

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

**Roundtable on Science and Technology for Sustainability
November 12-13, 2015**

National Academy of Sciences
Lecture Room
2101 Constitution Ave NW
Washington, DC

Thursday, November 12, 2015

8:30 am Breakfast available

9:00 am *Welcome, Introductions and Meeting Goals*
David Dzombak (NAE), Carnegie Mellon University, STS Roundtable Co-Chair
Lynn Scarlett, The Nature Conservancy, STS Roundtable Co-Chair
Jerry Miller, National Academies of Sciences, Engineering, and Medicine

Measuring Progress towards Sustainability: Social and Economic Indicators and Metrics for Urban Sustainability

9:15 am *Introduction to Panel*
David Dzombak (NAE)/Lynn Scarlett, STS Roundtable Co-Chairs

9:25 am *Keynote Remarks*
Heather Tallis, The Nature Conservancy (Rethinking Sustainability Indicators: Evidence from the Globe to the Ground)

10:00 am BREAK

10:15 am **Panel I: Overview of Social and Economic Indicators and Metrics: Characterizing the Issue**
Moderator: Steve Bergman, Shell International Exploration & Production Company

- Diane Pataki, University of Utah (Urban Ecological Indicators)
- Charles Redman, Arizona State University (Models for Supporting Sustainability Decision Making)
- Robin Morris Collin, Willamette University College of Law (Social Equity and Urban Sustainability)

11:15 am Q&A and Discussion

11:45 am LUNCH

12:45 pm	Panel II: Examples of Innovative Public Sector Sustainability Indicators and Metrics Moderator: Richard Spinrad, National Oceanic and Atmospheric Administration <ul style="list-style-type: none"> • Duane Verner, Argonne National Laboratory (Using Climate Data to Inform Critical Infrastructure Resilience and Urban Sustainability Decision-Making) • Gerardo J. Ruiz-Mercado, U.S. Environmental Protection Agency (Sustainability Indicators for Chemical Processes) • Michael Culp, Federal Highway Administration (Sustainability Indicators for Transportation)
1:45 pm	Q&A and Discussion
2:15 pm	BREAK
2:30 pm	Panel III: Examples of Innovative Private/NGO Sustainability Indicators and Metrics Moderator: Lynn Scarlett, The Nature Conservancy <ul style="list-style-type: none"> • Matthew Mehalik, Sustainable Pittsburgh (Sustainable Pittsburgh) • Fiona Cousins, Arup (Sustainability Performance and Metrics) • Nancy Kete, Rockefeller Foundation (City Resilience Index) • Maureen Hart, International Society of Sustainability Professionals (Measuring Sustainability for Communities)
3:50 pm	Q&A and Discussion
4:20 pm	<i>Discussion and Next Steps</i> Moderator(s): David Dzombak (NAE)/Lynn Scarlett, STS Roundtable Co-Chairs
4:50 pm	Wrap up and plans for next day (STS Roundtable Co-Chair)
5:00 pm	Adjourn
5:00 pm	<i>Reception</i> (Great Hall)
6:00 pm	<i>Working Dinner</i> (Great Hall) Speaker: Katherine Wallman, U.S. Office of Management and Budget

Friday, November 13, 2015

8:30 am	Breakfast available
9:00 am	<i>Welcome and Feedback from Previous Day</i> David Dzombak (NAE)/Lynn Scarlett, STS Roundtable Co-Chairs

Developing Sustainability Indicators and Metrics for United Nations Sustainable Development Goals

9:10 am	<i>Introduction to Panel</i> Alan Hecht, U.S. Environmental Protection Agency
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- 9:15 am *2015 Global Sustainable Development Report*
Richard Alexander Roehrl, United Nations Department of Economic and Social Affairs
- 9:35 am *Science, Technology, and Innovation for Sustainable Development Goals*
William Colglazier, American Association for the Advancement of Science
- 9:55 am *USAID Perspective on Sustainable Development Goals*
Ann Mei Chang, U.S. Agency for International Development
- 10:15 am Q&A and Discussions
- 10:45 am BREAK

Current Activities (STS Roundtable Co-Chair)

- 11:00 am *Transition toward Sustainability after 15 Years: Where Do We Stand in Advancing the Scientific Foundation? A Workshop* (Workshop scheduled for January 14-15, 2016)
David Dzombak (NAE), Carnegie Mellon University
- 11:10 am *Pathways to Urban Sustainability: Challenges and Opportunities* (Consensus report expected in mid-2016)
Paulo Ferrão, University of Lisbon
- 11:20 am *Partnerships, Research, and Innovation for Urban Sustainability: Confronting Local Sustainability Challenges in a Global Environment* (Meeting held October 15, 2015)
Mark Lange, National Academies of Sciences, Engineering, and Medicine
- 11:30 am *Addressing the Energy-Water Nexus: 2013-2014 Meetings in Brief*
David Dzombak (NAE), Carnegie Mellon University/Paulo Ferrão, University of Lisbon
- 11:40 am *STS Program and Publication Updates*
Jerry Miller, National Academies of Sciences, Engineering, and Medicine

Future Activities (STS Roundtable Co-Chairs)

- 11:50 am *Proposals from Roundtable Members for Future Roundtable Topics*
All Members
- 12:20 pm **Wrap up** (STS Roundtable Co-Chairs)
- 12:30 pm **Adjourn**