

## Meeting Reminders

### Pick Up Your Badges

Conference badges are required at all Annual Meeting events! Pick up your meeting badge at registration on the Convention level of the Hilton. Registration is open from 7 a.m. - 5 p.m.

### Plenary Luncheon

Join us for the Plenary Luncheon in Toronto I. Today's topic is the Costs of the North American Affordable Housing Crisis.

### Don't Forget the App

We encourage you to download the CSG East Annual Meeting Conference App. Find program information, floor plans, and connect with other attendees all on your mobile device.

### Closing Dinner

Reminder, the Closing Dinner hosted by Ontario will take place tonight in Toronto I & II from 6:30 - 9:30 p.m.



Luis Aguirre-Torres, Director of Financial Planning and Analysis and Financing Solutions with the New York State Energy Research and Development Authority (NYSERDA) discusses the role of government during the Energy and Environment Policy Committee on Monday.

## Panelists Consider Innovative Solutions for Catalyzing Building Electrification

There is general agreement that meeting U.S. and Canadian carbon-reduction goals will require a rapid shift from technologies powered by fossil fuels to those powered by clean energy – a process known as electrification. While the region has made strides in ramping up large-scale renewables and developing an electric-vehicle infrastructure, moving away from fossil fuels in the built environment, which generates nearly 40% of annual global emissions, has proven more complex.

Government has a critical role to play in this transition, both through educating the public and by creating financial incentives to help make retrofit projects affordable, said Luis Aguirre-Torres, Director of Financial Planning and Analysis and Financing Solutions at the New York State Energy Research and Development Authority (NYSERDA), during a panel discussion on Monday. The U.S. federal Inflation Reduction Act, which was signed by President Joe Biden last August, has created a wealth of incentives to speed along the process, but New York and other states are exploring a range of policies to reduce costs further and catalyze retrofits on a broad scale. Among NYSERDA's programs is a loan-loss reserve fund that will reduce risk to private capital markets and lower financing costs, particularly for housing retrofits in underserved communities, said Aguirre-Torres. The effort is among many incentives the agency is developing to help the state reach Governor Kathy Hochul's goal of electrifying 2 million homes by 2030.

In Ontario, the nonprofit Toronto Atmospheric Fund (TAF) has been working to overcome barriers to decarbonizing multifamily buildings through a

program known as a Retrofit Accelerator. Since its launch two years ago, the accelerator has retrofitted more than 1,500 homes, primarily in public housing, and reduced emissions from 50 percent to 85 percent per project, said Keith Burrows, TAF's low carbon buildings director. TAF's efforts are getting a lift from the federal government, which recently announced a \$200 million fund to create retrofit accelerators across Canada. Burrows discussed a number of barriers to catalyzing building decarbonization in Ontario, including high upfront costs and long payback periods, and the comparatively low cost of natural gas in the province. Natural gas costs 70% less, on average, than electricity on a per-unit basis throughout Ontario. Nevertheless, some building owners are beginning to factor the future price of carbon into their financial decisions regarding a building's operating costs, given the understanding that costs will only rise going forward, said Burrows. Carbon pricing is a federal mandate in Canada, with provinces required to implement their own programs, or adopt the federal program.

During the panel, members also heard about New York's recently enacted law requiring all new construction to be electric starting in 2026. In addition, they learned about Vermont's new clean heat legislation, which will compel fossil fuel dealers to obtain credits for adopting renewable or low-carbon heating technologies. When the program is implemented, it is expected to save Vermonters an average of \$7,500 per household by 2030, said Vermont State Senator Anne Watson, vice chair of the Vermont Senate Committee on Natural Resources and Energy.

# MOMENTS



David Biette, Director of CSG East welcomes delegates during the Plenary Luncheon.



Marie Gaudet, Wikwemikong First Nation located on Manitoulin Island, opens the Plenary Luncheon with a Thanksgiving Prayer and song on Monday.



Mary Nahwegahbow, Whitefish River First Nation, sings the national anthems.



Nora Young, Host of CBC Radio's Spark, Author of *The Virtual Self*, moderates a panel discussion between Tony Gaffney, President and CEO of the Vector Institute for Artificial Intelligence and Professor Anton Korinek, David M. Rubenstein Fellow at the Brookings Institution.



## Artificial Intelligence Technology and Emerging Legislation

Nora Young, Host of CBC Radio's Spark, Author of *The Virtual Self*, interviewed Tony Gaffney, President and CEO of the Vector Institute for Artificial Intelligence and Professor Anton Korinek, David M. Rubenstein Fellow at the Brookings Institution to explore how governments will need to adapt to address the rapid advancements in artificial intelligence (AI) technology. There is growing excitement and concern over advances in AI and the impact it is having, and will have, on an increasing number of industries and our day-to-day lives.

The recent conversations predominantly surround Generative AI (ex. Chat GPT, Midjourney, etc.), which is capable of creating text, images, or other media by learning from training data. Professor Korinek discussed what he calls the "Chat GPT moment"; when generative AI reached a point where it is broadly useful in white collar work. Tony Gaffney agreed that we are at an historic moment, adding that "guardrails" need to be put in place sooner rather than later.

There is an agreement among experts that there will be disruptions to the workforce, with some industries and professions being impacted more greatly than others. Though both panellists believe that AI offers tremendous potential and productivity at a scale that will result in an economic growth spurt. The technology can be used to make companies more competitive by becoming more efficient, which will help on a larger economic scale. Gaffney added that the benefit is not just economic but broadly societal

as well, highlighting uses of AI in the agriculture and healthcare industries.

What role do governments play when facing this emerging technology? Regulation and expert consultation are key elements to start with. The panel outlined two paths for AI regulation: a sector based approach, where legislation relies on industry specific regulations; and a general approach, which would create broad sweeping requirements that would be applicable to all sectors. Both options would be necessary to tackle the complex ways in which the technology can be used in different industries. Professor Korinek stressed that it is critical to "build pockets of expertise at every level of government," since AI is poised to become ubiquitously employed in more and more sectors.

Nora Young questioned the panel about the "alignment problem" of getting AI systems to fit with human values and follow "the same ethical standards that humans follow." Gaffney explained that researchers and regulators must look at ethics and behaviour, embracing trustworthy and safe uses of the technology by following codes of conduct. In July 2023, the G7 countries launched the Hiroshima AI Process to coordinate discussions on generative AI risks. International regulatory efforts such as these must also be investigated and discussed on a state and provincial level. Ted Arnott, Speaker of the Legislative Assembly of Ontario, closed the discussion with an optimistic note on partnership and collaboration in creating a better tomorrow.



Professor Anton Korinek, David M. Rubenstein Fellow at the Brookings Institution discusses the future of AI.



Tony Gaffney, President and CEO of the Vector Institute for Artificial Intelligence amid talks on the ethical standards of AI.

## Strengthening Canada-U.S. Trade Relations through Border Infrastructure

The extensive network of bridges, roads, ports and rail between Canada and the United States is a critical gateway for one of the world's largest bilateral trade relationships.

Debra Nelson, Director at the Office of Policy, Planning, & Performance at the New York State Department of Transportation (NYSDOT) highlighted the importance of the trade relationship between Canada and the United States. According to Director Nelson, connection points between Canada and New York State are among the busiest between the nations, with billions of dollars worth of trade passing through 17 land crossings and 4 rail-only border crossings. These crossings are vital to American trade, with over 80% of Canada-U.S. imports and exports entering via New York State. To bolster this important economic relationship, a series of modernization and construction projects are now taking place. Described as a "once-in-a-generation undertaking," Polina Hristeva, Director of Highways, Border, and Motor Carrier policy at Transport Canada praised the new Gordie Howe International Bridge as a huge step in supporting trade, addressing vulnerabilities, and creating upwards of 2,500 jobs.

According to Director Nelson, not all improvements relate to infrastructure. Significant investments in technology to help bolster transportation across the border have also been made such as the real-time border crossing wait time program, which aims to optimize traffic management strategies and mitigate congestion. Rebekah Bacon, U.S. Customs and Border Protection (CBP), Attaché for the U.S. Embassy in Ottawa also highlighted internal innovation taking place at CBP like the use of facial biometrics that are now being used in all modes of travel to facilitate

security measures. Panelists agreed that one of the most important elements to consider with all of these changes is data collection and implementation, especially since "you cannot go without data," Director Hristeva said.

Another exciting area of growth includes the investment in border infrastructure to build resilient lines of exchange between the two countries. Canada's National Trade Corridors Fund focused on national supply chains and resilience, especially after COVID disruptions. The NYSDOT has since submitted an application to the Promoting Resilient

Operations and Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program to improve resiliency at vital border crossings. The hope is to leverage technology to help communities advance regional capabilities to maintain transportation networks during extreme weather events that are especially prevalent in Western New York. These sorts of investments, be it physical bridges, or implementation of new technologies create a stronger trade relationship between Canada and the United States. All effort is focused on "finding a way to make the ecosystem of travel and transport as seamless as possible," said Ms. Bacon.



Debra Nelson, Director of the Office of Policy, Planning & Performance for the New York State Department of Transportation (NYSDOT) addresses the Border Transportation Infrastructure Panel on Monday morning.

## Tackling Transportation Issues in Changing Times

Rail safety has long been a top issue for experts like Melissa Connolly, Assistant Vice President of Government Affairs at the Association of American Railroads (AAR) but recently become international news following a widely publicized February rail disaster in East Palestine, Ohio.

That, and the memory of the tragic accident at Lac-Mégantic in Quebec in 2013 that led to the deaths of 47 people, continue to influence the need for greater rail safety in the U.S. and Canada. The issue, now on the minds of industry experts and legislators alike, was discussed on Monday morning during a CSG East Transportation Committee meeting in Toronto, Ontario.

Importantly, added Connolly, data show a drastic decline in rail accidents since 2000, including a 73% drop in incidents involving hazardous materials. "We have a goal of zero incidents," she said, pointing to the introduction of recent federal legislation such as bill S. 576 to amend the Railway Safety Act that aims to revise operational rules for railroads to further enhance safety. Connolly cautioned, though, that it was important to look at how the enhancements could negatively impact the operations of railways, such as the impact of additional inspections prior to trains leaving yards that could significantly slow service, and the recommendations for high hazard trains limiting the number of cars carrying hazardous materials and restrict their routing.

Alternately, she pointed to promising technologies that could also improve safety, such as new sensors that could be deployed along tracks to measure equipment heat and help prevent derailments. Additional on-board sensors could also play a vital role in preventing disasters, she said. Connolly is hopeful that continued successful lobbying will help get new rail safety legislation passed before the end of the current Congressional session in 2025.

Other new technologies were also discussed by the committee, including electric vehicles and the infrastructure needed to operate them along roadways in the U.S. and Canada.

Regional governments are racing to develop that infrastructure, according to Jordan Thirgood, Manager of Public Policy at Canadian Standards Association (CSA) Group. Thirgood provided a perspective on EV networks, pointing to how policymakers can

ensure equity and reliability in this new market. As the interest in EVs continues to grow quickly, new regulations and requirements are being added, cooling an otherwise hot market. Requirements for 100% of light duty passenger vehicles to achieve zero emissions in many jurisdictions by the 2030s will necessitate greater services and an all-hands-on-deck approach to the transition, Thirgood said. "We have quite a bit of work to do," she confirmed. Long term investments will be very important, and she brought up key issues surrounding deployment that included location, physical design of charging ports (incorporating accessible design practices), reliability (ensuring adequate power is constantly available), and payment options (universal payment methods such as credit or debit as opposed to subscriptions and apps).

Rhode Island Senator Lou DiPalma, the Vice Chair of the CSG East Transportation Committee who presided over the meeting, also spoke, providing an

enlightening and focused presentation about some of the consequences a shift towards EVs was bringing.

"We're now at a crossroads," he pointed out. DiPalma demonstrated that current revenues from fuel taxes would continue to decline over the following decade as more people began to buy EVs and that governments needed to be prepared to counter the loss in revenue. To mitigate the loss that "decarbonization" would bring might be countered through registration fees, or a per-mile road tax, said. He also explained that, due to the heavier weight of EVs, there would be a higher impact on road maintenance that would have to be offset somehow. "We have to focus on the why," he concluded, "we need a sound tax and user fee policy when it comes to EVs, one that's simple, transparent, neutral and stable. If it doesn't have these it will fall on its face."



Melissa Connolly, Assistant Vice President of Government Affairs for the Association of American Railroads (AAR) addresses the Transportation Policy Committee.

## Regenerative Agriculture – A Fascinating Look at New Strategies Impacting Agricultural Sustainability in the 21st Century

Pennsylvania Senator Judy Schwank chaired a fascinating series of presentations during a joint morning session of the Agriculture and Rural Affairs and Energy and Environment committees on Monday that looked at some of the exciting impact science and research is having on agriculture today - and how these will have a positive impact on the future. Alan Martinez, Senior Manager of Strategic Partnerships at the Cornell Atkinson Center for Sustainability got the ball rolling by showcasing strategies for moving research into action and how it can influence policy development. "Production has been all about yield since the 1960s and 1970s," he stated, "it's just been what governments have supported since that time, as it's always the way things have been done - but we need to look at things differently now." For Martinez, finding ways to build partnerships to help farmers is crucial. "Let's see what we can do to support farmers in a different way," he states. He proposes using innovative finance

to accelerate regenerative agriculture in the Great Lakes Region as an example. "Corporate suppliers want to be part of the solution as they also stand to benefit," he continues. He also explains how the New York Outcomes Fund, which pays farmers who can maintain regenerative practices, is an example of an innovative way partnerships can work. In closing, Martinez urged legislators in attendance to help where they could. "We need guardrails and space to innovate. We need public policy, law and finance - all of this to bring us together."

Elizabeth Sheppard, Manager of Integrated Supply Chain and Agriculture Strategy at Canadian company McCain Foods, followed, offering some interesting corporate insights into how they are working closely with its potato growers to help develop innovative techniques to achieve better sustainability. She indicated the concerns her company has regarding the impact of climate change on production. "We're

being proactive about regenerative agriculture," she explains, "as we are experiencing more climate events that have a trickle-down effect. A changing climate can lead to inferior quality potatoes." Although the regenerative practices McCain Foods is encouraging its farmers to embrace is voluntary, the company is continuing with a great deal of data collection so they can learn and improve as they go, understanding the different needs of their growers in the large number of regions where they farm. "There are reasons why farmers haven't transitioned to regenerative practices," she explains, "these can include social, technical, and financial. We're finding they don't have enough support or partnerships." Elizabeth wraps up by describing how McCain Foods is investing in innovation by operating its own research farms to experiment with techniques - a way it hopes to become a better corporate partner for its growers.



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Manitoba farmer Scott Day, who is also the Director and Chief Agronomist at Fall Line Capital – a company that purchases and manages farmland where innovative practices are encouraged and introduced – provided some exciting examples of regenerative farming techniques that he has overseen on his farms. One of the methods he was most proud to showcase was “no till” farming. The practice avoids scraping the land which can ultimately do more damage to the soil and natural habitats, and instead introduces seeds and plants via alternate methods. “Tillage doesn’t exist in nature,” he states. Day describes several other innovative regenerative practices, such as the “Susterre System”, equipment that uses ultra-high pressure water jets to accomplish row crop planting, and Greenlight Biosciences, a company developing protein-based fertilizers developed to only kill exactly

what it is designed for. “The future of pesticides is protein based,” he adds, “these are peptides that have no other impacts on the environment.” Before finishing, Day’s explanation of drone sprayers wows the group. “These are designed from the ground up and spot spray very effectively to target pesticides only where they are needed.” He is hopeful that other innovations, such as AI and the understanding of the Albedo Effect – the reflection of sunlight back into the atmosphere – will help in the shift towards more sustainable agriculture in the coming decades. Before wrapping up the session, Didi Barrett, New York Assemblymember and Chair of the Energy Committee of the New York State Assembly, offered some brief insights into unique processes her state had been working on with respect to farming, including involvement with carbon sequestration

(or carbon storage). “We introduced a carbon farming app in 2016,” she describes, “the first of its kind in the country!” Barrett continues that as state legislators, they were talking to constituents and farmers about best practices and providing tax incentives. “We were looking at natural ways to increase productivity,” she states, “and innovations such as capturing carbon dioxide from the air through photosynthesis.” Protecting small and mid-size farms was also part of the goal. Pointing to the passage of the Climate Leadership and Community Protection Act (CLCPA) in 2019 that addressed climate change and the goal of reaching net zero emissions in New York State, she concluded by stating that “this is the future of farming in many ways”.



Senator Judy Schwank from Pennsylvania, Co-Chair of the CSG East Agriculture and Rural Affairs Committee, addresses the Agriculture and Rural Affairs and Energy and Environment Joint Session on Regenerative Agriculture, Carbon Sequestration, and Carbon Markets.



Alan Martinez, Senior Manager and Strategic Partnerships with Cornell Atkinson Center for Sustainability discusses innovative partnerships Monday afternoon.



Charles Ellison, Lead Policy Consultant for the Council on Communities of Color, opens the Council on Communities of Color discussion on the State of Equitable Governance, Part III.



Delegate Joseline Peña-Melnik from Maryland moderates an emotional discussion between Delegate Adrienne Jones, Speaker of the House of Delegates in Maryland and Representative Rachel Talbot Ross, Speaker of the Maine House of Representatives.



Colby Thornton, Vice President of Diversity Equity and Inclusion, Lifelong Learning Administration Corporation addresses the Council on Communities of Color as Sarita Turner, Senior Fellow at Prosperity Now looks on.