

Executive Director's Responses to Questions from the CEC's 2023 Council Session's panel on: Nature-based Solutions, Environmental Justice and Climate Adaptation in Urban Environments

During the 30th Regular Session of the CEC Council (online: [#CEC30](#)), the CEC's Executive Director (ED) designed and personally hosted the "CEC Panel on Nature-based Solutions, Environmental Justice and Climate Adaptation in Urban Environments." This panel is the first ever "CEC Executive Director's Panel"—which will be held annually at CEC's Council Sessions and will be designed and moderated by the CEC's ED. As part of CEC's commitment to public participation, the CEC's ED, Jorge Daniel Taillant, promised to personally address the questions received through the session's virtual public engagement that were not responded to during the session. Below are the questions posed and the ED's responses.

Planting vegetation like trees has significant negative impacts on above- and below-ground infrastructure. How would you work around this?

Proper scoping and expert consultation are needed to ensure vegetation is appropriate. It should be naturally appropriate (native species) and adapted to the local climate. This also helps to promote restoration by nature of native ecosystems that have been covered and destroyed by the arrival of urban environments. The consultation should also provide significant nature-based solutions to rising problems like extreme heat and climate-related impacts (such as flooding, drought, etc.). Cities could and should work with experts from multidisciplinary backgrounds. Proposed solutions deriving from such consultation and the appropriate experts should be geared to mitigate and to avoid negative impacts. Local community members should also be consulted, as well as (where available and appropriate) traditional ecological-knowledge and Indigenous-knowledge experts, who can help identify solutions to solve the complex problems that exist in many urban areas. In the case of introducing tree canopy, it's important to identify adequate native species and identify the best areas and context in which to plant the trees, ensuring it is workable with the built environment. It is also important to consider expanding recreational areas, plazas, urban parks, etc., where more expansive forested areas (larger ecosystems) can be introduced or expanded, and where such ecosystems can better thrive.

It is also important to engage (and educate where necessary) local communities so that they are part of the solution, are engaged in the design, and also engaged in the maintenance and protection of the expanded urban ecosystems, better ensuring that they will be more sustainable in time.

When these projects are carried out, a holistic approach is necessary, focused not only on expanding trees (urban canopy) in urban areas, but also considering other elements—plants, design layout, building materials that provide shading and more efficiency, etc.

How can elected municipal officials push for more climate actions when a large proportion of their voters are still addicted to cars and impede such actions?

Public officials at the local level should work to engage community members in all stages of planning, project design, implementation, follow-up, etc. It is first important to understand the current modes of transportation utilized, as well as the drivers/incentives/barriers to more-preferred methods. Alternatives might be ignored for economic reasons or simply for lack of awareness, but until motives are made clear through proper consultation, it is likely that policy alone will not transform wholesale changes in how a community chooses to behave. COVID, for example, was an external factor that possibly permanently changed commuter trends, lowering vehicle miles traveled to and from work. Other wholesale changes could be identified with proper consultation and market study of the proposed changes. It is important to bring alternative solutions to the table, to make communities aware of the opportunities that are available but also to identify the levers needed to help communities make changes. Awareness and education campaigns around climate action will strengthen the likelihood that community members take up alternative choices related to climate change, such as purchasing less-contaminating appliances when it comes time to change out appliances. Incentives might also be considered, to encourage residents to turn in an inefficient appliance (refrigerator, AC, stove, etc.) In other cases, city codes can mandate that new buildings utilize cleaner energy or that fossil fuel energy options such as natural gas are banned. These significant policy choices can go a long way in mandating structural shifts, while in some cases, more education and engagement are needed for desired voluntary decisions. It is important also to ensure that plans are catering to public opinion and demand, and are also building community ownership of actions. Awareness and participation can yield the definition of the most suitable actions that address the needs and interests of a specific city or neighborhood, and that are also tied to a community's specific request or demand, as opposed to projects that have been decided top-down by the public officials behind them, based on the perceived needs. It is also very important to offer incentives for citizens to adopt climate actions (e.g., to use alternative transportation), instead of having them feel that solutions are being imposed.

Will presentations (e.g., pdf of slides from City of Vancouver) from today be available to participants?

Sure! Please find them here: <http://www.cec.org/wp-content/uploads/00-PRESENTATION-CEC-Nature-Based-Climate-Solutions-June-28-2023.pdf>

How can we overcome political inertia in implementing the policies and commitments that we already have? That is more the issue for local governments.

A more engaged and active civil society motivates governments (at different levels) to increase their own engagement and interest and their commitment to design and implement adaptation policies and actions. Engaging in political electoral campaigns demanding candidate actions on key issues is a step. Participating in local council sessions and communicating through various means (including social media) with public officials through their normal communication channels and at

public policy meetings is an important leverage. One should not rely on public officials to take action on their own, but rather, more actively engage communities to demand more action of their policymakers. In such fashion, policymakers may be incentivized to respond to local demands. Recognizing progress, awarding recognition where it is due, is important for policy makers in order to see the fruit of their work. Education and awareness campaigns for local community groups and leaders that are working on social justice but may not have in-depth knowledge on the environment or climate change are also important for mobilizing civil society and advancing policy development. It is also important to constantly educate social leaders on key existing and evolving global policy targets, instruments, commitment, etc., such as the Paris Agreement or the yearly COPs on Climate Change and Biodiversity. These events are critical to setting global policy, but do not necessarily get channeled to the local level or translated to local government policy. Education and frequent exchange of information regarding the evolution of these policies is key.

More collaboration between the federal and subregional governments can also help to facilitate the implementation of policies and action that might otherwise be stagnated.

How do you see tackling racialized violence as central to effective climate action in your county and community?

Evidence shows that violence can be correlated to climate impacts, and conversely, effort to address climate impacts reduces violence—particularly when climate action plans are designed to include environmental justice considerations. Racial violence, discrimination and racism are oftentimes engrained in social, political, and economic structures. It is necessary to deconstruct these systems by rethinking the way we formulate policy, by bringing in alternative views on local violence and its sources, and through actions that improve quality of life of the more disadvantaged neighborhoods, by rebuilding greener, cleaner, healthier spaces, ultimately contributing to reducing racial violence. Evidence also shows that, if properly dealt with through methods of conflict resolution and mediation, these social conflicts can also serve as an engine to define new ways of collaboration. To achieve this, climate action needs to recognize the particular local contexts, including history, relations, etc., and introduce appropriate mechanisms to deal with such conflicts. Any solution that is put forward should recognize local dynamics and conflicts and aim to ensure equitable access to the benefits generated by climate action. At the end of the day, violence is often an indicator of problems with quality-of-life conditions, and by improving living conditions as relates to climate impacts (extreme heat-tolerable and more naturally beautiful environments that are healthy for human development), we can lower violence.

Have we solved the ozone issue, or have we just moved on to something else? Ozone, GHG, climate change seem to all be referring to the same set of issues.

Over the past several decades, efforts to repair the ozone have had significant effect on avoiding catastrophic atmospheric collapse. It has not been entirely resolved, but it is on a progressive track of deepened action over time, which is having positive results. It is an ongoing process which is not over, nor should we say that we have moved on to something else, since we are still actively engaged globally in ozone reparation. We can, however, learn from this experience coordinated through the Montreal Protocol, which has been dubbed one of the, if not the, most successful environmental treaties ever.

Action on ozone repair is a win of international environmental policy, and we can use the process of resolving the ozone problem to replicate action and approaches to climate adaptation.

Ozone and climate change are interrelated, and there is urgency to attend them both, largely because we can, and because there has been more consensus on pathways to repair the ozone layer that have buy-in from many of the sectors, including industry, that need to be at the table for this to work. What we can benefit from are actions that both help the ozone as well as the needs to address climate, such as addressing certain climate super-pollutants such as HFCs. Fixing the ozone problem can have enormous benefit for achieving our climate targets rapidly, as working on solutions for reducing ozone can also have collateral benefits for human health and quality of life, such as reducing mixes of gases containing other super-pollutants, like methane, which create very toxic air that leads to respiratory diseases and illnesses.

These are different but deeply inter-related issues and if we can find ways to address multidimensional issues linking ozone to climate to human health, we can better balance mitigation and adaptation agendas and outcomes.

Climate change is driven by politics and/or the economy. How do we shift the paradigm?

Engagement. Education. Dialogue. Social paradigms are a sum of individual actions, they do not just exist on their own. We need to start by changing our actions at a personal level to start inspiring change and engaging others to share our message, inspire ourselves and create a resonance that is bigger than ourselves. A first and critical step is clearly changing ourselves, but that's not enough. We need to challenge ourselves to project, to engage and to send our message through the most influential spaces that we can use. We need to convince others to take action, and sometimes that's not easy, but it begins with dialogue and engagement. We then need to take our message to those scenarios where we can have a voice and influence change, and not every space affords this opportunity. Sometimes we need to engage in places that are uncomfortable, but necessary. "You" must take action for things to change. And we should always be asking ourselves if we are engaging where we can make a difference. Complacency is a losing proposition.

Educating key social actors, youth and society in general, and creating space for engagement of these actors is critical. Governments should encourage education but also allow for that engagement and participation space, fostering community-led prioritization of actions, considering nature in the solutions, and particularly local traditional and Indigenous knowledge.

Finally, generating the conditions to empower communities to have a voice and the autonomy to decide how they want to be governed in terms of climate action generates enabling conditions against business-as-usual politics and economics.

How can consciousness of environmental issues and climate change be raised in communities, and in particular among original peoples?

The knowledge that forms the basis for the identification of climate measures (ideally at all levels and where permitted by the characteristics of the location) must derive from a process of knowledge co-creation involving the active participation of communities—especially those possessing traditional ecological knowledge—alongside persons possessing “conventional” academic and technical knowledge. Unfortunately, many social and political systems, and “ways of acting” in general, were developed in the context of exclusive and discriminatory systems. The incorporation of alternative perspectives, especially local ones and those of the communities most negatively affected by the established systems, yields alternative scenarios for the more inclusive reconstruction of policies and solutions. To be valid, such processes of co-creation and collaboration must ensure that those who participate in them enjoy conditions of equality, equity, justice, access to information (and speech), and transparency. They must strive to identify relevant and legitimate information and sources in order to facilitate the decision-making process. This is the basis for the reinforcement of environmental and climate governance.

Basic education is insufficient. We must aim for large-scale, general, in-depth education, taking advantage of all the resources at our disposal to send the necessary messages to all levels.

How can local governments create the conditions to empower citizens so that development plans emerge from local concerns?

By creating genuine opportunities for participation and decision-making. By letting go of discretionary power over project design, trusting in participatory processes to yield good or better solutions. Civic participation must be effectively facilitated and must be remunerated, democratic, and informed, with equality and openness to all. In addition, local governments can strengthen environmental and climate governance insofar as they adopt new design approaches to climate action in which leadership and the power to define strategies are ceded to communities. As in the case of Vancouver, such approaches allow governments to play the role of facilitators or mediators, offering resources to local communities in order for the latter to take charge of the planning process.

Again, education, access to information, and acknowledgment of the value of different information sources are key to empowering society, which cannot participate without information, without equality, and without recognition of differences (both historical and current) and conflicts.

How do we make sure there is differential pricing, so that rich households do not sell energy to their lower-income neighbors while making a profit?

Governments should encourage progressive regulations to create an even and fair playing field, recognizing inequities as processes move forward and ensuring that energy solutions and access to them take into account these inequities. Markets are in many cases distorted to favor inequitable distribution of resources, including energy. Access to affordable and clean energy must be guaranteed through public policies, and in some cases, perhaps subsidized, and those policies should aim energy independence in ways that help to reduce inequities and not exacerbate them. The North American region is making progress in identifying financial instruments to advance the climate agenda.