

Exploring Possible Futures

Video Transcript

Why do we need economic models?

What will our future look like?

Will our cities continue to be fueled by burning fossil fuels and harvesting nuclear energy?

Or will we live a life in a 100% renewable future fueled by solar and wind?

How can we address the challenges of climate change?

Are we running out of time?

IPCC graphs show different scenarios with regard to emissions for the next 100 to 200 years. Each of these scenarios implies a different future setting. If we want to predict these settings and their impact on our society as well as on the environment, we need economic models. Model results have concrete practical implications. They influence policy decisions, like emission reduction targets, and company activities, like renewable energy investments. Thereby, one might say that models have an impact on our future. In this course, you will learn how economic models can be used to answer questions raised by environmental or energy policy.

We will guide you through the different aspects of modelling so that in the end, you will be able to use a model to design your very own energy future. I am Frank Krysiak, Professor for Environmental Economics at the University of Basel and one of the lead educators during this course. My field of research is the design of environmental and energy policy. During this course, I will discuss the conceptual aspects of model design and environmental policy with you. I am Hannes Weigt, energy economist at the University of Basel and the second lead educator for this course. I will guide you through the more computational and energy related aspects.

With climate change, regulation efforts, and new emerging technologies, energy markets are facing significant changes and challenges all around the world. Models can help us to better understand and evaluate those developments. So stick around if you want to know how our energy future could look like.