



Ministerie van Infrastructuur en Milieu

## Round Table Adaptation Finance

Deltas in Times of Climate  
Change  
*24th September 2014*  
Rotterdam, The Netherlands

25 september 2014



### Moderator Nanno Kleiterp - FMO



- Chief Executive Officer FMO
- FMO is one of the largest bilateral development banks
- Formerly Chief Investment (Risk) Officer
- Several Board Memberships a.o. Interact Climate Change Fund S.A.





## Programme

16.15 Introduction

16.25 Key-note / introducing Case *Metropolis near Sea*

16.40 Statement I on Case

- Reflection audience
- Panel discussion

17.15 Statement II on Case

- Discussion audience
- Panel discussion

17.55 Wrap-up



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## Marieke Lely - Boskalis



- Finance department Royal Boskalis Westminster N.V.
- Global maritime services company operating in the dredging and inland infra, and offshore energy sectors.
- Climate adaptation projects mainly in the form of land reclamation and coastal protection works (Maldives).
- Regular use of ECA cover from Atradius DSB.

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## Willemijn Verdegaal – Ministry of Foreign Affairs



- Senior Policy Advisor Private Sector Climate Investment
- Innovative public – private financing structures & new applications of ODA
- Integration of climate change perspectives in the public Dutch trade and business instruments
- Advisor to the Dutch representation on Green Climate Fund Board
- Former member of the UNFCCC Standing Committee on Finance.

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## Stephane Hallegatte - World Bank



- Senior Economist at the World Bank, Climate Change Group.
- IPCC lead author and researcher on economics and environmental issues
- Specialist in risk management, urban economics, and climate policy

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## Arthur Gleijm – Rebel Advisory Group



- Director, co-owner in Rebel
- Rebel is Finance & Strategy
- 25 years of working internationally in infrastructure development
- Creating an enabling environment for private sector participation and ...
- Supporting transactions, at public and private side, advising and investing

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## Willem Stitselaar – Macquarie Capital



- Managing Director at Macquarie responsible for Benelux and African PPPs
- Prior at ABN AMRO BANK's Infrastructure Capital team in London.
- Infrastructure projects in many sectors, Greenfield and M&A including: PPP, (toll) roads, utilities, energy, waste/water and property.
- Enjoys marathon running



## Patrick van Dijk – Royal HaskoningDHV



- Project Manager & Investment Advisor
- PPP's in Transportation and Water Management Infrastructure
- Civil Engineer, MBA
- Council Member International Project Finance Association The Netherlands



## Andreas Prystav – Swiss RE



- Senior Client Manager at Swiss Re Global Partnerships
- Developing and executing innovative risk transfer solutions to help
- Supporting governments, international financial institutions and NGOs to manage financial risks and contingent liabilities.
- Swiss Re is a wholesale provider of reinsurance, insurance and other insurance-based forms of risk transfer.



## Key-note speaker Pieter Pauw - DIE



- PhD study on role private sector at Deutsches Institut für Entwicklungspolitik/German Development Institute/ (DIE) in Bonn
- Research / advice on global climate policy and adaptation finance in developing countries.
- Contributing author to the IPCC's fifth assessment report (WG-II)



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## Climate Change Adaptation by the Private Sector

Introduction to roundtable 'financing climate adaptation'

Pieter Pauw – Deutsches Institut für Entwicklungspolitik/  
German Development Institute (DIE)

25 September 2014

## Costs of adaptation: aggregate



- **Adaptation:** 'The process of adjustment to actual or expected climate and its effects' (IPCC, 2014).
- **Adaptation costs** are too high to be covered by governments alone
- **Estimates of global costs of adaptation:**

Reference	USD billion/yr
World Bank (2010)	70-100*
Oxfam (2007)	>50*
UNDP (2007)	86-109*
UNFCCC (2009)	49-171

\* Developing countries only

- Costs of **individual projects** suggests global adaptation costs are much higher

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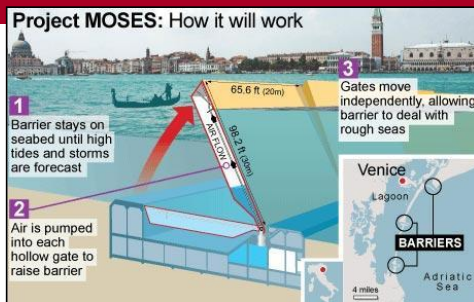
## Development costs of adaptation: transformative projects



MOSE project Venice  
(€ 7 billion)



Delta Programme 2015  
(Netherlands):  
€30 billion for 20 years



Coastal development  
Jakarta (Indonesia):  
USD 21 billion

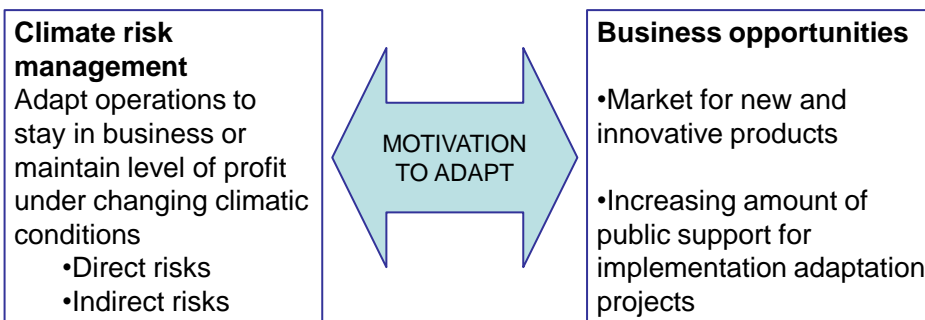
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## Public and private perspectives on adaptation are dissonant



- **Public sector - cost narrative**, secondary response to global climate change; public good; reducing vulnerability of economy, society and ecosystems
- **Private sector - revenue narrative**: reasonable, relatively quick and predictable returns, at acceptable risks



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## Specific barriers for adaptation



- **Public good characteristics**: public benefits higher than private benefits? → **Limited autonomous earning power** (models?)
- **High (perceived) risk profile**: uncertainty of climate change impacts; overrunning costs; foreign exchange; legal and policy framework; untested technology
- **Up-front, capital intensive investments**; yet **long amortization periods** (delayed benefits)
- **(large) unique projects** requiring tailor-made, local-scale solutions – **high transaction costs**

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## Enabling factors



- **Credible public partners:** stable policies, transparency, risk-sharing, reducing red tape, sound funding agreements
- **Reduce transaction costs:** standardisation and harmonisation of products and procedures (e.g. water quality demands, building codes)
- **Flexibility:** flexible frameworks and deployment of financial instruments for project development and implementation
- **Showcase profitable and sustainable business models:**
  - Move beyond CSR & philanthropy
  - Relative independence from public support
  - Innovative public-private arrangements allowing cash flow generation

## Discussion with audience and panelists



- **Discuss private adaptation in hypothetical region:**
  - Urban delta region, surrounded by rural lands
  - Climate change effects: sea level rise (+ land subsidence), salinization
  - Sectors impacted by climate change: water supply, flood protection, agriculture, tourism



d.i.e



Deutsches Institut für  
Entwicklungspolitik

German Development  
Institute

## Thank you for your attention

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## STATEMENT I – The Case versus Revenues

*It is impossible to privately finance adaption interventions, as revenue-generating potential –for instance sales of reclaimed land - is too limited.*



## Moderator / Panellists

Nanno Kleiterp

- Marieke Lely
- Willemijn Verdegaal
- Stephane Hallegatte
- Arthur Gleijm
- Willem Stitselaar
- Patrick van Dijk
- Andres Prystav

Moderator

Boskalis

Min. of Foreign Affairs

World Bank

Rebel Advisory

Macquarie

Royal HaskoningDHV

Swiss RE



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## STATEMENT II –The Case vs Contracting Authority

*There should be a dedicated project entity,  
which should be at arms-length from political  
manoeuvring,  
with a clear mandate handling the full project  
cycle  
from development, contracting and financing  
to implementation.*



## Moderator / Panellists

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THANK YOU VERY MUCH

Also on behalf of the Sponsor of this Round Table,  
the Dutch Ministry of Infrastructure and the  
Environment