

*To enable deep electrification of the economy, a significant expansion of grid distribution capacity will be required. However, how much grid investments eventually will be needed depends on how the grid is expected to be used. In this talk I will first provide an overview of the three prominent regulatory tools that are currently being promoted in Europe to unlock flexibility in grid usage at the distribution level: distribution network access tariffs, smart connection agreements, and local congestion markets. Then I will focus mostly on distribution network tariffs and their interactions with the other instruments. Besides refining and coordinating these regulatory tools, I will argue that the regulatory framework around the Distribution System Operator (DSO) also needs to be revised to avoid conflicts of interest. Finally, I will question the coordination between DSOs and transmission system operators (TSOs) which naturally surfaces when new market mechanisms involving Distributed Energy Resources (DERs) are put in place. I will argue that in the longer run, one can imagine a new reorganization of tasks between TSOs and DSOs.*