Energy and Technology Transitions Towards Capping Global Warming at 1.5C

The Paris Agreement ratified by 185 countries, stipulating that we need to hold global warming “well below 2 degrees”, and make all efforts towards capping it at 1.5 degrees, places energy transitions into a new context with new constraints. The talk will highlight several constraints, as well as potential opportunities, introduced by this stringent climate goal. The talk will first highlight different typologies of energy transitions compatible with 1.5C based on the IPCC special report, pointing to their various challenges. The urgency stemming from our very limited remaining carbon budget towards this temperature target forces us to rethink strategies and policies applied so far towards the energy transition, especially those that have lock-in consequences. This urgency puts the lock-in impact of transitions into their foreground. The talk will identify different aspects of lock-in that can help us design energy and technology transitions more compatible with 1.5C targets.