

Development Policy Seminar Series

“The World Economic and Social Survey: A reflective and selective energy discourse” presented by Prof. Mark Howells

Energy powers the delivery of services, from those essential for a meaningful livelihood to those that drive the machinery of economic growth. Properly managed it has propelled societies to prosperity. Lack of energy has trapped many in poverty. Injudicious energy use damages the ecosystems on which our sustained development depends.

This presentation provides limited and selected reflections in response to three questions: (1) What are feasible strategies for developing countries to transition to sustainable energy systems while at the same time aiming for high and sustained growth to meet poverty reduction targets? (2) To what extent is sustainable urban development critical in such strategies? (3) What new directions in international cooperation and agreements would be needed to enable the implementation of such strategies?

It is suggested that some of the answers may be found in: (A) The development of empowered institutions to support efficient deployment of strategic energy infrastructure. (Such infrastructure provides benefits at lower economic and ecological costs over its lifetime.) (B) Clear forward thinking to take advantage of urbanization patterns opens opportunities to provide low cost services and lock-in lower ecological footprints. And (C) these may be strongly facilitated by collaborative activities that build capacity to diagnose current development, autonomously map out development futures and assess their related market, ecological and institutional implications in developing countries.

Mark Howells directs the division of Energy Systems Analysis (KTH-dESA) at the Royal Institute of Technology in Sweden. Built upon a strong foundation in mathematical modelling, the division has a commitment to open accessible science that aims to support decision making. The division has five focus areas including: Integrated CLEWs (Climate, Land, Energy and Water strategies); OSeMOSYS.org (the open source energy modelling system); Energy security; Services, poverty and development; An economic energy transition; and Sustainability discourses.

He has papers accepted in leading journals including Nature-Climate Change. He has been a reviewer for several national foundations, Science and other publications. In his mid-30s he was appointed as a full professor following work that included interactions with several governments as well as active engagement with UN-Energy and other international organs and platforms. He earned his doctorate degree at the University of Cape Town.