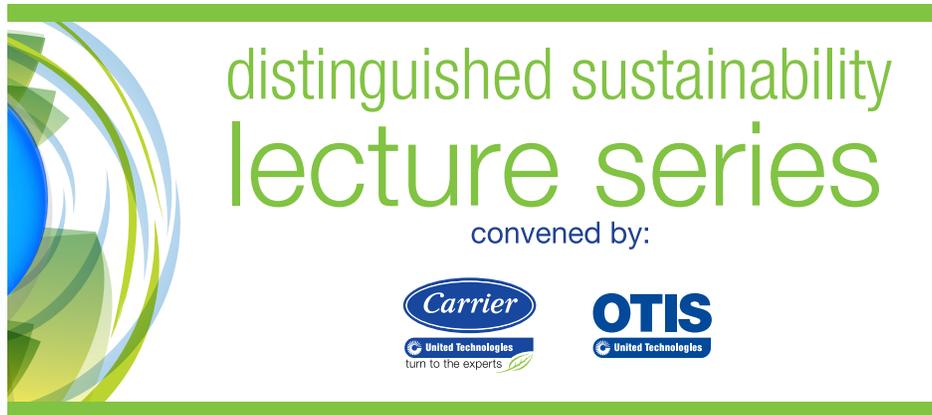


Key lecture points from the
Distinguished Sustainability Lecture Series

Istanbul, Turkey
September 11, 2014



Launched in 2011, the Distinguished Sustainability Lecture Series brings together two of our pioneering brands, Otis and Carrier, in a collaborative program with international universities and communities. The lecture series is designed to convene sustainability thought leaders and international building industry experts to transform the built environment. In this particular lecture, a panel of global experts came together in Istanbul, Turkey to analyze the green building movement from an economic perspective and shed greater light on the tangible financial benefits of making sustainable building choices.

If we achieved a **30 percent increase** in the energy efficiency of our buildings, those investments would not only pay for themselves, they would free up **\$65 billion** in new free cash flow for the US economy.

In **2012**, the number one reason people said they were building green buildings was because clients were demanding it and green buildings lower operating costs. This represents a **fundamental change**. It means we've gone from push to pull with green buildings because people understand the benefits.

It turns out that green buildings are **excellent business decisions** that lead to outstanding environmental incomes.

John Mandyck
Chief Sustainability Officer
UTC Building & Industrial Systems

The trend to green buildings has been rather phenomenal. In the United States, half of all of our buildings are being designed as green buildings. Those green buildings have done an incredible amount for us—they have changed the marketplace and we've gotten progress because of that change.

The environment today is the **driver for change**, and what these mega trends address is change in a **big way**.

Progress and change go hand in hand. If we're going to progress, **we have to change** and we have to **change attitudes**.

Valentine Lehr
PE, F.ASHRAE, F.ASCE, LEED AP
Lehr Consultants International

There are a couple of different options of how you can reduce energy consumption in buildings: **you can build better buildings or you can give people information on energy efficiency.**

The green building movement started out as green buildings presenting a technological change because green buildings are not just more efficient buildings but also just more pleasant buildings to be in. The air quality is better and typically in terms of design, there's more natural light. Architects and engineers never really thought about the story in terms of money. If I am an investor in real estate and I am presented with a green building and a non-green building and in my perception the green building is more expensive because it has a more efficient chiller which might also be slightly more expensive but also has more efficient lighting which might also be slightly more expensive, people are often more inclined to go for the cheaper alternative...even though over the economic life you might save energy, be more productive, and use less water in that green building.

By bringing in the economic dimension, that the green building actually leads to tangible financial benefits, you can really start to get to scale with green buildings.

Dr. Nils Kok

*Associate Professor in Finance and Real Estate
Maastricht University*

[Turkey is]
the **ninth**
country
in the world
that uses
LEED®
the most.

LEED is the most popular certification right now and **LEED is paving the way.**

The reason that we're discussing energy efficiency so much is that in the first phase it is perhaps the first thing that we can tackle, and also because it is something from which we can get quick return from.

Dr. Duygu Erten

*CEO, President of Turkish
Green Building Council*

*TURKECO Construction
and Energy Inc.*



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John Mandyck

Chief Sustainability Officer
UTC Building & Industrial Systems

John Mandyck serves as chief sustainability officer for United Technologies Building & Industrial Systems, the world's largest provider of technologies and services dedicated to making buildings and cities more energy-efficient, safe and secure. With more than 100,000 employees and sales in nearly every country, UTC Building & Industrial Systems serves customers with innovative elevator, escalator, heating, air conditioning, refrigeration, fire safety and security solutions from well-known global brands such as Otis, Carrier, Kidde and Chubb. In addition to sustainability, he leads the company's marketing and communications function.

John works with universities and organizations around the world to accelerate green building, such as the U.S. Green Building Council, which Carrier helped found and joined as the first member in 1993. John chairs the Corporate Advisory Board of the World Green Building Council, and serves as chairman of the Board of Directors for the Urban Green Council in New York City. He was appointed by the U.S. secretary of energy to co-chair the Department of Energy's Appliance Standards and Rulemaking Federal Advisory Committee. He has presented energy efficiency, sustainability and future of food strategies to audiences around the world.



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Valentine A. Lehr

PE, F.ASHRAE, F.ASCE, LEED AP

Lehr Consultants International

Mr. Lehr's experience covers projects on six continents. Noted for innovation in high-rise construction, hotel design and master planning of complex projects, he is also dedicated to environmentally responsive sustainable design and has led the design efforts in numerous award-winning environmental projects.

Mr. Lehr is licensed in 26 United States and territories, and is a chartered engineer in the United Kingdom and a licensed professional engineer in Australia. He has lectured at numerous colleges and universities. Mr. Lehr is also an adjunct professor at New York University, having been on the faculty since 1968, and a visiting professor at the University of Melbourne (Australia).

Mr. Lehr presently serves as chairman of the Board of Trustees at LaSalle Academy and is trustee emeritus at Manhattan College. He has also served as president of the New York Association of Consulting Engineers, is active in numerous professional societies and lectures widely on high technology. He also has served on a number of industry advisory boards.

As a distinguished lecturer, he has provided early insight on industry mega trends, focusing on their impact on both the construction industry and the global inhabitants occupying the built environment.



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Dr. Nils Kok

Associate Professor in Finance and Real Estate
Maastricht University

Dr. Nils Kok holds a position as an associate professor in finance and real estate at Maastricht University, the Netherlands. He is the recipient of a prestigious five-year grant from the Dutch National Science Foundation for his work on the intersection of energy efficiency and finance in the real estate sector. He also received awards from the United Nations Principles for Responsible Investment, Investment & Pensions Europe, and the European Social Investment Forum for his research.

Dr. Kok is the executive director and co-founder of the Global Real Estate Sustainability Benchmark (GRESB), a premier investor-driven initiative to assess the environmental and social performance of the global real estate investment industry. GRESB rates more than 600 REITs and funds on behalf of institutional investors that on aggregate represent some USD6 trillion.

He communicates his ideas and findings in the international arena as a frequent speaker at academic and industry conferences and actively shares his expertise through workshops with investment practitioners and policymakers. His research has appeared in leading academic journals such as the *American Economic Review*, the *Review of Economics and Statistics* and the *Journal of Public Economics*, and in media such as *The Wall Street Journal* and *The Washington Post*.

More information and blog at www.nilskok.com



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Dr. Duygu Erten

CEO, President of Turkish Green Building Council
TURKECO Construction and Energy Inc.

Dr. Duygu Erten is the president of Turkish GBC. As the co-founder of Turkish GBC she served as the vice president responsible for international relations between 2007-2013. She received the World Green Building Council President's Award in 2012 for the initiation of the Turkish Green Building Council and for her contributions to the global sustainability movement by WorldGBC. Of its many programs, The Center for Green Schools at TGBC is Dr. Erten's passion, with its goal of every child being in a green school within this generation. Dr. Erten has served on numerous boards and advisory committees, including the International Advisory Committee (IAP) on certification systems for developing countries. As the director of the "Clinton Climate Initiative" in Turkey, she contributed to the Turkish government's policies for green transformation of buildings by serving on the Ministry of Construction's "Sustainability and Energy" committee. She currently is responsible for government relations of Turkish GBC.

Dr. Erten is a graduate of Bogaziçi University, Department of Civil Engineering, completed her graduate studies at Rutgers University, New Jersey, and worked as a research fellow at Princeton University. She worked as an adjunct professor at USC, Los Angeles, and adjunct faculty at Koç and Sabancı Business Schools and is currently on the part-time faculty of Engineering at Bogaziçi University. She is one of the writers of UNEP's 2010 report, "Green Buildings." As a licensed professional engineer in the U.S., she is a professional who holds DGNB, LEED, BREEAM new and existing buildings certifications as well as communities assessor licenses and a LEED Faculty license. Her firm, TURKECO, is a strategic consulting firm on sustainability working on buildings and communities. TURKECO is the first Turkish firm elected to serve on the USGBC Board. Dr. Erten will serve between 2014-2017. TURKECO is the first C2C-accredited company in Turkey.