Esteemed Members of the Committee on Energy and Commerce of the U.S. House of Representatives,

Hereby we submit the written statement for the forum on climate change, organized by your committee on November 19, 2015. As requested by your committee, this statement and the oral presentation of our representative will focus on the effects of climate change on water issues (sea level rise, floods, storms and droughts) and the Dutch efforts to mitigate and adapt to these changes.

The Kingdom of the Netherlands will be represented by Kitty van der Heijden, Ambassador for Sustainable Development of the Kingdom of the Netherlands, currently on secondment to the World Resources Institute.

Summary

Climate change is a fact. Scientific evidence that supports the theory that increased CO2-emmission leads to a global rise in temperature and influences the climate is overwhelming. Besides that, the Netherlands is already being confronted with these changes on a daily basis.

As part of its overall climate policy, the Dutch government assumes mitigation and adaptation measures and cooperates with non-state actors to ensure an accelerated transition towards a low-carbon economy and to effectively deal with climate impacts. We are committed to tackling climate issues on a global scale by actively participating in international negotiations and agreements.

Through knowledge and technology transfer, as well as development cooperation, the Netherlands aims to contribute to an accelerated transition towards a low-carbon, climate resilient world. We strive to adopt an ambitious international climate change agreement during the COP 21 in Paris.

The Netherlands has a vital interest in preventing further climate change. Half of our country would flood twice daily if not for our elaborate water management system. We are considered the safest delta in the world, but we are already feeling the consequences of climate change. That is why we recently approved a comprehensive national Delta program. This program provides a framework to ensure that our flood risk management and freshwater supply are sustainable and robust by 2050. Preventing further climate change remains a priority, while more extreme weather demands more and more investments in adaptation measures.

We share our expertise on water and climate resilience with other countries around the globe. We provide technical assistance and promote the use of integrated water management and climate resilience and work to involve business and civil society organizations. At COP 21, we will advocate for ambitious mitigation measures and more attention for climate resilience and climate finance within the realm of climate adaptation. Across the globe, the effects of climate change can lead to further humanitarian disasters and economic losses, as well as tensions within and between countries. In the U.S, we have been actively involved in the redevelopment of the coastal defense of Louisiana after Katrina. We also provided technical advice to the Rebuild by Design contest after Sandy hit the New York – New Jersey region. We have a long term collaboration with the U.S. Army Corps of Engineers and facilitate knowledge exchange between US and Dutch cities, knowledge institutes and companies.

The Netherlands and Climate Change

The Netherlands accepts scientific evidence about the causes and impacts of climate change: human-induced increases in CO2-emissions lead to a global rise in temperature, with detrimental impacts across a range of economic sectors and ecosystems, as well as people's lives and livelihoods. As a densely populated country in a vulnerable delta, we are already being confronted with these changes on a daily basis. In the Netherlands, the number of record breaking weather phenomena (high temperatures, exceptional rainy or dry months) has increased in the last couple of years. Sea level rise is a reality we have to deal with as a low-lying delta. Similar impacts are felt across the globe.

The climate policy of the current Cabinet of Prime Minister Mark Rutte was published in 2014 as the 'Climate Agenda'. The Cabinet takes into account, and strives to build on, the energy, enthusiasm and determination that many other stakeholders in the Netherlands have when it comes to tackling climate change and ensuring a sustainable future. Leveraging this societal energy by creating coalitions to tackle climate change and create new opportunities for a more sustainable, circular economy in the Netherlands and abroad are an active part of this climate policy. The approach to climate mitigation and adaptation are described below.

Mitigation / National level

In 2013, over 40 organizations (government, companies, labor unions, financial institutions, environmental and civic organizations) committed themselves to an 'Energy Agreement for Sustainable Growth': a set of agreements and ambitions on, energy efficiency, clean technology and climate policy that should lead to clean and affordable energy, jobs and economic opportunities for Dutch companies in the clean tech industry. This agreement has been driving our governments Climate Agenda, which contains 5 action points:

Creating a better toolbox for mitigation: Better tools must and can be built for making
emission reductions achievable. For heavy industry, we use the European Emission Trading
System to secure greater reductions in the period up to 2030. The government is also
pursuing tougher standards for the energy use of appliances and products in Europe.

- 2. Facilitating renewable energy and energy conservation: Legislation and regulations need to be amended in order to facilitate the jump towards more renewable energy (onshore and offshore wind energy).
- 3. Taking the road towards sustainable mobility: As follow up to the Energy Agreement, the parties have agreed to work together to realize behavioral change, reduction of CO₂ emissions by large companies and arrangements for a public infrastructure for recharging electric vehicles before 2030.
- 4. Towards a different use of materials and sustainable industry: Using materials differently (more efficiently, more biobased and conversion of waste to raw materials) can make a big contribution to mitigate climate change. Specific supply chains are targeted by government programs to improve the sustainability.
- 5. A more productive and climate-friendlier agriculture and horticulture: The world's growing population is increasing the demand for safe and healthy food. The challenge is to provide sufficient food for everybody. The footprint of agriculture can be reduced by about 30% by making changes to the menu.

Mitigation / COP 21

The Netherlands is committed to tackling climate issues on a global scale and actively participates in international negotiations and agreements. The global climate negotiations in Paris later this month offer a crucial opportunity for a much needed global agreement to effectively tackle climate change, and to accelerate the transition towards a low carbon economy. We strive to adopt a new international climate change agreement during the COP 21 in Paris. Our priorities for designing the new post-2020 agreement are:

- Participation of as many countries as possible (especially the major players) and buy-in from businesses, civil society organizations, local authorities.
- Creating a future-proof, dynamic and flexible legal framework including a rachet-up mechanism to ensure a regular review aimed at incentivizing an accelerated decarbonization of the global economy.

- The agreement should provide flexibility for contracting parties to (upwardly) adjust their
 CO2-reduction targets and the ways they achieve them.
- A toolbox of instruments to facilitate governments and other actors in addressing the climate challenges (both mitigation and adaptation).
- Incorporating the concepts of climate neutrality and climate resilience: zero net emissions as long term goal.
- Shifting the focus of adaptation measures to climate resilience and climate finance for greening investments.
- Recognition of the importance of gender-responsiveness within climate policy in the preambular text of the 2015 agreement.
- Making headway with the development of the Green Climate Fund. Establishing adequate financial means to help developing countries deal with climate change is critical.

Adaptation / National

The Netherlands has a vital interest in preventing further climate change: it is a matter of survival for our economy, our people and the ecosystems on which we depend. Already now, about half of our country would flood twice daily if not for the elaborate water management system we developed over the course of eight centuries. We are considered the safest delta in the world and we thrive in this vulnerable, densely populated ecosystem: The Netherlands is one of the top 30 economies in the world and one of the top destinations for U.S. foreign investment.

However, we notice that weather patterns are changing and sea levels are rising. According to our studies we have to brace for more extreme circumstances. To cope with these new conditions, we recently developed the new Delta program: this plan provides the framework to ensure that our flood risk management and freshwater supply will be sustainable and robust by 2050, so that our country will be better equipped to withstand weather extremes, sea level rise, storm surges and larger fluctuations in the discharge of our rivers. The key features of the program are:

- The development of new flood protection standards. These standards will not only be linked to
 the probability of flooding, but also to the impact of a flood (risk-based approach). The scope
 of the impact is the decisive factor in setting the standard;
- The availability of freshwater for agriculture, industry and nature will become more predictable;
- Spatial planning will become more climate-proof and water-robust.

The development and implementation of the Delta program is overseen by an independent high level civil servant (Delta Commissioner). The realization of projects and the maintenance of dikes and levees is financed by a dedicated fund (about \in 1 billion/year up to 2028). A dedicated law is put in place to arrange the process, legal positions of stakeholders and the finances regarding the water safety of our country for the next century.

The development and implementation of this program demands constant innovation in technology, management and design. We use the experiences we gain in our international activities to feed this innovation process. The lessons we learn from working on projects abroad, or the international research on topics such as as modeling or green infrastructure, are incorporated into our knowledge base.

Adaptation / International

We actively share our expertise on water management as a contribution to a more stable and more sustainable development of the world economy. Each year 100 to 200 million people suffer the consequences of a flood and these numbers are likely to rise in the future. The United Nations estimates that each dollar invested in the prevention of these disasters leads to 7 dollars of return on investment. Especially developing countries are vulnerable to the consequences of climate change (e.g. humanitarian disasters, economic losses, food insecurity – all of which may add to tensions within and between countries). We try to share our expertise in many ways:

 Sustainable water management is one of the main themes within the Dutch international development policy. We aim to improve the access to safe drinking water and sanitary

- facilities, increase the water efficiency of local agriculture and improve the management of rivers and coastal protection.
- We advocate for more attention and financial means to make cities and coastal areas more climate resilient during events like these and in our contacts with international organizations like the World Bank and the UN.
- Dutch knowledge institutes and companies that are active in water projects abroad export
 Dutch expertise and try to share the lessons we have learned over centuries with their local
 partners and clients. The Dutch government actively stimulates this exchange in a range of
 countries like Indonesia, Vietnam, Egypt, Mozambique and Bangladesh.
- We have a Disaster Risk Reduction Team in place which can respond to foreign requests for advice immediately after flood related disasters.
- The USA plays an important role in our international activities on climate adaptation:
 - We have a long lasting relationship with the U.S. Army Corp of Engineers. We truly appreciate the opportunity we have to share and develop knowledge together on a range of topics related to flood risk reduction, levee safety, resilience, knowledge management, and sustainment of large and aging water resources infrastructures.
 - After Katrina hit New Orleans, Dutch emergency pumps were flown in. In the years after the hurricane, Dutch and U.S. water experts worked closely together to develop the new dikes, storm surge barriers and the New Orleans Water Plan.
 - After Superstorm Sandy hit the New York area U.S. secretary Shaun Donovan of Housing and Urban Development was advised by a high level Dutch civil servant when his department developed the 'Rebuild by Design' contest as part of the rebuilding effort.
 - Many other local authorities have worked with Dutch parties to strengthen their water management and resilience strategies: Galveston, St. Louis, Miami, Tampa, Los Angeles, San Francisco, Norfolk and Boston are the most noteworthy.
 - The U.S. is home to many organizations that play an important role in the climate resilience discussion. We share our unique experience with them, including the World Bank, the World Resources Institute and the Rockefeller Foundation, in order to contribute to a more secure, sustainable future for all people.