The New Calculus
Technology, Energy, and Real Estate

An Urban Land Institute Global Policy and Practice Forum

Organized by:
The ULI Climate Change, Land Use, and Energy [CLUE] Initiative

March 5–6, 2013 • Houston, Texas

Supporters:

Partners:
This forum explores innovation at the nexus of new technologies, business models, energy policies, and finance mechanisms that are emerging across global property markets today. With expertise from stakeholders across the commercial real estate spectrum and government, the dialogue will illuminate emerging trends in innovative finance, cutting-edge retrofit technologies, and transaction underwriting, as well as challenges associated with building performance benchmarking and disclosure.

This leadership dialogue will inform future research and programs across ULI’s global councils and networks.

Questions explored:

- How are energy retrofit markets evolving across asset types?
- Which market stakeholders are shaping new value propositions?
- How are new technologies targeted at real estate markets?
- How is the market ecosystem of new services reshaping investment strategies?
- How is asset performance being measured and valued in information-rich markets?
- How can stakeholders better collaborate to advance technology adoption?
Tuesday, March 5, 2013

Optional Mobile Workshops—Tour 1

11:00 a.m.  Houston Energy Corridor

Instructions: A shuttle for participants will depart from Hotel Alden at 11:00 a.m. and return to One Shell Plaza by 4:00 p.m. for the opening reception. A complimentary box lunch will be provided.

Project stakeholders will guide participants through an on-site tour of real estate case studies demonstrating how new technologies have been integrated into both old and new buildings. Tour hosts will explain how these technologies were identified, justified, and financed as integral components of their real estate strategy.

■ BP Westlake Campus, Houston

Helios Plaza

The visit will include discussion and a tour of Houston’s first LEED Platinum–certified building, which includes level-one amenities and an on-site alternative energy system that uses a natural gas–fired combined heat and power plant providing 85 percent of the building’s electricity.

High-Performance Computing Center

The visit will include discussion of the purpose of and a view of construction of one of the world’s largest computational research supercomputing centers, scheduled to open this summer.

Tour Hosts:
Charles Cervas, Program Manager, Westlake Campus Redevelopment Project, BP America Inc.
Todd Eads, Project Director, BP America Inc.

■ Eldridge Place I, II, and III

The tour will include three commercial office buildings constructed in 1984, 1986, and 2009—all LEED Gold certified and featuring an on-site car-sharing program.

Tour Hosts:
Debbie Fujimoto, Regional Portfolio Director, Houston Market, Behringer Harvard
Greg Brooke, Vice President, Office Development and Asset Management, Behringer Harvard

■ ConocoPhillips Headquarters

The global headquarters of the third-largest integrated energy company in the United States offers a case study of the evolution of the office workspace designed to attract and retain highly sought-after employees. The tour will include a discussion of the building certification strategy and how corporate culture informed the implementation of specific sustainability measures.

Tour Host:
Steve Moskowitz, Director, Houston and West Coast Properties, ConocoPhillips
Optional Mobile Workshops—Tour 2

12:45 p.m.  Downtown Building Tour

Instructions: This is a walking tour through downtown Houston. The tour will begin in the lobby of the Hyatt Regency Hotel and return to One Shell Plaza by 4:00 p.m., in time for the opening reception. Meet promptly at 12:45 p.m. at the lobby bar of the hotel. At each building, there will be a presentation from the project team, then participants will walk to the next building.

- **Hyatt Regency Hotel**, 1200 Louisiana Street, 12:45 p.m. to 1:45 p.m.
  After its recent cosmetic upgrade, the Houston Hyatt focused on how to lower its operating costs. An integrated plan was developed and is still ongoing. This tour will show several key components of this plan, including motors, variable-frequency drives (VFDs), and integrated statistics; solar film installation; parking garage sensors; and an in-room keycard access reader pilot to control lights, plug loads, and HVAC, as well as future planned phases of work. Hear how the plan was developed and implemented, as well as the process of securing rebates for all the various phases from CenterPoint.

  *Tour Host:*
  **Bradford H. Dockser**, CEO, Green Generation Solutions LLC

- **Pennzoil Place**, 711 Louisiana Street, 2:00 p.m. to 2:45 p.m.
  Transwestern and the building owner, Metropolis, recognized the need to update Pennzoil Place’s building systems. The energy efficiency of every system was analyzed, and a solutions strategy was developed. This strategy included rebuilding the cooling tower, installing new chillers, conducting a lighting retrofit, replacing the HVAC system, revamping the alarm system, and retooling the building access system.

  *Tour Host:*
  **Roger Vasquez**, Director of Engineering, Transwestern

- **BG Group Place**, 811 Main Street, 3:00 p.m. to 3:45 p.m.
  BG Group Place is certified Platinum under the LEED Core & Shell rating system. This marks Hines’s second Platinum building in downtown Houston, joining 717 Texas, which received Platinum certification under the LEED for Existing Buildings rating system (a first in Texas) in December 2010. Sustainable features at BG Group Place include a rooftop garden, increased ceiling heights, horizontal and vertical glass sunshades, electronic air cleaners, UVC emitters (“bug lights”), dedicated filtered-water drinking fountain systems, and energy-efficient harmonic cancellation transformers.

  *Tour Host:*
  **Adam Rose**, General Property Manager, Hines
Forum Program

4:00 p.m.  One Shell Plaza: A Legacy of Forward Thinking
Hear the story of enduring value associated with a building built in 1971 and retrofitted in 1994, and which, in the combined sale of One Shell Plaza and Two Shell Plaza in 2012, achieved the highest total price in history for a downtown Houston office property.

Speaker:
Jon Cogdill, Senior Manager, Hines

Location: Lobby, One Shell Plaza, 910 Louisiana Street

5:00 p.m.  Welcome Reception
The forum will commence with opening remarks from Houston Mayor Annise Parker and ULI leadership, a special presentation, and a cocktail reception that will kick off the forum dialogue.

Location:
The Houston Club, 49th Floor, One Shell Plaza, 910 Louisiana Street

Opening Remarks:
John Mooz, Senior Managing Director, Hines
Jonathan Brinsden, Trustee, Urban Land Institute, and President and CEO, Midway
Mayor Annise Parker, Mayor, City of Houston
Philip S. Payne, CEO, Ginkgo Residential, and Cochair, ULI CLUE Advisory Group

Keynote Presentation:
Russ Conser, Leader, GameChanger Team, Shell

6:30 p.m.  Adjourn
Wednesday, March 6, 2013
All Day Two activities take place at Asia Society Texas, 1370 Southmore Boulevard

7:30 a.m.  Networking Breakfast

8:00 a.m.  Opening Remarks
Uwe Brandes, Senior Vice President, Initiatives, Urban Land Institute
Greg Erwin, Cochair, Real Estate Development and Investments Practice Group, Winstead, and Chair, ULI Houston District Council
Johanna Partin, Regional Director, North America, C40 Cities Climate Leadership Group
Laura Spanjian, Director of Sustainability, City of Houston

8:15 a.m.  The 2011 Greenprint Performance Report
Speaker:
Helen Gurfel, Executive Director, ULI Greenprint Center for Building Performance

8:30 a.m.  Value at the Nexus of Energy and Real Estate
Value has emerged as a central factor in expanding the depth and breadth of energy investment in real estate. Hear how value is created and, more important, how to calculate and present it to capital providers.

Speaker:
Scott Muldavin, Senior Adviser, Rocky Mountain Institute, and Executive Director, Green Building Finance Consortium

9:00 a.m.  Metros and Markets in Motion
Why is the building retrofit marketplace moving faster in some regional markets than in others? How are economic drivers, finance mechanisms, and policy frameworks coming together to advance the appetite to invest in high-performance buildings?

Moderator:
Gary Holtzer, Senior Managing Director and Global Sustainability Officer, Hines

Special Presentations:
Thomas R. Ike, Vice President, Global Sales, Lutron
Mark Huppert, Technical Director, Preservation Green Lab, National Trust for Historic Preservation

Discussion Leaders:
Bill Sisson, Director of Sustainability, United Technologies Research Center
Jake Ronay, Head of Environmental Delivery Team, Greater London Authority
Aaron Thielhorn, Principal, Trammell Crow Company

10:15 a.m.  Coffee Break
10:30 a.m.  **Technology Innovation and Disruption: In Real Estate?**
What are the drivers enabling the adoption of new technologies in existing buildings? How are companies positioning themselves in the marketplace to add new value to existing assets?

*Moderator:*
**Joseph O’Connor**, Principal, VisorPoint

*Special Presentation:*
**Arah Schuur**, Acting Program Manager, Commercial Buildings Integration Program, U.S. Department of Energy

*Discussion Leaders:*
**Yuko Nishida**, Senior Planner, Tokyo Metropolitan Government  
**Roger Vasquez**, Director of Engineering, Transwestern  
**Laurie Actman**, Deputy Director, Energy Efficiency Hub, Philadelphia Navy Yard

11:30 a.m.  **Looking Backward While Jumping Forward: The Underwriting Challenge**
What are the challenges of underwriting new technologies in real estate? Who guarantees what and on what basis? How is risk being underwritten in recent case study transactions?

*Moderator:*
**Philip S. Payne**, CEO, Ginkgo Residential, and Cochair, ULI CLUE Advisory Group

*Special Presentation:*
**Chrissa Pagitsas**, Green Initiative Program Manager, Fannie Mae  
**Greg Hale**, Board Member, New York City Energy Efficiency Corporation

*Discussion Leaders:*
**Beau Engman**, Vice President, Commercial Energy Solutions, Building Efficiency, Johnson Controls  
**Barry Hooper**, Director of Sustainability, City of San Francisco  
**Shannon Smith**, CEO, Abundant Power

12:30 p.m.  **Lunch**
A World Café of Value
This interactive lunch will be organized around small table discussions exploring how value is being captured in geographic or product submarkets. Discussion moderators will advance specific dialogues in a free-flowing, self-selecting format.

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<td>Jake Ronay, Head of Environmental Delivery Team, Greater London Authority</td>
<td>Yuko Nishida, Senior Planner, Tokyo Metropolitan Government</td>
<td>Jonas Tolf, Head of Unit, Energy and Climate, City of Stockholm, Environment and Health Administration</td>
<td>Barry Hooper, Green Building Specialist, San Francisco Department of the Environment</td>
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<td>HOUSTON</td>
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<td>Laura Spanjian, Director of Sustainability, City of Houston</td>
<td>Varun Sivaram, Senior Adviser to the Mayor, Energy and Water Policy, City of Los Angeles</td>
<td>Devesh Mothilall, Program Manager, African Green Development</td>
<td>Ruben Lazos-Valencia, Director of Institutional Relations of the Governor Office, Michoacán State</td>
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1:15 p.m. **Metrics That Matter**
What needs to be measured? How is new information enabling new decision making? How are labels and ratings driving real estate to be more sustainable? Where do they fall short? What technologies and data partnerships are advancing the ability to produce such metrics?

*Moderator and Special Presentation:*
*Ari Frankel*, Real Estate Sustainability Leader, Alternatives and Real Assets, Deutsche Asset & Wealth Management

*Discussion Leaders:*
*Elizabeth B. Stein*, Investor Confidence Project, Environmental Defense Fund
*Daniel Probst*, Chairman, Energy and Sustainability Services, Jones Lang LaSalle
*Clayton Ulrich*, Senior Vice President, Engineering Services, Corporate Engineering Services, Hines
*Adam Slakman*, Technical Director, ULI Greenprint Center for Building Performance

2:30 p.m. **Dialogue and Discourse: The Road Ahead**
Moderated discussion will explore how civic debate and professional practice are likely to change over the coming months and years. Dialogue will explore next steps and ongoing strategies of engagement for ULI programs and research as more stakeholders enter the conversation.

*Moderator:*
*Uwe S. Brandes*, Senior Vice President, Urban Land Institute

*Discussion Leader:*
*Molly McCabe*, Managing Director, HaydenTanner

3:00 p.m. **Networking over Light Refreshments**

4:00 p.m. **Forum Adjourns**
**Speaker Biographies**

**Laurie Actman**  
Deputy Director, Energy Efficiency Hub, Philadelphia Navy Yard  
Actman is deputy director for the Energy Efficient Building Hub (EEB Hub) in Philadelphia. In that role, she helps lead and manage the EEB Hub’s activities related to achieving a 20 percent reduction in energy use by average-size buildings in the Philadelphia region. Actman previously was the director of strategic partnerships and public policy for Viridity Energy. She has worked with several noteworthy Philadelphia organizations, including the Central Philadelphia Development Corporation and Greater Philadelphia First.

**Uwe S. Brandes**  
Senior Vice President, Initiatives, Urban Land Institute  
Brandes is senior vice president, Initiatives, at the Urban Land Institute, where he leads ULI’s Climate Change, Land Use, and Energy (CLUE) initiatives. Recent projects and publications completed include: *The City in 2050: Creating Blueprints for Change; What’s Next? Real Estate in the New Economy;* and *What’s Next? Getting Ahead of Change.*

**Charles Cervas**  
Program Manager, Westlake Campus Redevelopment Project, BP America Inc.  
Cervas has 30 years of experience in the oil and gas industry. He is a board member for the Energy Corridor Management District and secretary for the West Houston Association. Cervas was nominated as Real Estate Executive of the Year in 2007 for his role as program manager for the redevelopment of BP’s headquarters at the Westlake Campus in Houston. He is on the leadership team for Westlake Property Management and is responsible for all capital projects at BP’s Westlake campus.

**Jon Cogdill**  
Senior Manager, Hines  
Since joining Hines in 1978, Cogdill has contributed to the property management of more than 10 million square feet of commercial real estate. He has been directly involved in capital projects as varied as lighting retrofits, cooling tower/chiller replacements and main electrical bus repairs, facade repairs, and elevator modernizations. His primary focus is to provide ongoing support to the region on telecommunications matters.

**Russ Conser**  
Leader, GameChanger Team, Shell  
Conser, leader of Shell’s global GameChanger team, is based in Houston. GameChanger is a Shell-created innovation program that invests in people in or outside of Shell to help them bring their breakthrough energy ideas to proof-of-concept. He is a longtime “Shell guy” who spent his early years exploring for and producing oil and gas around the world, then later worked in business planning, strategy, scenarios, and technology ventures.

**Bradford H. Dockser**  
CEO, Green Generation Solutions LLC  
Dockser is the chief executive officer and cofounder of Green Generation Solutions LLC, which optimizes client profitability by implementing customized, enterprise-wide energy solutions. Before founding GGS, Dockser was a principal with national real estate investment firm MacFarlane Partners. He is a member of the Urban Land Institute, U.S. Green Building Council, Harvard University Asia Center Advisory Committee, and International Society of Sustainability Professionals. He is chairman of the ULI Washington Sustainability Committee.

**Beau Engman**  
Vice President, Commercial Energy Solutions, Building Efficiency, Johnson Controls  
Engman is vice president, commercial energy solutions, for Johnson Controls, managing the delivery of energy efficiency solutions to Global 1000 and commercial real estate companies. He is also on the board of PACENow, a nonprofit organization focused on eliminating longstanding barriers for building owners to undertake energy efficiency retrofits. Engman was cofounder of E2 Capital Partners.

**Greg Erwin**  
Cochair, Real Estate Development and Investments Practice Group, Winstead, and Chair, ULI Houston District Council  
Erwin is cochair of Winstead’s Real Estate Development and Investments Practice Group. With more than 30 years of experience as a real estate practitioner, he handles sophis-
ticated real estate deals for clients such as New York Stock Exchange REITs, privately held development firms, and wealthy individuals. He is a frequent lecturer at local, state, and national seminars; a contributor to legal publications; and the chair of ULI Houston.

**Ari Frankel**
**Real Estate Sustainability Leader, Alternatives and Real Assets, Deutsche Asset & Wealth Management**
Frankel is the real estate sustainability leader for Deutsche Asset & Wealth Management’s Alternatives and Real Assets platform, based in New York City. He represents Deutsche Asset & Wealth Management’s real estate investment business on a number of sustainability committees and working groups in the real estate industry, including the Greenprint Performance Committee. Frankel currently sits on the ULI Sustainable Development Product Council, and on the ULI New York Sustainable Building Council.

**Helen Gurfel**
**Executive Director, ULI Greenprint Center for Building Performance**
Gurfel is the executive director of the ULI Greenprint Center for Building Performance. Greenprint is an alliance of leading real estate owners and investors committed to improving the environmental performance of the global real estate industry. Before Greenprint, Gurfel was a director of GE Capital Real Estate’s global sustainability group, where she spearheaded a number of sustainability initiatives. Previously, she was a principal consultant at PricewaterhouseCoopers.

**Gary Holtzer**
**Senior Managing Director and Global Sustainability Officer, Hines**
Holtzer joined Hines in 1985. He is responsible for investment transactions, portfolio and asset management in Hines investment partnerships, and oversight and coordination of Hines’s sustainability efforts worldwide. Before taking his current role, Holtzer was responsible for property management operations in the Hines New York office.

**Mark Huppert**
**Technical Director, Preservation Green Lab, National Trust for Historic Preservation**
Huppert, the technical director of the Preservation Green Lab, oversees building and energy research at the National Trust for Historic Preservation and supports efforts to increase investment in older and historic buildings. He is the lead author of the Preservation Green Lab’s latest research report, “Realizing the Energy Efficiency Potential of Small Buildings”; was coauthor of the 2012 publication *Saving Windows, Saving Money: Evaluating the Energy Performance of Window Retrofit and Replacement*; and has contributed to *Urban Land* magazine.

**Thomas R. Ike**
**Vice President, Global Sales, Lutron**
Ike, vice president, global sales, at Lutron, works with Lutron personnel worldwide and is responsible for driving the company’s strategic systems sales and business initiatives. He is involved in defining and driving the overall strategic product and international market development initiatives for the company. He is a ULI Foundation governor and a member of the Responsible Property Investment Council.

**Molly McCabe**
**Managing Director, HaydenTanner**
McCabe is the founder and president of HaydenTanner, a firm focused on the nexus of profit and sustainability. She is the author of the book *Practical Greening: The Bottom Line on Sustainable Property Development, Investment, and Financing*. Before starting HaydenTanner in 1999, McCabe founded and was president of Bridger Commercial Funding, a leader in the commercial mortgage-backed securities field.
**John Mooz**  
**Senior Managing Director, Hines**  
Since joining Hines in 1989, Mooz has contributed to the development of over 8 million square feet of commercial and institutional real estate representing about $3.2 billion. Recently, he negotiated and completed the development of BG Group Place in downtown Houston, the renovation of El Paso Tower, two build-to-suit projects for Shell Oil, and the acquisition and disposition of Bank of America Center.

**Steve Moskowitz**  
**Director, Planning and Construction, ConocoPhillips**  
Moskowitz is the director of planning and construction at ConocoPhillips in Houston.

**Scott Muldavin**  
**Senior Adviser, Rocky Mountain Institute, and Executive Director, Green Building Finance Consortium**  
Muldavin is a senior adviser to the Rocky Mountain Institute and executive director of the Green Building Finance Consortium. His book *Value Beyond Cost Savings: How to Underwrite Sustainable Properties*, as well as his broad portfolio of sustainable value and finance collaborations, is dedicated to detailing the financial basis for deep energy efficiency and sustainability investment. Muldavin has written more than 200 books and articles on real estate finance, investment, valuation, and sustainability.

**Yuko Nishida**  
**Senior Planner, Tokyo Metropolitan Government**  
Nishida has been a planner for the Bureau of Environment, Tokyo Metropolitan Government, since 1998. She specializes in urban sustainable development issues, and currently is in charge of policy making regarding climate change and the heat-island effect. Before taking her current position, Nishida worked with the Bureau of Construction as an urban renewal planner and coordinator, and as a researcher with the Institute of In-House Training of the Tokyo Metropolitan Government.

**Joseph O’Connor**  
**Principal, VisorPoint**  
O’Connor is a consultant at VisorPoint and acting executive for several Northeast-based smart-building tech startups, with a primary focus on business development. He spent 20 years with Cisco, most recently leading the Cisco Smart+Connected Communities Business Transformation team for the Americas. O’Connor was responsible for the real estate industry and application areas, including building energy management.

**Chrissa Pagitsas**  
**Green Initiative Program Manager, Fannie Mae**  
Pagitsas is the program manager for Fannie Mae’s Multifamily Green Initiative. In this role, she develops and executes the strategy to integrate energy and water efficiency into Fannie Mae’s existing multifamily loan products and underwriting processes. Pagitsas provides technical guidance on green multifamily financing, green building, LEED, and Energy Star. Her previous professional experience includes leading teams on energy management, renewable energy, and information technology projects in the United States and Europe.

**Annise Parker**  
**Mayor, City of Houston**  
Parker is Houston’s 61st mayor and one of only two women to hold the city’s highest elected office. She has spent many years serving the people of Houston, with six years as a City Council member and six years as city controller. She is the only person in Houston history to hold the offices of council member, controller, and mayor. This is currently serving her second term as mayor. *Time* magazine named Parker one of the 100 most influential people in the world. She has also been the recipient of numerous awards during her career, including the 2011 Guardian of the Bay Award from the Galveston Bay Foundation, Scenic Houston’s 2010 Scenic Visionary Award, and the 2010 Guardian of the Human Spirit Award from the Holocaust Museum Houston.

**Joanna Partin**  
**Regional Director, North America, C40 Cities Climate Leadership Group**  
Partin is regional director for North America for the C40 Cities Climate Leadership Group. She also is director of climate protection initiatives in the office of San Francisco Mayor Ed Lee, where she advises Lee on citywide sustainable energy, climate, transportation, green building, and other programs promoting sustainability for San Francisco. Partin held the same position under Mayor Gavin Newsom from August 2009 to January 2011.
She is a board member for the Bay Area Air Quality Management District and a faculty member of the Climate Leadership Academy.

**Philip S. Payne**  
**CEO, Ginkgo Residential, and Cochair, ULI CLUE Advisory Group**

As CEO, Payne has primary responsibility for the overall strategic direction, growth, and development of Ginkgo. Previously, he was CEO of Babcock & Brown Residential. Before Babcock’s acquisition of BNP, Payne was chairman of BNP. He is a member of the board of Ashford Hospitality Trust, a REIT focused on the hospitality industry, and is chairman of its audit committee. He is a member of the National Multi Housing Council and the Urban Land Institute, and is the founding chairman of ULI’s Responsible Property Investing Council.

**Daniel Probst**  
**Chairman, Energy and Sustainability Services, Jones Lang LaSalle**

Probst was the founding member of Jones Lang LaSalle’s Global Environmental Sustainability Board and currently is chairman of Energy and Sustainability Services. In his 30 years in commercial real estate—including 23 with Jones Lang LaSalle—Probst has played key roles in diverse areas of the business. While overseeing the firm’s engineering and operations group, he launched the firm’s energy services and mobile engineering practices.

**Jake Ronay**  
**Head of Environmental Delivery Team, Greater London Authority**

Ronay is head of the Environmental Delivery Team at the Greater London Authority. The team is responsible for delivering major energy-efficiency retrofit programs in London, including RE:NEW, the mayor’s award-winning program for domestic housing, and RE:FIT, which is aiming to retrofit over 40 percent of London’s public sector buildings by 2025.

**Adam Rose**  
**General Property Manager, Hines**

Rose is a general property manager at Hines for Main Place, a 1 million-square-foot Class A office property in Houston. At Hines, Rose is responsible for certifying the first LEED for Existing Buildings structure in Houston’s central business district, as well as in Texas. He serves Hines as the LEED and sustainability expert.

**Arah Schuur**  
**Acting Program Manager, Commercial Buildings Integration Program, U.S. Department of Energy**

Schuur is acting program manager of the Commercial Buildings Integration Program in the U.S. Department of Energy (DOE) Building Technologies Office. Before joining DOE, Schuur was the director of the Energy Efficiency Building Retrofit Program at the Clinton Climate Initiative, working to initiate large-scale energy-efficiency projects and programs in cities around the world.

**William Sisson**  
**Director of Sustainability, United Technologies Research Center**

Sisson is the director of sustainability at the United Technologies Research Center. From 2006 to 2009, he was the cochair for United Technologies Corporation in the World Business Council for Sustainable Development Energy Efficiency in Buildings Project. Since 1999, Sisson has been a Sloan Fellow at the Massachusetts Institute of Technology.

**Adam Slakman**  
**Technical Director, ULI Greenprint Center for Building Performance**

Slakman is vice president of the ULI Greenprint Center for Building Performance, a member-driven organization of leading commercial property owners, investors, and other industry stakeholders whose mission is to lead the real estate industry toward improved environmental performance. He is based in New York and oversees all aspects of the Greenprint Performance Report.

**Shannon Smith**  
**CEO, Abundant Power**

Smith is the founder of Abundant Power, based in Charlotte, North Carolina. Before Abundant Power, he was managing partner and founder of Blue Point Capital Partners. Smith is a board member of the Southeast Board of the Environmental Defense Fund, and a member of the North Carolina Sustainable Energy Association and the Leadership Council of the American Council on Renewable Energy. Currently he serves on the Operating Executive Committee of Blue Point Capital as well as William M. Bird Company and McCoy Sales.
Laura Spanjian  
**Director of Sustainability, City of Houston**  
In April 2010, Spanjian joined the city of Houston as Mayor Annise Parker’s sustainability director. Her career includes roles as assistant general manager for external affairs at the San Francisco Public Utilities Commission, and government affairs director at the San Francisco Municipal Transportation Agency.

Alan Stewart  
**Senior Account Executive, Sustainability Services Division, Weathermatic**  
Stewart, a LEED accredited professional, is senior account executive of Weathermatic’s Sustainability Services division, the world’s leader in smart cloud-based controllers with over 200,000 installations achieving significant irrigation water savings. He has been involved in many forms of sustainability in real estate over 20 years, including founding the ULI North Texas Sustainability Committee.

Elizabeth B. Stein  
**Investor Confidence Project, Environmental Defense Fund**  
Stein is an attorney in the Environmental Defense Fund (EDF) Energy Program, focusing on energy efficiency in large commercial buildings and the transition to a clean, low-carbon electricity system. She works with public and private parties to address barriers to creating a durable market for energy efficiency through innovative financing, such as on-bill repayment and EDF’s Investor Confidence Project, and on energy efficiency efforts for buildings in New York City.

Clayton Ulrich  
**Senior Vice President, Engineering Services, Corporate Engineering Services, Hines**  
Since joining Hines in 1975, Ulrich has provided direction for Hines’s 120 million square feet of commercial real estate engineering operations. He leverages his extensive experience in building operations and energy management technologies to lead Hines’s energy management and conservation focus on an annual utility purchase in excess of $215 million.

Roger Vasquez  
**Director of Engineering, Transwestern**  
Vasquez is director of engineering for Transwestern and responsible for the Pennzoil Building, a 1.8 million-square-foot multi-tenant building in Houston. He has been directly involved in the development, design, and start-up operations of over 12 million square feet of office, residential, retail, and industrial space in three countries.
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<tr>
<td>Laurie Actman</td>
<td>Pennsylvania State University, Philadelphia, Pennsylvania</td>
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<td>Nick Allen</td>
<td>Urban Land Institute, Washington, D.C.</td>
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<td>Alan Arnold</td>
<td>The Lionstone Group, Houston, Texas</td>
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<td>Gary Baker</td>
<td>Granite Properties, Houston, Texas</td>
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<td>Taylor Breihnan</td>
<td>DataCom Design Group, Austin, Texas</td>
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<td>Jonathan Brinsden</td>
<td>Midway, Houston, Texas</td>
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<td>Suzanne Cartwright</td>
<td>University of Washington, Runstad Center for Real Estate, Seattle, Washington</td>
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<td>Filo Castore</td>
<td>Perkins + Will, Houston, Texas</td>
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<td>Tiffany Chao</td>
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<td>Deutsche Asset &amp; Wealth Management, New York, New York</td>
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<td>David Gabrielson</td>
<td>PACENow, Bedford Corners, New York</td>
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<td>Joshua Green</td>
<td>CDM U.S. LLC, Washington, D.C.</td>
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<td>Helen Gurfel</td>
<td>ULI Greepoint Center for Building Performance, New York, New York</td>
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<td>San Francisco Department of Environment, San Francisco, California</td>
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<td>Kurt Hull</td>
<td>Ziegler Cooper Architects, Houston, Texas</td>
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<td>Mark Huppert</td>
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<td>Chicago Title Company, Houston, Texas</td>
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<td>Mike Keese</td>
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<td>Olivia Keller</td>
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<td>Eugene Kesselman</td>
<td>Transwestern, Houston, Texas</td>
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<td>HaydenTanner LLC, Bigfork, Montana</td>
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<td>Tessie Nolan</td>
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<td>Joseph O’Connor</td>
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<td>Brian Yeoman</td>
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ULI Climate Change Statement and Principles

As presented to the ULI Trustees in Las Vegas, Nevada, on October 27, 2008, by Kenneth Hubbard and Jonathan Rose on behalf of the ULI Task Force on Climate Change appointed and convened by ULI Chairman Todd Mansfield.

ULI will bring its organizational resources to the complex issues surrounding energy and climate change, acknowledging that the successful global reduction of greenhouse gas (GHG) emissions requires substantial investments in local communities. We believe ULI has the ability to foster new policies and solutions to address global climate change that are both feasible and effective at the nexus of land use, real estate, energy, and infrastructure.

As an organization, we seek to move forward with new urgency by fostering leadership among ULI members and identifying the tools, techniques, and best practices needed to address difficult choices and tradeoffs, for which there are no precedents to measure decisions. We seek to empower individuals and organizations to solve one of the most important and complex long-term challenges ever faced by communities around the world, in a manner that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

ULI recognizes that effective strategies to combat global climate change will require cooperative effort by all segments of the economy and all segments of society around the globe. Given the multifaceted challenge and the many exemplary efforts by organizations around the world to meet this challenge, ULI does not seek to duplicate the effective efforts of others, such as those focused on transportation technologies or building technologies. By focusing on issues at the core of the ULI mission—the responsible use of land—ULI seeks to make an important contribution within the emerging chorus of collaboration and partnership.

For the full Statement and Principles, visit [www.uli.org/clue](http://www.uli.org/clue).