A SERIES OF VOICES SHAPING SUSTAINABLE CHANGE

Meet the STEP-CHANGErs

Teresa Bonserio: **Multi-sector assessment of climate change mitigation policies on the African energy system**
Implementing climate-oriented energy transition strategies in Africa requires balancing rapid energy access expansion with global climate goals in complex socio-political contexts. This research introduces a political risk evaluation framework within the OSeMOSYS-TEMBA AHA model to assess how instability shapes future power trade strategies. It also explores the alignment of African climate pledges under the Paris Agreement with long-term mitigation pathways, through a soft-link between GCAM and OSeMOSYS-TEMBA AHA.

Marianna Alghisi: **Future Navigation Systems: 5G and LEO-PNT as Complements to GNSS to Improve Precise Positioning in Urban Environment**
GNSS is the global standard for positioning, navigation, and timing (PNT), but its accuracy in urban environments is limited by signal obstruction and multipath effects. This work explores a hybrid approach combining GNSS with 5G and Low Earth Orbit PNT (LEO-PNT) satellites to enhance positioning reliability and precision. A software platform integrating real GNSS data, 5G observations, and synthetic LEO inputs through an Extended Kalman Filter demonstrates significant accuracy improvements, especially for Precise Point Positioning (PPP).

The event will be followed by a networking aperitif.

15th September 2025
5:00 - 6:00 pm
Alpha room, Building 24

Register here

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