



JASPERS Networking Platform Event

Climate Change Adaptation: Vulnerability and Risk Assessment and the Resilience of Major Infrastructure Projects

Date:	7 and 8 June 2016
Location:	EIB Brussels Office
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Summary Report and Key Messages

Overview

The assessment of climate change risks and the integration of appropriate adaptation measures in order to promote climate resilience are essential steps in project development. The aim of this knowledge sharing event was to facilitate capacity building and sharing of experiences on this topic; bringing together individuals and organisations working on climate change adaptation for infrastructure projects across Europe and encouraging the exchange of views, ideas and experiences through interactive sessions and discussions.

The event was structured into two sessions, the first session provided an update on guidance and methodologies and the theory of vulnerability and risk assessment; whilst the second session went into detail on the project level, showing examples of integrating adaptation considerations into project planning and implementation in practice.

Videos of the event, along with the presentations given are available on the JASPERS Networking Platform Website: [Event Page](#)

Opening and Introduction

The event was opened by the Head of Unit for Major Projects and Closure within the European Commission DG Regional Policy, **Jonathan Denness**, who welcomed the participants and expressed the importance and timeliness of the event in relation to Major Project preparation in this MFF period.

Beatriz Yordi Aguirre, Head of Unit for Climate Adaptation within the European Commission DG Climate Action, provided a keynote speech addressing the needs for climate change adaptation in an overarching sense and specifically in the development of infrastructure projects. She also provided an update of the main initiatives currently ongoing in DG CLIMA.

Sarah Duff, JASPERS Climate Change Specialist, discussed the background to this event by explaining the outcomes from the previous networking platform events that have been held on climate change adaptation. She also presented the results of the pre-event questionnaire which was sent to the participants. The results showed that most participants are at an early stage in developing knowledge and experience of this topic, with the key issues in further development being about the lack of available data and methodologies to inform climate adaptation vulnerability and risk assessment. The presentations that followed were aimed at responding to the needs identified through the previous networking platform events, JASPERS experience in supporting project development, and the issues raised in the questionnaire. ([Presentation](#))

Session 1: Methodologies and Guidance

The aim of this Session was to discuss recent development in guidelines and methodologies; providing information to participants about what new guidance and tools are available, what is being developed, different ways of approaching climate adaptation for projects, and where to find relevant information and data regarding climate change.

Monica Scatasta, Head of Environment, Climate and Social Policy at the European Investment Bank (EIB) started the session with an overview of the position of the EIB and what they are doing on Climate Adaptation. **Rasmus Lauridsen**, Senior Climate Change Specialist at EIB and **James Dunham**, Senior International Climate Change Adaptation Consultant at Atkins, provided more details about the recent Climate Risk Screening work that the EIB has been undertaking, including a summary of how EIB are implementing this into their due diligence on projects. As part of this work, EIB have undertaken a review of the various Climate Risk approaches of other Financing Institutions throughout the world, this provides a useful background to see that knowledge on this topic is rapidly progressing but in the initial stages of the learning curve. None of the institutions are at the stage where integration of climate risk assessment into project appraisal is an established practice because the topic is still relatively new.

[\(Presentation\)](#)

Claus Kondrup from the Climate Adaptation Unit of the European Commission's DG Climate Action presented an overview of the new Fact Sheet that has been produced by DG CLIMA. The [Fact Sheet on Climate Change and Major Projects](#) presents a summary of the climate change requirements and provides guidance on how to address them. This Fact Sheet can be considered to be the first point of call for Major Project developers considering how to integrate climate change adaptation and mitigation into the development of their projects in order to meet European Commission requirements. It provides a clear and basic overview of what to do, with links to other sources of guidance and information.

[\(Presentation\)](#)

Following up on the topic of recently issued guidance, **Marta Modelewska**, from the Energy Efficiency and Climate Change Department of EBRD, presented the latest paper published by [EUFIWACC¹](#) on [Integrating Climate Change Information and Adaptation in Project Development](#). The paper is based on emerging experience from climate change adaptation experts and is aimed at practitioners who already have some experience of the process. Although initially developed by the Financial Institutes the paper provides information and support to improving the adaptation process in projects and is applicable to all cases of climate adaptation vulnerability and risk assessment. [\(Presentation\)](#)

The session was concluded with a presentation from **André Jol**, Head of the Climate Change Impacts, Vulnerability and Adaptation Group at the European Environment Agency (EEA), who provided a summary of European wide information from EEA on the topic. This included a number of research papers and reports which provide much needed information on the risks posed by climate change to infrastructure projects. In addition André provided an overview of the [Climate-ADAPT web platform](#) which contains EU policy information, guidance and adaptation tools, country profiles and case studies examples. When looking for information and data on climate change, the [EEA website](#), the Climate-ADAPT web platform and national hydrometeorological and environmental institutes would be the first places to start. [\(Presentation\)](#)

¹ EUFIWACC is the European Financing Institutions Working Group on Adaptation to Climate Change – consisting of the Agence Française de Développement (AFD), the Council of Europe Development Bank (CEB), the European Bank for Reconstruction & Development (EBRD), the European Commission's DG Climate Action, the European Investment Bank (EIB), KfW Development Bank (KfW) and the Nordic Investment Bank (NIB).

Session 2: Practical Experience from Projects

The aim of this Session was to discuss real examples of projects and case studies and to understand lessons learnt and experiences of doing the assessments. Seven project examples were provided and discussed. The first two examples were projects which have an adaptation element to them. Whereas the examples that followed were cases of other types of infrastructure which need to be resilient to climate change.

The first example was provided by **Branimir Barač** from Hidroing Consultants in Croatia. It was the Vulnerability and Risk Assessment undertaken for the Water Supply and Drainage Project in Cres, Mali and Veli Losinj, Croatia. The example showed how the long term impacts of climate change present risks to a project, as well as those from short term extreme weather events. In the longer term the project may not be feasible unless something is done to address the issues of climate change at this stage in its development. In this sense climate change can also act as a driver for projects. ([Presentation](#))

Sebastian Hyzyk from the EIB Projects Department, Water Division, presented an example from the Irish Flood Prevention Programme. In this example the project promoter are relatively advanced in addressing climate change and already have their own guidance documents which are provided to consultants working for them to ensure consistency. Sebastian highlighted that one of the first steps in assessing risk from future climate change is to understand your system and the stresses that it can already cope with. This sets the baseline for understanding the potential future impacts. ([Presentation](#))

Rasmus Lauridsen from the EIB presented an example which had been shared by the Asian Development Bank. The Central Mekong Delta Region Connectivity Project is a bridge on the Mekong Delta in Vietnam in an area extremely prone to flooding. The example highlighted that the cost of doing a climate risk assessment, in comparison to the cost of the project was miniscule and that even the adaptation measures resulting from the assessment were only 0.5% of the total project cost. The assessment also proved to be very useful in improving stakeholder communication on the topic. ([Presentation](#))

The next example was from a project, currently at an early stage of development, where the assessment process is still ongoing. **James Dunham** from Atkins presented the first stage Vulnerability Screening that has been undertaken for the Kuty-Bratislava Rail Upgrade Project in Slovakia. This assessment used available literature studies in Slovakia and internationally, looking at the location of the project and what sorts of climate hazards are relevant for rail upgrade projects, to identify which risks should be taken forward into further assessment. ([Presentation](#))

Marta Modelewska from EBRD provided two examples. The first was a Hydropower Project in Qairokkum Tajikistan where, even though there was a clear recognition that climate change was an issue for the project, the assessment was difficult to undertake initially as data was not easily accessible. Nevertheless this hurdle was overcome and the assessment resulted in many useful adaptation measures being incorporated into the project, a lot of which were 'soft measures' including management and capacity building. The second project was a Sea Port in Poland where it was recognised that the extreme events are often the most compelling to persuade project promoters to address climate change. ([Presentation](#))

The last example was from **Boris Majić** of Hrvatske Ceste who presented the example of Pelješac Bridge which connects the Dubrovnik Neretva County to the mainland of Croatia. Climate change issues had been considered in the option analysis although not specifically labelled as such. Then for the chosen option a Climate Change Adaptation Vulnerability and Risk Assessment was undertaken and the main lessons learnt were regarding integrating the assessment into the feasibility study and not doing it solely at the end of the process. ([Presentation](#))