

Adaptation finance ecosystem in The Netherlands

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Abstract

This paper presents the adaptation finance ecosystem in The Netherlands, known to be active in climate action. The data used for this study is available online. The adaptation actions over the past two years were mostly undertaken by non-financial companies using the companies' own funds. Most of the adaptation actions used a project approach, which involved several stakeholders each with their own roles and bound by agreements.

Keywords: *The Netherlands, Climate action, Adaptation finance, Project finance*

Introduction

Over the past years, efforts have been made on establishing how to support climate change mitigation and adaptation using financial support from multilateral sources and grantors. This research aimed to explore the ways with which adaptation actions were realised and concretised in The Netherlands.

Methodology

This research is done using online, free and publicly available sources, chosen in order to replicate the information accessible to those with no access to expensive information sources. Included in the data gathering are economic entities operating in The Netherlands, projects or companies being funded from The Netherlands, and investment funds owned by Dutch companies and/or operated by Dutch entities. The data was gathered in August 2017. Adaptation actions, deals and transactions considered in this research were active in 2016 and 2017. The adaptation actions considered are the ones mentioned in the United Nations Environment Programme Adaptation Gap Report (2016). Data gathering involved looking at company annual reports. The published reports of the six largest financial institutions in The Netherlands and the largest Dutch pension funds were analysed first, with the expectation that

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financial companies would be involved in financing adaptation actions. Due to the lack of information on adaptation finance activities of these banks and pension funds, the data gathering was extended to companies which are part of the index of the Amsterdam Stock Exchange. In addition to the annual reports, also included in the data gathering were the latest news reports on, and the reported high-profile climate adaptation actions in The Netherlands. Data was collected on the finance sources, who the recipients of the financings are, what climate action was financed and how the projects were structured.

Findings

The data sources yielded 27 transactions that qualify as adaptation actions, which are activities related to “process of adjustment to actual or expected climate and its effects”, based on the definition used by the Intergovernmental Panel on Climate Change (IPCC) in its report ‘Climate Change 2014: Synthesis Report.

Adaptation financing for the selected transactions was undertaken in the form of bond, debt, equity and grants structures. Corporations had capital expenditures and operating expenses to adapt their operations. Data used by the corporations and possible adaptation solutions were from the consultancy firms. To build the infrastructure needed, EPC (engineering, procurement and construction) contractors were hired. The purpose of the funding was varied, with a focus on water and coastal management efforts. A number of adaptation actions involved financing of Research and Development, and innovations.

The Adaptation Finance ecosystem in The Netherlands is made up of parties from different industries with different focus and products, as follows:

- i) Financing sources: National Government, Local Governments, Commercial Banks, the Netherlands Development Finance Company, named FMO, and Investors (Venture and Angel Investors);
- ii) Corporations as grantors and capex/opex parties, and financing users;
- iii) the innovators or the “builders of the solutions” companies and research institutions (universities); and
- iv) the data providers, such as Consultancies.

National and Local Governments: are active in two ways - by mandating financial institutions to manage climate finance funds, and to act as sponsors for construction projects.

Investment Managers: No data was found on their investment holdings in green bonds and there are no funds invested solely on adaptation activities.

Development Bank: Of the Dutch financial institutions, only the Netherlands Development Finance Company has made public its investment holdings in climate finance. It invests in adaptation through its investment fund and directly in the companies in the form of loans and grants. As of December 2016, adaptation finance in its Sustainable Bond fund represented only 3% of the total amount.

Commercial Banks: The only public information available for an adaptation finance transaction is that of Anglian Water Company, where Dutch bank ING arranged an 8-year Green Bond. Other Dutch banks have also issued green bonds but no information on which companies or projects are included in these bonds was found.

Investors: While there were very few investments of this nature, the common factor was that the start-up/scale-up companies involved in adaptation action were initially funded by grants from the European Union via its grants to Small and Medium Enterprises, and from Dutch local governments via their innovation funds. Next round financings were with venture capital and angel investors. These start-ups and scale-ups have products already available in the market and are revenue generating.

Corporations: Non-financial corporations are likewise active in adaptation finance, through using financing from their own cashflows: (1) as a grantor for projects, and (2) spending in capex and opex to adapt their own operations to climate change.

Adaptation Consultancy Firms: With their expertise and available data, corporations use the services of these consultancies in order to decide on their climate action.

Receivers of the financing: the innovators and builders of the adaptation solutions, there was often mention of the “*Triple Helix Model of Innovation*” in various investors’ events in The Netherlands - Engineering, Procurement, Construction Service providers, and other “triple helix” parties. This is the policy of encouraging interaction between the universities, government and industry to promote innovation, which is very much needed in tackling the climate adaptation problem.

Specific adaptation actions financed during 2016 and 2017 included:

- Biodiversity, ecosystem service, ocean clean-up, reef 3D printing
- Waste management (recycling, reduction)
- Water management (drought, resilience, water recycling, watershed, water supply)
- Coastal development (flood management, “sand engine” for coastline reinforcement)
- Agriculture (climate smart soil, agri micro-insurance, alternative food)

- Research & Development for climate action
- Snow harvesting

Discussion

The transactions in The Netherlands were not the usual or simple grantor-grantee arrangement. It may be because the Dutch approach to building objects or assets requires transparency and accountability, which could be easier monitored if there are actions and outputs that are specified before starting any activity. The adaptation finance activities observed often involved several parties, not just a grantor and grantee, and that part of the motivation to undertake the activities is driven by economic reasons and mitigation of business risks. As such, corporate investment, and not simply issuing a grant, would be encouraged by having these two elements included in planning for adaptation activities.

Additionally, the intertwined nature of the Dutch adaptation finance ecosystem, where financing involved projects with many parties, required the extension of the research to include non-finance corporations. A probable reason for the “inter-connectedness” of the transactions is that the “project approach” is common practice in The Netherlands since the 13th century, when dikes were built and land was reclaimed so communities in low-lying areas would not be flooded by rising water levels. This required the cooperation of different parties. The project approach to the adaptation actions may have helped in making these possible and successful. Based on recent reports, the projects included in this study, in general taking at least five years for implementation, have been delivered on time and on budget.

The adaptation actions done by corporations are mainly to mitigate the adverse impact of climate change on revenue streams and operational risks. Possible implications of this are (1) that areas where these corporations are present stand to benefit from adaptation actions from the corporations and (2) that areas where the corporations have no such link, such as economically remote areas, will not be considered for adaptation actions. Economically remote areas such as low-lying coastal villages and small islands stand a lot to gain if these also receive support for their adaptation actions.

Conclusion

To improve monitoring adaptation finance, the following is recommended:

- i) Focus should be given to the adaptation finance ecosystem and not only on the financial institutions

- ii) Adaptation finance policy makers should make data more available, easily accessible and cheaper
- iii) To entice investors, the regulators and rating agencies should add a “climate action” indicator in their reports, and
- iv) For Sustainability Reporting, the rating agencies can require information on how much the investments are in adaptation projects and whether these are in Annex I or Non-Annex I country.

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