2013 Working Group Discussion and Team Leaders

I. Campus-Based Energy Efficiency

Discussion Leader:

<u>Victor Olgyay</u>, As a principal architect directing RMI's Buildings Practice, Victor Olgyay is leading an initiative to encourage widespread adoption of comprehensive building energy retrofits resulting in energy savings of at least 50%. Victor has a wide range of experiences in architectural design and planning, with specializations in bioclimatic building, renewable energy and daylighting design.

Victor was an Associate Professor and Director of Research at the University of Hawaii School of Architecture from 1993 to 2000 and Chairman of the AIA Honolulu Energy and Environment Committee from 1995–2000. He has served on the Board of Directors for the American Solar Energy Society, is currently on the University of Colorado Design Review Board, and the GSA Green Building Advisory Committee. His research focuses on ecosystem services as criteria for green building assessment including building tool application for demonstrating the reduction of carbon, water, and ecological footprints.

Team Leaders:

<u>Steve Sharpe</u> is the Energy Manager for the University of North Carolina – Wilmington. He is a graduate of North Carolina State University with a Bachelors of Science in Mechanical Engineering and a minor in Science, Technology, and Society. He is a registered Professional Engineer and Certified Energy Manager. His work career began at a private engineering firm where he assisted in opening their North Carolina office and helped to establish long term clients such as Duke University, NC State, and UNC-Chapel Hill. Past projects include, Johns Hopkins Bunting Blaustein Cancer Research Building, Durham Veterans Administration Medical Center, Duke Medical Center, National Institute of Health, and various educational, hospital, military, and commercial projects.

Steve then worked at UNC-Chapel Hill as a Capital Projects Manager and Building Systems Engineer. In that position, He managed capital projects and oversaw building systems design for the 14 million square foot urban main campus, associated satellite campuses, and properties. During that time he was involved in over 700 million dollars of capital development. Projects ran a wide range that included 150 year old historic buildings, high rise biological research laboratories, high technology classrooms, office space, data services buildings, performance auditoriums, combination building / parking deck, combination energy plant / parking deck, and various types of residence halls, student apartments, and married student housing.

<u>Chris M. Martin, Jr.</u> graduated from North Carolina State University with a bachelor's degree in mechanical engineering. During his career, he has worked in the nuclear industry, in DOE superfund cleanup efforts, in steam boiler design, and in design engineering consulting. Most of his career, however, has been in facilities engineering, specifically at McMurdo Station, Antarctica and at the University of North Carolina at Chapel Hill.

Chris is currently the Director of Energy Management at the University of North Carolina at Chapel Hill. The Energy Management department is leading a campus-wide energy conservation initiative that has reduced consumption on campus by over \$130M with a program wide savings of 31%.

II. High Performance Campus Design

Discussion leader:

<u>Blake Herrschaft</u>, PE, is a Consultant within RMI's Building's Practice and has 6 years of experience in project management, integrated sustainable design consulting, whole building energy simulation, HVAC design and controls, water efficiency, and design and analysis for renewable energy systems.

At RMI, Blake uses his background in passive design, high-efficiency HVAC design, water savings strategies and renewable energy systems design to help influence high efficiency new and retrofit projects; including the National Museum for African American History & Culture slated to open at the Smithsonian in 2015. Before joining RMI, Blake acted as the Director of Sustainable Design at one of the largest building M/P design firms in the San Diego area. His work there focused primarily on passive and high efficiency design of new and existing buildings in the region which hosts an ideal climate for natural ventilation and requires a specific focus on water efficiency due to the lack of annual rainfall.

Prior to that, Blake worked with WSP group in Sydney, Australia as an Ecologically Sustainable Design consultant working on some of the most progressive projects in the country including the new 6-star Greenstar (Platinum equivalent) Macquarie Bank headquarters on the Sydney harbor.

Another highlight of Blake's career is the High Tech High Chula Vista campus, which earned an AIA Top Ten Green Projects award in 2011.

Team Leaders:

Rosalba Ledezma serves as Director of Design and Construction at Winston-Salem State University since May 2012. Prior to joining WSSU, Rosalba served Purdue University for 15 years in various capacities including Guest Lecturer in the Department of Visual and Performing Arts, Assistant Director in the Office of Space Management and Academic Scheduling, and Project Manager in the Physical Facilities Department.

Rosalba is a Registered Architect and holds a Bachelor of Architecture in Architecture, a Bachelor of Science in Environmental Design, and a Master of

Science in Structural Engineering. Her mission as Director of Design and Construction is to advance and fortify the university's goals for our students' success by creating living, learning, and working environments that serve our constituents today and well into the future.

<u>Cameron Smith</u> currently serves as Director of Capital Project Management (CPM) at NC State University, managing a department of 18 professionals responsible for capital project design, construction and budgeting. He has over 18 years of construction management experience and has been working in the North Carolina higher education system for the past 12. He previously served as Associate Director of CPM in charge of Construction at NC State and as a Construction Project Manager at UNC Chapel Hill. Prior to that, Cameron served in both active and reserve roles in the US Navy as a Civil Engineer Corps Officer, serving tours of duty in Naval Station Guantanamo Bay, Cuba; Naval Air Station Willow Grove, PA; and a deployment to Iraq in 2004 in support of Operation Iraqi Freedom II.

Cameron is a registered Professional Engineer in the state of North Carolina and the Commonwealth of Pennsylvania. He is also a LEED Accredited Professional. Cameron graduated from NC State with a Bachelor of Science in Civil Engineering/Construction and a Minor in Business Management.

III. Academic Integration

Discussion Leader:

<u>Michael Kinsley</u> is a Senior Consultant at Rocky Mountain Institute and an independent community-conflict resolution practitioner. He has extensive experience with, and is a frequent speaker on sustainable communities and college campuses, whole-system thinking, collaborative problem-solving, and workshop design and facilitation.

For forty years, Kinsley has wrestled with the problems of building viable local economies while preserving quality of life. First as the director of a community organization, then as a local elected official (1975-85) he pioneered programs in growth management and affordable housing. Also, he is a landscape painter. His two books are Accelerating Campus Climate Initiatives (2009), and Economic Renewal Guide (1997)

Team Leaders:

Trey McDonald has been in the environmental field for over 15 years, working as a whale biologist, environmental scientist, and sustainability professional. Observing the pace and scale of development during his time as a wetlands scientist in Florida, he recognized the need to rethink how we approach our relationship with the Earth. He shifted his career focus to sustainability, earning his LEED Accreditation in 2006 and his M.S. in Environmental Science

and Policy from the University of South Florida in 2008. His Master's thesis focused on sustainability at university campuses, and examined USF as a case study. Earlier he earned his B.S. in Marine Biology from Auburn University, and has also studied at the University of British Columbia, the University of Oregon, and Florida Institute of Technology. Prior to coming to UNCG, he served as the first sustainability coordinator for the University of Richmond, leading the development of their Climate Action Plan. Beyond his role at UNCG, Trey enjoys restoring large, expensive things such as houses and cars, and he and his wife Sara have won historic preservation awards for home restorations in both Florida and North Carolina. Trey is also an avid distance runner with two marathons to his credit, and is a self-avowed science fiction geek.

Jeff Ramsdell has served as the Director of the Appalachian Energy Center at Appalachian State University since January, 2010. He is also a Professor in the Department of Technology and Environmental Design. Dr. Ramsdell came to Appalachian State University in 2003 after 13 years in industry as a project manager and engineer. In his current position he teaches materials science, building science, and renewable energy courses, and directs the renewable energy and energy efficiency related activities of the Center. He is a full member of the graduate faculty and has developed international summer courses with a focus on sustainable construction and energy production. Dr. Ramsdell was recently named an American Council on Education Fellow. He earned a Ph.D. in Materials Science and Engineering from the University of Central Florida, a Master of Business Administration from Rollins College, and a Bachelor of Science in Mechanical Engineering from the University of Florida. Dr. Ramsdell is a licensed Professional Engineer.

IV. Transportation-Oriented Opportunities

Discussion Leader:

Ben Holland is Director of Deployment Strategy for SAFE and the Electrification Coalition (EC). He provides technical expertise and strategic guidance for the EC's Community Deployment program, which is focused on creating a replicable and scalable model for fostering electric vehicle adoption at the city level. Ben previously worked at Rocky Mountain Institute, where he led Project Get Ready, an initiative focused on increasing electric vehicle adoption across a network of thirty cities. He has worked extensively with cities, utilities, and industry stakeholders to identify solutions for the integration of vehicle electrification.

Team Leaders:

Marcy Bauer is a Clean Transportation Specialist in the Clean Transportation Program at the N.C. Solar Center. She is currently tracking and analyzing petroleum displacement by state fleets, developing tools for fleet assessment, and providing fleet eco-driving training. Marcy earned her B.S. in Molecular Biology from Vanderbilt University, and her Master of Environmental Science from Miami University. She has extensive experience with start-to-finish development, implementation and evaluation of environmental science/health programs covering a wide range of multi-media topics. Project types include comprehensive environmental health assessment, education/outreach, environmental sampling, risk characterization, risk reduction/management, and pollution and toxics exposure prevention.

Brian O'Sullivan has been at NC State since May, 2008 following his relocation from the Pacific Northwest. He currently oversees a diverse transportation mobility planning and operations portfolio that includes transit, traffic, bikes and pedestrians, transportation demand management, facility maintenance, parking supply/siting, construction project coordination and long-range master planning. Prior to joining NC State he spent over 27 years in the Seattle metropolitan area working in a variety of public agency transportation and environmental project management roles.

He is an avid road cyclist and a resident of downtown Durham, NC.

Mr. O'Sullivan holds a M.S. in Urban Affairs and Planning from Hunter College in New York City.

V. Finance, Regulatory and Energy Generation

Discussion Leader:

Cara Carmichael's background in both architecture and engineering has served as the cross disciplinary foundation for her passion of working on strategic energy design and master planning in buildings and portfolios. Cara helped shape the strategic creation and operation of the RetroFit Initiative within RMI. She led the content development and launch of the RetroFit Depot, an online industry resource about deep retrofits - benefits, processes, case studies and tools to prove the economic viability of deep commercial building retrofits. She continues to lead an effort focused on implementing a deep retrofit business model within Energy Service Companies and targeted architectural, engineering and consulting firms. Coupled with her ability to create high-level net zero energy masterplans and deep retrofit value propositions, Cara enjoys working at a tangible, project level to apply integrative design solutions and turn theory into practice on actual projects.

Currently, she is leading RMI's efforts to design a new, next generation deep green headquarters for RMI in Basalt Colorado. She is applying Integrated Project Delivery and quantifying some of the value beyond energy cost savings the building will provide to create a replicable process and financial model for other small building owners to follow. A few of her other recent projects include Ford's Green Dealership program, GSA Net Zero Renovation Challenge and working with a global healthcare company to create a net zero energy roadmap for one of their R&D campuses based on the principles of aggressive efficiency and finding the most cost effective balance point between energy efficiency and onsite renewable energy generation.

Team Leaders:

Jack Colby

Miriam Tripp holds a bachelor's degree in Business Administration from UNC, a Master's in Management from NC State, and has PEM certification. In 20 years at NC State, she worked initially in Purchasing, then in leadership roles in Telecommunications, Space Planning and Management, and Facilities Planning and Design. Since leaving NC State, she has worked at UNC-General Administration, Finance Division, in support of capital project activities including the Higher Education Bond Program, Historically Underutilized Business reporting, administration and training in capital project systems and procedures, and guaranteed energy performance contracting.

VI. Student Leadership and Engagement

Discussion Leaders:

Lee F. Ball Jr. has a PhD in Sustainability Education, an MA in Environmental Education, and a BS in Natural Science. He has spent the past ten years teaching Sustainable Building Design in Appalachian State University's Building Science program. Lee's primary research is focused on green building literacy and training needs of the North Carolina real estate appraisal industry. He strongly believes that inaccurate valuations of properties with green/sustainable features are one of the largest barriers to the green building movement. Lee's other research interests and activities involve indoor air quality effects of low income weatherization, green building occupant behavior modification, biophilic design benefits, cob and adobe construction methods, sustainability literacy, and the integration of service learning activities into his curriculum. Lee is also a founding member of ASU's Living Green residential learning community and teaches one of its linked first year seminar courses. In addition, Lee is a founding member of ASU's Sustainability Council and is the current chair of its Assessment and Data sub-committee.

Allison Sims, holds a Bachelor's of Science in Appropriate Technology from Appalachian State. She worked in the energy efficiency industry, and installed solar thermal and photovoltaic panels before returning to school. She recently graduated from Appalachian State with a MBA, concentration of sustainable business. While in school she was the President of the Net Impact Club graduate chapter, worked with the MBA program in internship/practicum placement, and worked in the Office of Sustainability to help coordinate the 2013 Appalachian Energy Summit. Allison continues to be an active member of the Western North Carolina sustainable business community.