



DHI MARKET AREA: CLIMATE CHANGE

CLIMATE CHANGE—RESEARCH AND DEVELOPMENT

Developing new technologies to meet future challenges

Over the coming years, climate change will severely impact water environments. The world will experience a gradual increase in the contrasting patterns of precipitation between wet and dry regions and seasons. Moreover, extreme precipitation events will be more intense and frequent, accompanied by more extreme and longer lasting droughts. To add to this, tropical cyclone activity will be more intense and sea levels will continue to rise.

THE CHALLENGES

- Downscaling climate projections from Global Climate Models (GCMs) and Regional Climate Models (RCMs) to provide reliable impact assessments
- Quantifying and reducing uncertainties in climate change impact assessments and adaptation analyses
- Identifying climate change adaptation strategies that are robust to uncertainties in climate change and other socioeconomic pressures

OUR APPROACH

At DHI, we're actively involved in continuous research and development (R&D) activities aimed at solving water-related challenges posed by the changing climate. We collaborate with leading scientists to incorporate state-of-the art scientific results on climate change into our development of new tools and services. We develop analysis and decision support tools that can help authorities and the industry assess the future risks and mitigate the adverse consequences of climate change.

OUR SOLUTIONS

Our climate change R&D activities include:

- statistical downscaling of climate model projections for impact modelling
- projection of climate extremes
- risk analysis and risk management
- climate change impact and adaptation analysis
- climate change uncertainty
- decision-making under uncertainty

THE ULTIMATE GOAL SUPPORTING CLIMATE CHANGE IMPACT ASSESSMENT AND ADAPTATION PLANNING

Responding to climate-related risks involves **decision-making in a changing world**, with continuing uncertainty about the severity and timing of climate-change impacts

*Intergovernmental Panel on Climate Change,
Working Group II Fifth Assessment Report, Summary for Policymakers (2014)*

OUR TOOLS AND SERVICES

We implement the results of our R&D activities into our climate change tools and services. These include:

- MIKE Powered by DHI climate change tool for impact modelling
- Climate change Decision Support Systems (DSS)
- DHI WaterData climate change data portal (<http://waterdata.dhigroup.com>)
- Climate Change Guidelines (<http://climatechange.dhigroup.com/Publications.aspx>)
- Climate change courses taught by THE ACADEMY by DHI

Contact us: info@dhigroup.com
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