



Reducing and Managing Food and Organic Waste Streams



Challenges and Opportunities in North America

Agenda



About the CEC

The CEC facilitates collaboration and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade, and social links among Canada, Mexico, and the United States. Find out more at: www.cec.org.



Canada, Mexico and the United States produce an immense and increasing amount of food waste, which increases pressure on arable land, intensifies the environmental impacts of agricultural production, and taxes food delivery and transportation systems. Food waste also compounds the growing problem of effectively managing organic waste streams (including food waste, paper/paperboard, wood, and yard trimmings) in North America. When organic waste is improperly managed, it aggravates watershed contamination and the pollution of waterbodies. It can also create public health problems, increase vector-borne diseases, and contribute to squalid living conditions for poor communities. Even when properly disposed of in landfills, organic waste decomposition releases methane—a short-lived greenhouse gas that is over 20 times more potent than carbon dioxide.

To address these problems, governments must work with industry and affected populations to reduce food waste and to divert the organic waste streams to productive uses, such as energy production and agricultural uses. This JPAC public forum will bring together citizens and stakeholders to engage with experts from academia, government, and the private sector to discuss issues, challenges and opportunities for reducing, recovering, diverting and processing food and organic waste. Sessions will review organic waste sources, types, and environmental impact, and discuss capacity in the three countries for reducing food waste and promoting organic waste recovery within North America.

Thursday, 23 March 2017

- 7:30–8:30 **Registration of participants** – *Foyer*
- 8:30–8:35 **Opening remarks**, by **Eric Dannenmaier**, JPAC Chair – *Chiapas I & II*
- 8:35–8:45 **Overview of the CEC** by **César Rafael Chávez**, CEC Executive Director
- 8:45–9:05 **Keynote presentation** by **Renán Alberto Poveda**, Senior Environmental Scientist, World Bank
- 9:05–9:15 **Presentation of CEC's current and upcoming work related to food and organic waste**, by **David Donaldson**, CEC Program Manager, Green Growth projects
- 9:15–10:15 **Panel 1 – Diverting and processing organic waste: Best practices and emerging technologies**
– *Chiapas I & II*
- In Canada, Mexico, and the United States, organic waste is predominantly sent to landfills, where it decomposes under anaerobic conditions, contributing to the formation and release of methane, a potent greenhouse gas. This panel will identify barriers, opportunities and solutions related to increasing organic waste diversion and processing capacity in North America through mechanisms such as anaerobic digestion, composting, and landfill methane capture.
- Moderator: **Gustavo Alanís-Ortega**, JPAC member
- **Jaime Slomianski Aguilar**, Titular, Agencia de Gestión Urbana, Gobierno de la Ciudad de México
 - **Craig Coker**, Principal, Coker Consulting + Senior Editor, BioCycle Magazine
 - **Sergio Gasca Álvarez**, Director de Bioenergéticos, Secretaría de Energía de México (Sener)
- 10:15–11:15 **Facilitated discussion with panelists and members of the audience** (in-person + online)
- 11:15–11:30 **Break**



11:30–12:30 **Panel 2 – Food waste: Reduction and recovery programs** – *Chiapas I & II*

According to the World Bank, up to one-third of the world's food produced for human consumption is either lost during processing or wasted by consumers. North America stands out from other developed regions with the most food wasted per capita. This panel will discuss opportunities and projects underway to enhance capacity for reducing the disposal of food waste in landfills by exploring opportunities to achieve food waste reduction and recovery within North America.

Moderator: JPAC member

- **Ralph C. Martin**, Professor, Department of Plant Agriculture, University of Guelph, Ontario
- **Daniela Ruehl**, Consultora de Programas, FAO México
- **Yolanda Soto**, President and CEO, Borderlands Food Bank (Nogales, Arizona)
- **Rubén Oliva Rodríguez**, Director General, Bancos de Alimentos de México (BAMX)

12:30–13:30 **Facilitated discussion with panelists and members of the audience** (in-person + online)

13:30–15:00 **Luncheon presentation: Sumidero Canyon II Factual Record** – *Chiapas III*

15:00–16:30 **Roundtable discussion: Reducing waste from formal and informal human settlements – Legal and institutional barriers** – *Chiapas I & II*

This roundtable will discuss overcoming legal and policy barriers to sound management of food waste and organic waste with panelists and members of the audience. It will focus on case studies that demonstrate both the challenge of managing these waste streams in North America, and the opportunities presented by new technological, process, and policy approaches.

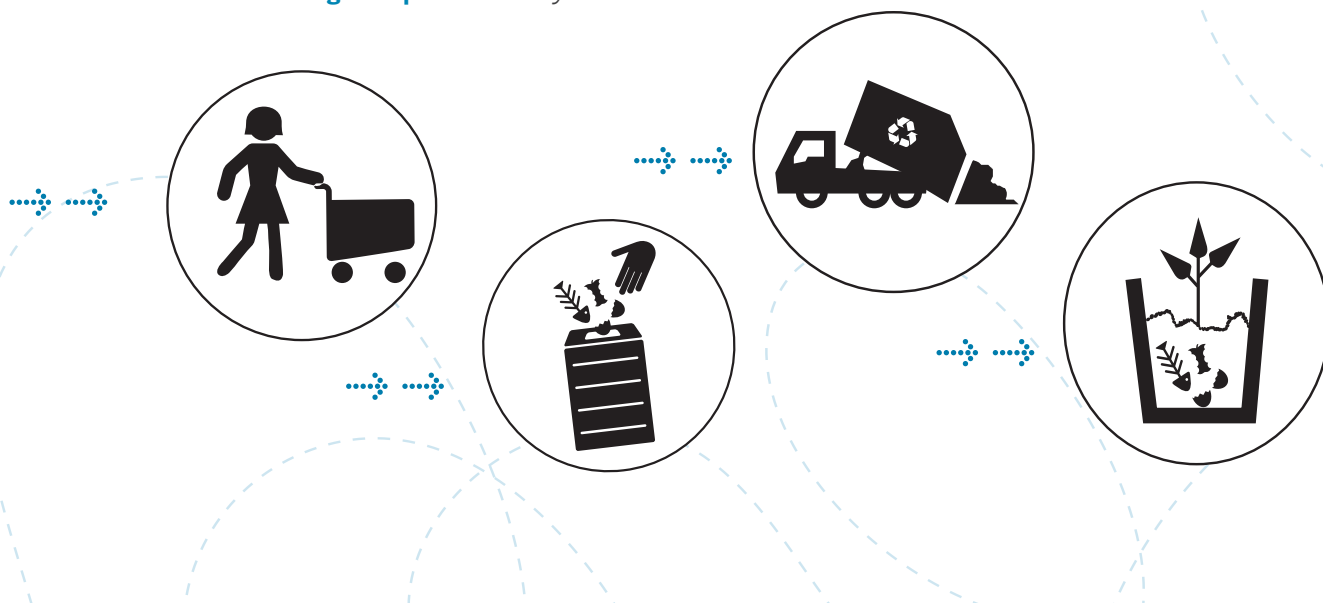
Moderator: **Eric Dannenmaier**, JPAC Chair

- **Cristina Cortinas**, Environmental Consultant, Mexico
- **Melissa Lenczewski**, Associate Professor, Geology and Environmental Geosciences, Northern Illinois University

16:30–17:00 **Wrap-up with panelists and members of the audience** (in-person + online)

17:00–17:15 **Closing remarks** by **Eric Dannenmaier**, JPAC Chair

18:00–20:00 **Networking reception** – *Lobby bar*





Biographies

César Rafael Chávez, CEC Executive Director



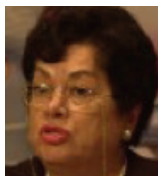
Executive director of the Commission for Environmental Cooperation (CEC) of North America since January 2016, Mr. Chávez studied at the Universidad Autónoma de Nuevo León in Mexico. He holds a certificate in regional planning and environmental protection from the University of Oslo and a master's degree in urban and regional planning from the University of Edinburgh, UK. He graduated from the program in Advanced Studies on Environment and Sustainable Development (LEAD-México) at El Colegio de México, and pursued doctoral studies on environmental urban history at the Universidad Iberoamericana. Mr. Chávez has worked on environmental issues for more than 25 years in the public, private, social and academic sectors, and in collaboration with organizations such as the US Environmental Protection Agency (EPA), the United Nations Environment Programme (UNDP), the World Bank (WB), and the Organization for Economic Cooperation and Development (OECD).

Craig Coker, Principal, Coker Consulting + Senior Editor, BioCycle Magazine



Craig Coker is an environmental scientist and engineer with over 38 years of experience in the planning, permitting, design, construction, and operation of organics recycling facilities that process a wide variety of wastes, using several composting and digestion technologies, as well as in the marketing and sales of compost and compost-amended horticultural products. In addition to running Coker Composting and Consulting, he is a senior editor at BioCycle magazine. Coker has worked on developing composting facilities in North America, the Middle East, Africa and South Asia. He has an undergraduate degree in environmental science from the University of Virginia and a graduate degree in sanitary engineering from George Washington University.

Cristina Cortinas, Environmental Consultant, Mexico



A member of Mexico's *Sistema Nacional de Investigadores* (National System of Researchers) and certified in hazardous waste management by the Bureau of Investments and Technical Support of Sweden, María Cristina Cortinas Durán furnishes advice on hazardous waste management to political and legislative authorities on both the federal and state levels in Mexico. She has formulated, for example, technical proposals for laws and regulations, such as the *Ley General para la Prevención y Gestión Integral de los Residuos* (General Act for the Prevention and Integral Management of Wastes), which have been adopted, both as laws and associated regulations, by the states of Guanajuato, Guerrero, Morelos, Querétaro and Quintana Roo. Among other duties, she has been the general technical coordinator for National Implementation Plan responding to the Stockholm Convention, in the *Secretaría de Medio Ambiente y Recursos Naturales* (Semarnat). In recent years she has worked on a project for the Inter-American Development Bank with the goal of integrating Mexico's Plan *Estratégico Sectorial para la Gestión Integral de los Residuos Sólidos* (Sectoral Strategic Plan for the Integral Management of Solid Waste) with two projects of the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Association for International Cooperation). At present, she is collaborating with the *Instituto Nacional de Ecología y Cambio Climático* (National Institute for Ecology and Climate Change) and Japan's Agency for International Cooperation, participating in conferences and as a technical advisor in international courses on instrumentation in integral management of solid waste oriented on the three R's (reduce, reuse, recycle).

A biologist from the *Universidad Nacional Autónoma de México* (National Autonomous University of Mexico), in whose Institute for Biomedical Research she studied the genetic effects of chemical substances and pollutants for two decades, she holds a doctorate in science from the University of Paris. She has written books and numerous articles on environmental health and the management of wastes and hazardous materials, several of which are available on her webpage: www.cristinacortinas.org.



David Donaldson, CEC Program Manager, Green Growth projects



David Donaldson is Program Manager for Green Growth at the Commission for Environmental Cooperation (CEC), where he works to ensure the successful implementation of CEC efforts on transportation, clean energy, and sustainable production and consumption, including the North American Initiative on Food Waste Reduction and Recovery. David holds a Master's degree in agricultural economics from Wageningen University in the Netherlands. Before joining CEC, David worked fifteen years at the U.S. Environmental Protection Agency in the regulation of pesticides and chemicals that deplete the ozone layer.

Melissa Lenczewski, Associate Professor, Geology and Environmental Geosciences, Northern Illinois University



Melissa Lenczewski is the director of the Institute for the Study of the Environment, Sustainability, and Energy at Northern Illinois University. Her research focuses on organic pollution, polluted groundwater, and the changes in microorganisms associated with pollution, particularly centered on the impacts of tourist activities on groundwater in Yucatán, Mexico. She also studies the microorganisms associated with steel slag pollution of groundwater in a hyper-alkaline environment (pH levels up to 13.3) in Calumet, Illinois.

Ralph C. Martin, Professor, Department of Plant Agriculture, University of Guelph, Ontario



Ralph C. Martin grew up on a beef and hog farm in Wallenstein, Ontario. He has bachelors and masters degrees in biology from Carleton University and a Ph.D. in plant science from McGill University. He developed a great love of teaching while working at the Nova Scotia Agricultural College, beginning in 1990, and realized how students teach him, too. In 2001, he founded the Organic Agriculture Centre of Canada, in the Faculty of Agriculture of Dalhousie University, to coordinate university research and education on organic systems across Canada. From 2011–2016, he held the Loblaw Chair in Sustainable Food Production at University of Guelph, where he is still a professor.

Renán Alberto Poveda, Senior Environmental Scientist, World Bank



Responsible for various environmental portfolios at the World Bank since 2000, Renan Poveda has been a project manager and the senior environmental specialist for the Latin American region, responsible for the development of environmental programs related to air quality, water and sanitation, contaminated sites and solid waste management in the Andean region, Brazil, Mexico, Argentina and the Southern Cone. Since 2014, Poveda has been in charge of the World Bank's environmental agenda in Mexico.

Among the key activities he has led at the Bank are: (i) the design and preparation of the program for environment policy reform in Peru; (ii) the study of the environmental and social dimensions of the mining sector in Peru; (iii) the National Environmental Program in Brazil; (iv) the implementation of the Matanza-Riachuelo River Basin Sustainable Development Project in Argentina (judged as one of the 10 most polluted rivers in the world); and (v) the solid waste management agendas for Argentina and Mexico, where the importance of addressing food loss and waste as part of the Bank's strategic and operational work has been emphasized.

Before joining the World Bank, Poveda was a research fellow at the East-West Center in the University of Hawaii. He supervised and coordinated the environmental education programs at Mexico's Secretariat of Public Education in Mexico (SEP) and worked as an environmental specialist at the Secretariat of Ecology and Urban Development (SEDUE), also in Mexico. His academic studies were at the University of California at Berkeley and the Fletcher School of Law and Diplomacy at Tufts University (Boston) in environmental policy and economics.





Daniela Ruehl, Consultora de Programas, FAO México



A consultant with the United Nations Food and Agriculture Organization (FAO) in Mexico, Daniela Ruehl is the FAO-México focal point on food loss and waste and now coordinator of the FAO project on food loss measurement, in collaboration with the Mexican Agriculture Ministry. She has designed and implemented a food security observatory, contributed to a program to improve inclusion of the marginalized poor in rural areas, and worked to establish monitoring and early warning systems to detect climate impacts on food production (ASIS).

In 2012, Ruehl collaborated with the International Policy Centre for Inclusive Growth (IPC) of the United Nations Development Program in Brazil, helping to design an internationally comparable inclusive growth index. In 2010, she worked for the German International Cooperation (GIZ) in Kenya on designing and piloting an Agricultural Business Index for small-scale farmers.

Born in Mexico, Ruehl grew up in Brazil. She holds a bachelor of science degree in economics from the University of Münster (Germany) and received her master's of science in economics, with specializations in macro- and developmental economics, at the Institute for Latin American Studies, Freie Universität Berlin, where she developed her professional interest in projects to aid the social and economic development of Latin American countries.

Jaime Slomianski Aguilar, Titular, Agencia de Gestión Urbana, Gobierno de la Ciudad de México



With more than 20 years' experience in public administration, José Jaime Slomianski Aguilar was appointed to direct Mexico City's Agency of Urban Management in September 2016. Over the course of his extensive career as a civil servant, he has held positions as general director for Coordination of Judicial Administration and Public Security in the Office of the Attorney General for the Federal District, general director of the Institute of Administrative Verification for the Federal District, coordinator of standards and legal affairs in the wholesale market (Central de Abasto), and general

director of urban services in the Secretariat of Public Works and Services of Mexico City.

Slomianski Aguilar studied for the licentiate in law at the Benito Juárez Autonomous University (Oaxaca, Mexico), graduating with honor. He also holds a master's in government and public policy from Universidad Panamericana, and an international master's degree on the Mexican penal system from the Universidad de Girona (Spain).

Yolanda Soto, President and CEO, Borderlands Food Bank (Nogales, Arizona)



Yolanda A. Soto became the first executive director of Borderlands Food Bank in 1995. Borderlands is a nonprofit organization with the mission of helping to feed the vulnerable nutritiously, through local, state, and out-of-state partnerships with hundreds of community organizations. She has guided Borderlands in rescuing millions of pounds of fresh, nutritious produce that otherwise would have been dumped into local landfills. Every year, Borderlands rescues approximately 30-40 million pounds of fresh produce and distributes it through hundreds of nonprofit organizations in 23 states in the US,

and internationally, to local residents. The *Non-Profit Times* awarded her as one of the most influential people of 2015 because of the Arizona produce distribution program known as P.O.W.W.O.W. (Produce on Wheels WithOut Waste), a program which should be taken as a model by other states rescuing produce.

Soto lives in Nogales, Arizona, where she grew up. She has dedicated the majority of her life helping the less fortunate with many issues; but the problem of waste and hunger is closest to her heart because she believes that the most basic of human needs and rights is to eat nutritiously.



Commission for
Environmental Cooperation



Join the conversation
by using the hashtag
#JPACTuxtla



cec.org