



Opportunities & Challenges

An Independent Study by the CEC Secretariat

Biographies

(Speakers and Moderators)

Green Building in North America: A Mexican Perspective

Meeting – Mexico City, 20–21 February 2007

Alison Kinn Bennett, of the US Office of the Federal Environmental Executive, began her federal career in the Environmental Protection Agency's Office of Pollution Prevention and Toxics in 1997 working on environmental management system standards and participating in the President's Council for Sustainable Development Environmental Management Taskforce. Since 2001, Ms. Bennett has served as the building projects manager for EPA's Environmentally Preferable Purchasing Program, focusing her efforts on reducing the US government's environmental "footprint" by specifying greener building products and construction services. In this role, Ms. Bennett is developing the "Federal Green Construction Guide for Specifiers" on the Whole Building Design Guide and sustainable building standards within ASTM International. She also cochairs EPA's cross-office Green Building Workgroup. On a temporary assignment to the Office of the Federal Environmental Executive, she continues to lead the development of technical guidance, as per Executive Order 13423, and the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding. She earned a bachelor of arts in political science and geography from the University of California at Berkeley and a masters degree in urban and environmental planning from the University of Virginia School of Architecture.

Odón de Buen is the president of *Energía, Tecnología y Educación* (ENTE), a consulting firm based in Mexico City working on energy and environment projects in Mexico and Central America. Mr. de Buen was the general director of the *Comisión Nacional para el Ahorro de Energía* (National Commission for Energy Conservation—Conae) from 1995 to 2003 and, among other accomplishments, led the implementation process for more than a dozen mandatory energy-efficiency standards, one of which was applicable to non-commercial buildings. In that position, he led the Canada-US-Mexico working group on energy efficiency that helped harmonize mandatory standards for electric motors, AC units and refrigerators in the NAFTA region. As a consultant, he is currently doing work for the Inter-American Development Bank in Central America and has collaborated with the United Nations Development Program, the World Bank, the European Commission, the United States Agency for International Development (USAID), the Natural Resources Defense Council (NRDC), and the CEC, among others. He is also very active in several energy-related nongovernmental organizations in Mexico and publishes a weekly newsletter < www.funtener.org>.

Peter Busby is the managing director and founder of Busby Perkins + Will, an architecture firm recognized internationally as a leader in green building design with the largest portfolio of completed green buildings in Canada. The firm's success has been proven through award recognition for completed buildings, six Governor General awards for architecture, documented reductions in energy consumption, and Canada's first new LEED® Gold building, completed in 2003. Mr. Busby is a founding member of the Canada Green Building

Council and actively participates in the work of the US Green Building Council and the Architectural Institute of British Columbia. In 1997, he was admitted to the College of Fellows of the Royal Architectural Institute of Canada and in 2005 received the Order of Canada in recognition of his leadership role in sustainable design in Canada.

<u>Guillermo Casar Marcos</u> is the superintendent of Civil Construction for *Ingenieros Civiles Asociados*, the largest construction company in Mexico. He is a member of the Mexican College of Civil Engineers (*Colegio de Ingenieros Civiles de México*—CICM), the Mexican Port Engineering Association (*Asociación Mexicana de Ingeniería Portuaria*), the Mexican Society of Seismic Engineering (*Sociedad Mexicana de Ingeniería Sísmica*) and the Mexican Institute for Intelligent Building (*Instituto Mexicano del Edificio Inteligente*). Mr. Casar's professional experience includes the design and construction of industrial plants, highways, department stores and intelligent buildings for a variety of companies, such as Picciotto Architects, where he was an assistant in the Projects Department. Mr. Casar teaches at the *Universidad Nacional Autónoma de México* and the *Universidad La Salle*, and is a regular speaker on such topics as port scanning, intelligent buildings, domotics and reengineering. In 2000, he received the Miguel A. Urquijo Award for the best civil engineering article, "Domotics: The Intelligent House," published in the *Ingeniería Civil* magazine, published by the CICM.

<u>Rubén Chávez González</u> earned a bachelor's degree in economics from *Universidad Nacional Autónoma de México* and studied masters-level finance at *Universidad La Salle*. He currently is director of loan portfolio management and sustainable development at HSBC México. From 1990 to 1993 he was a manager at *Ingenieros Civiles Asociados* (ICA).

Arturo Echeverría Aguilar obtained his university degree in business administration from the *Universidad Anáhuac del Norte*, in Mexico City. He graduated from the Upper Management 2 (AD2) program at the *Instituto Panamericano de Alta Dirección de Empresa* (IPADE). Currently, he is general director of the firm Aislantes Minerales, ROLAN, S.A. de C.V. Mr. Echeverria is the founder and president of the Association of Businesses for Energy Savings in Building (*Asociación de Empresas para el Ahorro de la Energía en la Edificación*, A.C.). As well, he is president of the Mexican Association of Fibers for Thermal and Acoustic Insulation and, since 2004, has been a member of the board of governors of the North American Insulation Manufacturers Association (NAIMA).

Huston Eubank is executive director of the World Green Building Council, where he focuses on developing the council and its programs both internally and with its partners. He served the WorldGBC as secretary from 2003 to 2005 before committing full time to its development in June 2005. From 1999 to spring 2005 Huston was a principal with Rocky Mountain Institute's Green Development Services team <www.rmi.org>. Prior to joining RMI he helped develop environmentally responsible solutions for commercial construction as director of building futures services at USGBC founder David Gottfried's firm Worldbuild <www.worldbuild.com>, as the "Earth Smart Ambassador" for Enron/Portland General Electric in Portland, Oregon, and as a senior project architect at Gensler. Huston has a bachelor of architecture degree from Cornell University and is a registered architect with wide-ranging experience inside and outside the construction industry, the last fifteen years of which have been in green building. He is a LEED(tm) Accredited Professional and Fulbright Senior Specialist.

Adrián Fernández Bremauntz was named President of Mexico's National Institute of Ecology (INE) in March 2005. From 1995 to 2000 he was Director of Management and Environmental Information (DGGIA) for INE, responsible for pollution policies and regulations at the national level. From January 2001 until February 2005 he was INE's director of research on urban, regional and global pollution and was responsible for promoting and coordinating national activities related to air pollution, climate change and persistent organic pollutants. Dr. Fernández is a biologist and specialized in ecology at the Metropolitan Autonomous

University. In 1989 he completed a Master of Science degree in environmental technology at London's Imperial College of Science, Technology and Medicine. He obtained his doctorate in environmental sciences at the same school, publishing a thesis entitled "Commuters Exposure to CO in the Metropolitan Area of Mexico City". During the last three years, he has assisted Dr. Mario Molina en creating the Mario Molina Center for Strategic Studies on Energy and the Environment, which opened in November 2004 and with which INE has carried out joint research projects.

Luis Antonio García Díaz is a partner at Sinergia Capital in Mexico City. He has a degree in public accounting from the University Iberoamericana, in Mexico. At Sinergia Capital, Mr. García is responsible for the area of financial analysis. With his team, he analyzes and coordinates the process for mergers and acquisitions, corporate finance and company valuations. His previous experience has included: senior auditor for Arthur Andersen, where he specialized in the Audit and Business Consulting divisions; senior analyst for *Acciones y Valores*; and work for Citigroup Brokerage House and their Consumer Credit Division. He has nearly 20 years experience in the financial markets.

<u>Christopher Godlove</u> supports the Clinton Climate Initiative (CCI) advising cities globally on water and energy projects and the opportunities they provide for GHG mitigation. Mr. Godlove has over a decade of experience developing international energy and environment activities having worked for a variety of NGO and private sector organizations. Prior to joining CCI Mr. Godlove worked for the Alliance to Save Energy where he managed a seven-country initiative focused on energy and water efficiency within municipal water systems. He has a special interest in the development of public-private initiatives and their role in the development of energy efficiency market opportunities. As a program manager with the Environmental Export Council (EEC) Mr. Godlove lead initiatives focused on market transformation in Latin America and Central and Eastern Europe. Mr. Godlove holds an M.A. in Latin American Studies from American University, and an A.B. with a concentration in Spanish Literature from Washington University in Saint Louis.

Ernesto Gómez Gallardo is an architect from the School of Architecture of the *Universidad Nacional Autónoma de México* and a numerary member of the National Academy of Architecture (*Academia Nacional de Arquitectura*). He currently works as general technical coordinator for the National Workers' Housing Fund Institute (*Instituto del Fondo Nacional para la Vivienda de los Trabajadores*—Infonavit), responsible for furthering the quality of housing developments and maintaining and increasing the property value of Institute-funded housing. From 2001 to 2005 he was deputy general technical director at the same agency, where he was responsible for tracking the supply of housing and developing and implementing economic housing and new models of real estate valuation and inspection. In 2001 he was general coordinator for the Northeast Region, in charge of operating and promoting development in nine regional delegations. From 1979 to 2001 he held various positions with *Banco Nacional de México* (Banamex), including director of real estate financing products and deputy director of tourism promotion. For three years, Gómez Gallardo was executive coordinator of the Mortgage Committee for the Mexican Banking Association (*Asociación de Banqueros de México*—ABM), and has been a founding member of the Real Estate and Housing Business Board (*Consejo Empresarial para el Desarrollo Inmobiliario y de Vivienda*—CEDIV) representing the ABM, as well as the Inter-American Housing Union (Uniapravi).

<u>James Grogan</u> is the president and chief executive of the Loreto Bay Company. Mr. Grogan has a long and successful track record of leadership in both public and private real estate-oriented companies focused on land development, homebuilding, merchant banking, lending, hotel ownership and management, luxury multi-family projects, and commercial investments. Prior to joining Loreto Bay in early 2003, Mr. Grogan served as president of GW Holdings, a diversified real estate investment company that sold its homebuilding and land development operations to a multinational public company in August 2002. GW Holdings also developed The Rocks, Scottsdale's most prestigious private residence club. Mr. Grogan also served as president of Sterling Financial, where he was responsible for managing all aspects of this publicly traded,

TSE company. Specifically, he coordinated Sterling's real estate-oriented merchant banking activities, the acquisition and disposition of assets, the company's hotel division, and the identification of appropriate lending and investment opportunities.

Evangelina Hirata Nagasako is the general director of housing growth development at the National Housing Development Commission (*Comisión Nacional de Fomento a la Vivienda*—Conafovi) in Mexico. She has been involved in different construction, engineering and urban planning companies in the private sector in Mexico and Spain. In the governmental sector, she has held various positions in the Secretariat of Social Development (*Secretaría de Desarrollo Social*) and the National Housing Development Commission. An urban architect by training, her projects have participated in various international competitions, such as the International Union of Architects competition at Warsaw and the design competition at Bilbao, Spain. She has also given conferences in Canada, the United States and Japan.

Innes Hood is senior associate/project manager at the Sheltair Group in Vancouver, British Columbia. He is a professional engineer and a resource management professional. Mr. Hood is committed to the construction of healthy buildings and the design of sustainable communities, utilizing an interdisciplinary approach to identify innovative and practical solutions. Over the last nine years at Sheltair, he has completed assignments related to energy efficiency, air quality management, and climate change mitigation. He has also participated in federal and provincial initiatives for developing climate change policy and energy efficiency programs. He has conducted numerous community energy plans in BC and Alberta. Mr. Hood is also a LEED®-Accredited Professional and a Building Envelope Professional (BEP), and provides building design services to private and public sector clients.

<u>Donald R. Horn</u> is the director of sustainable design at the Office of Applied Science for the US General Services Administration's (GSA) Public Buildings Service in Washington, DC. He ensures that sustainable design principles are included in GSA guidance for new construction, repair and alteration, facility management, and leasing. Mr. Horn represents GSA on the Federal Green Building Council, the Interagency Sustainability Working Group, and the US Green Building Council's Government Committee and the LEED[®] for Commercial Interiors Core Committee. He also serves on the Whole Building Design Guide Advisory Committee and Sustainable Subcommittee. Mr. Horn's previous experience includes work at private sector architecture firms.

Rodolfo Lacy graduated as an environmental engineer from the Metropolitan Autonomous University (UAM) in Mexico City and took a masters degree in environmental planning at the Massachusetts Institute of Technology. He was awarded a fellowship from the Rockefeller Foundation in the Leadership for the Environment and Development (LEAD) program. He is the founding president of the Environmental Engineers Association of Mexico, the former executive director of environment pollution prevention and control in the Mexico City government and the former head of advisors to the Minister of the Environment and Natural Resources in Mexico. Currently, Rodolfo Lacy is a researcher and coordinator of strategic studies on energy and environment projects at the Mario Molina Center. He coordinated and edited the first state of the environment report in Mexico and is the author of the book, *Air Quality in the Valley of Mexico (La calidad del aire en el valle de México)*.

Julia Martínez Fernández is the coordinator of the Climate Change Program at Mexico's National Institute of Ecology (INE). She studied Biology at the Faculty of Sciences of the National Autonomous University of Mexico, she graduated with commendation in 1969. She specialized in from 1970 to 1971 at the Beth Israel Medical Center in New York, USA, and was a member of the American Society for Clinical Pathology of the United States. From 1983 to 1987 she worked At the National Autonomous University of Mexico (UNAM, acronym in Spanish). she was Head of the International Relations Department of the General Directorate of Academic Interchange of the UNAM. She performed as Academic Secretary of the General Coordination of

Graduate Studies of the UNAM, from 1987 to 1989. From 1989 to 1993 she was editor for the Centro Panamericano de Ecología Humana y Salud OPM/OMS. In 1993, she was appointed Deputy Director of Research for the Social Development Secretariat of INE, a position that she held until 1994. In that period, the Country Study on Climate Change in Mexico was started and she coordinated several research items and organized several workshops to study and follow up this topic. From 1995 to 2000, she was Director of Climate Change, and from 2001 to date she has been Director of Climate Change Research for that same Institution. She participated in the coordination of the First (1997) and Second (2001) National Communication of Mexico to the United Nations Framework Convention on Climate Change, UNFCCC.

Juan C. Mata Sandoval is the director general of the *Comision Nacional para el Ahorro de Energía* in Mexico. Prior to joining Conae in 2006, Juan Mata was director general for research, technology development and environment at the Ministry of Energy. In this capacity, he was responsible for the development of policy, regulatory, and planning instruments, in the areas of renewable energies, energy efficiency, climate change, and innovative technologies. Prior to this position, Mr. Mata held the position of director of energy and environment at the Ministry of Energy. Before joining the Ministry of Energy, Mr. Mata worked at the World Bank in the ESSD Division for Latin America and the Caribbean, implementing projects funded by the Montreal Protocol. Mr. Mata has a solid background in the evaluation of technologies for environmental applications in water, soil and hazardous wastes, and developed research in these topics at the National University of Mexico and the US Department of Agriculture.

<u>Fernando Mayagoitia</u> is a civil engineer from the Autonomous University of Guadalajara who completed postgraduate studies and has teaching experience in administration, finance and management. He has been a speaker at various international conferences on the theme of industrialization and housing. He has had 25 years of experience in the construction industry, 16 years of which were spent working with URBI, a large builder of homes in Mexico. He currently works with URBI as a consultant on sustainable housing issues and projects related to energy and water conservation and disposition of hazardous waste as well as alternative energy sources.

<u>Mario Molina</u> is professor of environmental and physical chemistry at the University of California at San Diego and founder and director of the Mario Molina Center for Strategic Studies in Energy and the Environment, located in Guadalajara, Mexico. In 1995 he was awarded the Nobel Prize in chemistry for his work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone. His current work focuses on air quality and global change issues.

<u>David Morillón Gálvez</u> is the coordinator of the University Energy Program at Mexico's National Autonomous University (UNAM) Engineering Institute, where he teaches and conducts research in the areas of bioclimatic design, energy systems, energy efficiency and renewable energy. Previously, Mr. Morillón worked as a designer, estimator and builder for various private companies. He has served as assistant director of buildings, director and advisor for the National Energy Commission, and was also director of the Association of Applied Energy Technicians and Professionals. He has published research papers on energy issues, four books on bioclimatic architecture and 14 technical reports on research and technological development in the context of Mexico's challenges.

José Picciotto is the founder of Picciotto Architects and has developed various projects for them, including low-cost, mid-level and luxury housing, corporate buildings and, most recently, industrial and hotel construction. The constant in his work has been energy efficiency, allowing low maintenance and operating costs. In 2002, he received the Mario Pani Award for Architect of the Year, awarded by *Universidad Anáhuac del Norte* in the state of Mexico. Other recognitions for his work include second place in the National Intelligent Building Award in 1994, given by the Mexican Institute for Intelligent Building (*Instituto Mexicano del Edificio Inteligente*—IMEI) and third place in the National Energy Savings Award, granted in 1996 by the

Energy Savings Trust (*Fideicomiso para el Ahorro de Energía*). For the Eclipse Insurgentes project, which currently houses the federal Ministry of Energy (*Secretaría de Energía*), he was recognized by the Federal Electricity Commission (*Comisión Federal de Electricidad*). Mr. Picciotto is an alumnus and a member of the teaching staff at the Universidad Anáhuac.

Stephen Selkowitz has 30 years of experience in the field of building energy performance, with an emphasis on research, development and deployment of energy efficient technologies and design practices. He currently heads the Building Technologies Department at the Lawrence Berkeley National Laboratory (with a budget of \$10M/year), where his responsibilities include management and technical oversight of 70 researchers in five major R&D activities: windows and daylighting, lighting systems, commercial building systems, building simulation research, and demand response research, as well as an applications team that applies current research and development to real world projects. His department's work encompasses such diverse topics as development of new coatings for windows, laboratory and field testing of advanced glazing and window systems, development of new light sources and fixtures, field studies of advanced lighting controls, development of new daylighting design strategies, building life-cycle information models, commercial building systems performance, automated demand response systems and advanced simulation and design tools such as DOE-2, EnergyPlus, Building Design Advisor, and RADIANCE. Projects range from near-term demonstrations of emerging technology to basic materials research intended to influence the next generation of building products, and include development of the new computer tools and information technologies needed to change the practice of building design and operations. The program balances a state-of-the-art research effort with an aggressive technology transfer and implementation effort so that results of the R&D program are effectively utilized by industry and the building community. Mr. Selkowitz participates in a wide range of building industry, government, and professional activities in the United States and internationally. He is a frequently invited speaker on the topic of building energy efficiency, the author of over 150 publications, and holder of two patents.

<u>David Shields</u> is a journalist and a private consultant on energy matters in Mexico. Mr. Shields was born in Glasgow, Scotland, and is a graduate in arts and social studies from Strathclyde University, having specialized in media and communication. He has written for a wide range of Mexican and international media. He is the editor of "Energía a Debate," a magazine devoted to discussion of energy topics related to Mexico. He writes in *Reforma*, one of the leading daily newspapers in Mexico, in *Vertigo* magazine, and other Mexican media. He has written for international media, such as *Offshore*, *Oil & Gas Journal*, *Petróleo Internacional* and *The Journal of Commerce*. He has published two books on state-run oil company *Petroleos Mexicanos* (Pemex) and is the author of "Pemex: Problems and Policy Options," a white paper written for the University of California at Berkeley (2006).

Leanne Tobias is founder and principal of Malachite LLC, an advisory company that specializes in the selection, development, financing, leasing and management of green real estate investments. She is exploring the creation of a green real estate fund and is a member of the advisory board of the Green Building Finance Consortium. Ms. Tobias is an internationally recognized speaker and author on sustainable real estate, who has spoken on green real estate investment at the United Nations, the US Green Building Council, the Urban Land Institute, and elsewhere. Ms. Tobias is a principal author of the Urban Land Institute's authoritative *Green Office Buildings: A Practical Guide to Development*. Her green real estate projects have been featured in a Home Box Office documentary on American television. Ms. Tobias was previously managing director of the Multi-Employer Property Trust, a \$3.2 billion commercial real estate equity fund, headed the real estate operations of the AFL-CIO Building Investment Trust, and directed programs for capital markets and institutional lenders at the Mortgage Bankers Association. She is one of the few real estate investment professionals to hold the US Green Building Council's LEED® Accredited Professional designation.

<u>César Ulises Treviño</u> is the founding president of the Mexican Green Building Council, and serves as secretary to the World Green Building Council, leader for the Mexican Green Building Challenge Team, and committee member of the International Initiative for a Sustainable Built Environment. A civil engineer by training, Mr. Treviño founded Green Building and Alternative Energy Co., a consulting firm based in Monterrey, Mexico, offering green building design, energy and environmental assessment and sustainable project management. Mr. Treviño is also a postgraduate professor at Monterrey Tech, where he lectures on sustainable construction and domotics. He is former technical general director for the Subway Construction Agency in Mexico City and a guest researcher and consultant at the Norwegian Buildings Research Institute in Oslo, Norway. He is the first LEED™-accredited professional in Latin America.

Adrián Vázquez is the executive director of the Commission for Environmental Cooperation (CEC). A chemist by trade, Mr. Vázquez brings a strong background in environmental science and enforcement to the Commission, having worked for more than 15 years in such areas as industrial air pollution, wastewater treatment, hazardous waste management, environmental audits, and occupational exposure. His environmental activities have focused on the US-Mexico border region, particularly related to environmental law in Mexico and the United States. Throughout his career, he has assisted firms (including several Fortune 500 companies) interested in environmental compliance in Mexico and abroad, as well as compliance with corporate environmental policies. At the Packard Electric group of companies, he spent nearly three years designing and consolidating the group's environmental program. He has held various positions at leading Mexican academic institutions, such as the Instituto Tecnológico de Ciudad Juárez, where he helped found the environmental engineering program, and has worked as a researcher at the Universidad Autónoma de Ciudad Juárez. He has been involved with the Pan American Health Organization (PAHO) in institutional exchange and advisory programs in the border states. In recent years, his public-sector work in Mexico has been with the Office of the Federal Attorney for Environmental Protection (Procuraduría Federal de Protección al Ambiente—Profepa), where he held the positions of technical secretary of the Northern Border Commission, Profepa chief of staff, and deputy attorney for natural resources. Most recently, Mr. Vázquez was deputy minister for management of environmental protection at the Secretariat of the Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales—Semarnat).

Jonathan Westeinde is the managing partner of Windmill Development Group, a part of the Westeinde Group where he is chief financial officer. He is responsible for corporate strategy, finance and business development, and green development practices. Previously, Mr. Westeinde was a founding partner of Venbridge, the venture capital services division of Gowlings, one of Canada's leading law firms. He has held senior positions with Corel Corporation and Exocom Consulting, and was the chief executive officer and founder of LOSC, Inc., a Boston-based venture capital firm. Mr. Westeinde has also spent several years in the real estate development industry in various leasing and financing positions. He serves on the board of directors for the Canada Green Building Council and the Canadian Construction Association.

<u>Steven Winter</u>, fellow of the American Institute of Architects, is an architect and founder of Steven Winter Associates, Inc. (SWA), a leading research/design firm specializing in energy efficient and sustainable housing. The firm has developed and implemented energy-efficient and green building practices, specifications and designs for major builders, developers and owners throughout the United States. SWA is the lead member of Consortium for Advanced Residential Buildings, supported by the US Department of Energy under the Building America Initiative. The firm is also under contract to the US Department of Housing and Urban Development to conduct research under its Partnership for Advancing Technology in Housing (PATH) program. Mr. Winter is the past chairman of the US Green Building Council and the chair of the LEED® for Homes Committee.

<u>Charles R. Zimmerman</u> is currently the vice-president of prototype and new format development for Wal-Mart Stores, Inc. Mr. Zimmerman is also leading the "Sustainable Buildings Network" at Wal-Mart. This

network, among other things, is charged with increasing the overall energy efficiency of new and existing buildings by 20 to 30 percent. Prior to his current role, Mr. Zimmerman worked in the International Division for Wal-Mart Stores as director of design and construction. Mr. Zimmerman has worked for Wal-Mart since 1997. Previously, he worked as a private consultant and for the Texas State Department of Highways. Mr. Zimmerman is a graduate of the University of Arkansas, is a registered professional engineer, and a member of the Arkansas Academy of Civil Engineers.

