A PRELIMINARY POLITICAL ECONOMY OF NEGATIVE EMISSIONS TECHNOLOGIES

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Although still at the drawing board, a thought experiment into the implications of negative emissions technologies (NETs) yields a different political economy than that of traditional low-carbon technologies. For some NETs, such as biomass energy with carbon capture and storage (BECCS), the rollout and deployment would likely be relatively similar though arguably more difficult than for fossil CCS. The immediate political challenge for BECCS is likely to be the extent that debates can be resolved over sustainable biomass feedstock or over food versus fuel. As with nuclear power, many environmentalists may come to view many NETs as simply unacceptable or they may view it more like fossil CCS or biofuels that are acceptable, at least under certain conditions. The key question to be resolved is whether NETs will be viewed (and regulated) as a moral hazard that would otherwise sap political and public support for mitigation without delivering the needed negative emissions. We also consider the international dimension and whether not having access to NETs will put certain countries (e.g., India) at a comparative disadvantage. The history of CCS, biofuels, and nuclear power provides helpful guide for the possible evolution of NETs. The most important difference, however, is with regard to energy savings. The interaction of NETs with previously unalloyed positive elements of a traditional mitigation portfolio such as energy efficiency is largely unexplored. Successful deployment of NETs could challenge the almost universal consensus in favour of energy savings since greater energy use in a net-negative emissions world could be considered a virtue. Thus, most of the issues raised by NETs have emerged with regard to other technologies except for the question of energy savings, which would require a redefinition not just for environmentalists or NGOs but basic cultural views about the virtues of greater savings and efficiency.