





Name/title	Roberto Schaeffer, Professor
Institutions	Centre for Energy and Environmental Economics (Cenergia), Energy
	Planning Program (PPE), Coppe, Universidade Federal do Rio
	de Janeiro (UFRJ)
Topic to be presented	A Global South perspective on climate mitigation scenarios:
	Advancements with the COFFEE model

Abstract

Integrated Assessment Models (IAMs) are essential tools for exploring global climate mitigation pathways. However, most IAMs originate from institutions in the Global North, limiting the diversity of regional perspectives in IAM analysis. The COFFEE model (COmputable Framework For Energy and the Environment), developed by the Cenergia laboratory at the Federal University of Rio de Janeiro (UFRJ), offers a distinctive Global South perspective. Continuous research at Cenergia has driven the model's methodological evolution, expanding its capacity to represent different economic sectors, as well as hard-to-decarbonize sectors, and its regional dynamics in energy and land-use systems. COFFEE has contributed to academic studies and international climate assessments, including its selection as the representative marker scenario for the IMP-Neg pathway in the IPCC Sixth Assessment Report (AR6). Current developments focus on enhancing COFFEE for participation in initiatives such as ScenarioMIP, contributing to the scenario framework for the IPCC's Seventh Assessment Report (AR7). These efforts highlight the value of advancing IAMs developed in the Global South, such as the COFFEE model, to broaden the range of socio-technical narratives informing global climate scenario research.

Keywords: Climate change mitigation; Integrated Assessment Models; Climate scenarios.