Recommendations

The research shows that flood risk management of the unembanked industrial areas in the Port of Rotterdam is a joint issue of national importance. Increased knowledge on consequences of a flood in these areas, the joint effort of the authorities, and the participation of businesses in the pilot study helped to break the vicious circle between the lack of awareness and insufficient communication. Also, by sharing the risk information with stakeholders in the Port of Rotterdam a broader MSP can be created. Hence, it is really promising to see that public and private stakeholders (national and regional authorities, industry, utilities, and so on) work on a climate adaptation strategy for a pilot area. Joint fact-finding and open discussions on risk governance, financing and partnerships will be the key factors to realise such a strategy.

We recommend answering at least the following questions when developing the adaptation strategy:

- Is it necessary to reduce flood risk in all regions?
- Are disaster risk reduction solutions that are cost-effective for industry also cost-effective for society?
- Are the solutions flexible enough with respect to uncertainties and climate change?
- How large is the influence of uncertainties in the risk indicators on the cost-effectiveness of particular measures and the adaptation strategy?
- What is the impact of disaster risk reduction solutions on the current activities and responsibilities of the stakeholders?

The stakeholders should answer these questions together, after which they can decide on the structure of the enhanced MSP.

A recommendation to the EU is to identify other critical infrastructure 'hubs' in Europe and map their resilience to natural (and man-made) disasters, taking into account climate change.



Tanker and oil storage tanks in Rotterdam, the Netherlands. Photo by VanderWolf Images/Shutterstock.