



Dr. Charles T. Driscoll
Distinguished Professor
Dept. of Civil and Environmental
Engineering
Syracuse University

Friday, March 18, 2016
2:00pm-3:00pm
Biodesign Auditorium BDB105

Air Quality, Health, and Ecosystem Co-benefits of Policy Options for a U.S. Powerplant Carbon Standard

Abstract: Carbon dioxide emissions standards for US power plants will influence the fuels and technologies used to generate electricity, alter emissions of pollutants such as sulfur dioxide, nitrogen oxide and particulate matter, and influence ambient air quality and public and ecosystem health. An analysis was conducted of how three alternative scenarios for US power plant carbon standards could change fine particulate matter and ozone concentrations in ambient air, and the resulting public health and ecosystem co-benefits. The results underscore that carbon standards to curb global climate change can also provide immediate local and regional health and ecosystem co-benefits, but the magnitude depends on the design of the standards. A stringent but flexible policy that counts demand-side energy efficiency towards compliance yields the greatest health and ecosystem benefits of the three scenarios analyzed.

Bio: Charles T. Driscoll is a Distinguished Professor at Syracuse University. He received his PhD from Cornell. Driscoll's research addresses the effects of disturbance on forest, freshwater and marine ecosystems, including air pollution (acid and mercury deposition), industrial and municipal waste inputs, land-use effects, and climate change. Driscoll has testified at US Congressional and state legislative committee hearings, and served on many local, national and international committees. He is a member of the US National Academy of Engineering.