Climate, Air Quality and Health: Implications of China’s Energy Future

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As a result of rapid industrialization, China now frequently suffers from extremely high levels of health damaging fine particulate air pollution and agriculture damaging elevated surface ozone pollution. In addition, China’s emissions of carbon dioxide (CO2) are the largest in the world. Both air pollution and climate issues have gained intense domestic and international attention with new Chinese government policies intended to reduce air pollution emissions and peak CO2 emissions before 2030. However, although many air pollutants are emitted from the same energy technologies that emit carbon dioxide, and air quality co-benefits from reducing CO2 are known, strategic planning to optimize dual achievement of both goals is needed. This talk will describe some of our atmospheric modeling/integrated assessment work analyzing various Chinese energy strategies to identify those most likely to maximize co-benefits for air quality, health and climate.

Dr. Denise Mauzerall holds a joint appointment between the Woodrow Wilson School of Public and International Affairs and the Department of Civil and Environmental Engineering. Her research examines linkages between energy technology choices and air pollution origin, transport and impacts, including impacts on human health, food security and climate change. Prior to Princeton Dr. Mauzerall was a post-doc at the National Center for Atmospheric Research, a program manager in the Global Change Division of the U.S. EPA where she implemented the Montreal Protocol, and an environmental consultant. She has authored over 60 peer-reviewed papers, has lectured widely around the world, and has been a contributing author to the Intergovernmental Panel on Climate Change (IPCC). She is currently a member of the chartered EPA Science Advisory Board, several European science advisory boards, and is on the editorial board of the journal Atmospheric Environment. She directs the doctoral program at the Woodrow Wilson School at Princeton University. Mauzerall received her Sc.B. in chemistry from Brown, her MS in environmental engineering from Stanford and her PhD in atmospheric chemistry from Harvard University.

Wednesday, March 22
At 12 noon in Bldg 90, Room 3122
For further information about this seminar contact Lynn Price LKPrice@lbl.gov