



## **Physical climate risk for the energy sector**

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The Task Force on Climate-related Financial Disclosures (TCFD), a global task force set up by the G20, has developed a voluntary framework for companies to disclose the financial impact of climate-related risks and opportunities. Since the release of its final recommendations in June 2017, the TCFD has received endorsements from more than 100 companies with \$11 trillion of assets.

Climate change poses a significant threat to businesses globally, due to more frequent and extreme weather events and chronic physical impacts, such as temperature rises. Many businesses are grappling on how to measure and disclose the actual impact of climate change onto their business. Leaving the question behind how can complex and difficult to understand climate change data be summarized and presented to the key stakeholders within a company, investors and the public.

In a case study looking at the energy sector we explore which climate indices contain valuable information for the whole sector and how they can be presented. Using selected members from the CMIP5 global climate model ensemble we focus on precipitation changes strongly affecting the energy sector having a above average water consumption. Further we facilitate an inhouse portfolio of energy companies with specific information of the location of their respective assets as well as particular energy generation data. We show how the inherent uncertainty from the climate and the impact models can be distilled to provide a useful climate service.