish you lots of inspiration with your research and I thank you for this promising 'Preview of End results'.