'Uncertainty, Ambiguity and Risk in Forming Climate Policy'

Leonard A. Smith and Nicholas Stern Presented at 'Handling Uncertainty in Science' Royal Society, London, 22 March 2010

Abstract

Policy making, or at least sound policy making, is usually about risk management. Thus, science supports sound policy when it informs risk management. Policy measures can influence key aspects of the causal chain: from humans to emissions; from emissions to changes in atmospheric concentrations; from changes in concentrations to changes in weather and climate conditions around the world; from these changes and induced feedbacks to changes in global climate; and from global and local climate and weather changes to changes in risks and the circumstances of individuals. Climate policy aims both to alter future risks (particularly, mitigation) and to take account of and respond to relevant remaining risks (adaptation). While fundamental research increases our understanding of each link, policy profits from tracing understanding along the entire chain thereby informing how to shift the distribution of risks to the left, towards less dangerous impacts, even if the fundamental probability of events remains uncertain. Immediate value lies not only in communicating how risks may change with

