

## HITEC Theme Day

**Title:** Mitigation of Climate Change: How to achieve the Paris goals?

**And why?**

**Date:** 25 June 2018

**Time:** 9:00 – 16:00

**Location:** [Forschungszentrum Jülich](#) ► Bld. 04.7, Room 338

More than two years have gone by since the adoption of the Paris Agreement which aims to avoid dangerous climate change. The agreement calls for massive reductions of greenhouse gas emissions and a net neutral world economy in the second half of the century. With respect to electrical power systems, this translates into complete decarbonization within a few decades. According to the document, man-made climate change shall be limited to 1.5°C or 2°C.

Most of you have probably heard these phrases. But what do they actually mean? What is the climate science behind it and what are the implications for energy systems? What does the agreement imply for us as at a research center that focuses on energy and climate research?

During this HITEC Day, we will be joined by leading climate and energy scientists from a bunch of different institutions. Their presentations will cover the different aspects of the agreement including its two temperature targets and the implications for energy systems. Throughout the day, interaction between the audience and the presenters is highly encouraged. There will be a 15 minutes discussion slot after each presentation and also time in the coffee breaks for lively exchange.

### Contents:

- How real and serious is climate change? Is our knowledge based on observation or models? Can we trust them? What are potential impacts of climate change on humans?
- Why does the Paris Agreement contain two different temperature targets? What is their history?
- Which consequences does the intended pull-out of the US have?
- How do we build energy systems that are compatible with 1.5°C and 2°C warming? When do we need zero-emission power systems?
- What is the contribution of renewables to zero-emission power systems? What are the challenges of integrating very high shares of wind and solar?

### Target group:

HITEC Ph.D.-fellows;  
Postgraduate-, Ph.D.- and postdoctoral fellows from the fields of energy and climate research and others

### HITEC Days

HITEC Days are an inherent part of the graduate school Helmholtz Interdisciplinary Doctoral Training in Energy and Climate Research (HITEC). They devote a whole day to a method or a scientific topic with lectures and discussions. The methodological days serve to encourage scientific interdisciplinarity and will enable the PhD students to extend their range of methods with respect to their own scientific work. HITEC Days always end with a 'Get together', some snacks and drinks. HITEC Days are open for HITEC Ph.D. students and other interested young scientists.