



Meeting Notes

The City of Calgary – Calgary Climate Panel – Meeting #8
 9:00am – 12:00noon, September 11, 2020
 Online – Microsoft Teams Platform

Agenda

Time	Agenda Items	Lead
9:00am – 9:10am	Welcome and Agenda	Climate Team
9:10am – 9:15am	Economic Recovery in Calgary	Councillor Demong
9:15am – 9:20am	New Panel Member Introduction	Climate Team
9:20am – 9:40am	Climate Program and Working Group Update Q3	Climate Team
9:40am – 9:50am	New Climate Adaptation Working Group	Climate Team
9:50am – 10:15am	Financial Models for Energy Upgrades	CFO, City of Calgary
10:15am – 10:45am	PACE and Utility Bill Financing of Energy Upgrades	Alberta Ecotrust
10:45am – 10:55am	Break	
10:55am – 11:30am	Climate-related Financial Disclosure & Task Force	Mantle314
11:30am – 11:55am	Panel Discussion	All
11:55am – 12noon	Upcoming Panel Meetings & Wrap Up	Climate Team

Attendance

Organization	Representative	May 29, 2020
Alberta Council for Environmental Education	Gareth Thomson	√
Alberta Ecotrust	Mike Mellross	√
Alberta Health Services	Dr. Nicholas Etches	
ATCO Gas	Ryan Germaine	√
BILD Calgary Region	Deborah Cooper	√
BOMA Calgary	Jayeful Islam	√
Brookfield Residential	Doug Owens	√
Calgary Airport Authority – Co-chair	Harris Switzman	√
Calgary Board of Education	Olena Olafson	√
Calgary Chamber of Commerce	To Be Determined	
Calgary Climate Hub	Bob Morrison	√
Calgary Emergency Management Agency	Chief Tom Sampson (alt) Tobi Bellis	√
Citizen-at-Large	Rev. Bill Phipps	√
ENMAX Energy	Justin Jacober (alt) Jennifer Lefevre	√
Fuse Collective	Ai-Linh Tran	√
Indigenous Community	Lorna Crowshoe	
Intact Insurance	Luisa Currie	
Siemens Canada	Adrian Francese	√
The City of Calgary – Councillor	Cllr. Peter Demong	√
The City of Calgary – UEP General Manager	Dan Limacher	√
University of Calgary	Dr. Jennifer Winter	√
Youth Community	Logan Mitchell	

Administrative Support		
The City of Calgary – ESM Director	Christopher Collier	√
The City of Calgary – Climate Change & Environment Manager	Dick Ebersohn	√
The City of Calgary – Climate Leader	Brit Samborsky	√
The City of Calgary – Climate Leader	Dawn Smith	√
The City of Calgary – Climate Team Member	Adrienne Beattie	√
The City of Calgary – Climate Team Member	Susan Stinson	√

Discussion

Agenda Item Notes	Actions
<p>1. Welcome and Agenda from the Chair</p> <ul style="list-style-type: none"> ➤ This meeting is hosted online and few regrets in this meeting ➤ Restatement of the fundamental mandate of the Climate Panel ➤ Land acknowledgement ➤ Overview of the agenda, actions requirements, technical elements – noted that presentations will be recorded for transcription purposes ➤ Review of the package and theme for this session ➤ Request for feedback at session end from the Panel in support of developing a Panel Statement 	<p>FYI</p> <p>Contribute</p>
<p>2. Economic Recovery in Calgary</p> <ul style="list-style-type: none"> ➤ Overview of Calgary’s current economic status; impacts from depressed Alberta energy sector and related business and industry impacts; resulting effects on the Alberta economy and City of Calgary; exacerbating impacts from COVID-19; recovery options are being explored. ➤ Economic status – the Calgary recession is entering its 5th or 6th year ➤ Calgary’s current downtown vacancy rate for office space is between 25 and 27% and may reach 30% before things turn around; the high vacancy rate is resulting in lower assessed values and consequently lower tax revenues for The City in the last few years ➤ MLS (Multiple Listing Service) sales prices seem to have leveled off at a two-year high; however, these numbers may be depending on various government supports ➤ Pullback of the oil and gas industry – this industry is in a very difficult position which again has only been exacerbated by COVID-19 ➤ Recovery as a province – part of that is getting through the pandemic, part of that is encouraging industry to return to its natural standards 	<p>FYI</p>

<p>3. New Panel Member Introduction from the Co-chair</p> <ul style="list-style-type: none"> ➤ Introduction to one new Panel Member Representative: Deborah Cooper, BILD Calgary ➤ Roundtable of introductions from Climate Panel Members and Climate Team staff 	<p>FYI</p>
<p>4. Climate Program and Working Group Update Q3 from Admin</p> <ul style="list-style-type: none"> ➤ Q3 2020 Climate Program and Working Groups update – Panel members who are participating in these working groups were invited to speak and answer questions ➤ Referenced Attachment 2 in the Pre-meeting package which includes all the Climate Program activities for the last quarter ➤ Discussion about current actions and 2020 Q3 Update: <ul style="list-style-type: none"> 1) Climate Mitigation: <ul style="list-style-type: none"> ➤ Today’s Discussion: Using Low Carbon Finance to meet our GHG reduction goals ➤ Residential and commercial sectors have the biggest impact on GHG emissions in Calgary ➤ Both residential and commercial each account for 28% of overall GHG emissions – almost 60% together. Most of the building stock we’ll be using in 2050 is already built today, so the challenge in the building sector is to improve the buildings we already occupy ➤ Driving factors for this sector include: <ul style="list-style-type: none"> ○ A price on carbon for the foreseeable future ○ Progressively stronger building codes and energy codes – for new and existing buildings ○ Investment funds taking climate into consideration for long-term portfolios ○ Opportunities for innovation in construction, technology, and convenience for customers ○ And all the above spurring on a new economy ➤ The construction and design industry can provide solutions toward a low carbon economy, with benefits including local jobs, investment, and energy savings. But it needs to be paired with a financing approach that works on a large scale and attracts broad participation. This is the focus in today’s Panel meeting ➤ Our team is targeting the largest sectors and developing opportunities to collaborate on GHG actions: ➤ Buildings Energy Program – Outcome: Identify energy use among commercial and residential buildings to enable owners to compare against others, then plan improvements, subsequently invest, create jobs and implement the changes and upgrades. 	<p>FYI</p>

- For 2020 we are focusing on commercial and institutional energy benchmarking as well as residential energy labelling. All of these are in their early stages.

Phase 1: Commercial and Institutional Energy Benchmarking Program, launching very soon with both city-owned and private sector building owners in Calgary (Q3 2020 – full year 2021)

Phase 2: Solar PV Potential Map, focusing on residential PV with a built-in calculator for cost and payback based on today's rates (Q3 2020)

Phase 3: Residential Energy Labelling, study of program options and attitudes to inform a possible program (Q3 2020 – Q1 2021)

- **Energy & Utilities Program area** – Outcome: Identify best investment approaches to energy system and new development and to align strategy, policy and programs to implement biggest GHG reductions.

Phase 1: Develop city-wide current state energy map with both inputs and outputs for various building typologies (Q4 2020)

Phase 2: Forecasting impacts of multiple energy scenarios to get to 2050 GHG target (Q4 2020 – Q1 2021)

Phase 3: Develop 'Energy Playbook' with energy utilities, BILD, The City to identify best investment approaches to energy system and new development (Q2 – Q4 2021)

Phase 4: Align strategy, policies, and programs to implement biggest GHG reductions (Q4 2021 onward)

- **Low Carbon Financing** – Outcome: Assessment of several low carbon financing models to provide investment platform for GHG reduction actions

Phase 1: Feasibility assessment for 3 different approaches to energy retrofits for commercial and residential buildings (Q3 2020)

Phase 2: Program design of potential program for energy loans (Q4 2020 – Q1 2021)

Phase 3: Bring proposal to Council for pilot project to launch financing program (2021)

- **Project Evaluations** – Outcome: Provide input at early stages of large infrastructure projects for low-carbon solutions and energy savings

- **Current and upcoming projects:** BMO Centre, Events Centre, Arts Commons Expansion, Rivers District development opportunities (Q3 2020 – ongoing)

Demonstration – Commercial & Institutional Building Energy Benchmarking Program

- Launching later in September 2020
- The Commercial and Institutional Building Energy Benchmarking Program helps building owners and operators measure and track building energy performance

- By tracking your building energy use, you can improve efficiency, contribute to energy savings and reduce greenhouse gas emissions to help limit global climate change
- Learn more about who is eligible to participate, how to register your building and what support you can access as part of the program
- How does the Building Energy Benchmarking Program work?
- The program is designed to assist building owners and operators in measuring and tracking the energy performance of their portfolios.
- Business owners and operators are asked to voluntarily benchmark their building energy performance using the ENERGY STAR Portfolio Manager software
- Once the buildings have been benchmarked, the data will be shared with The City of Calgary and presented online through the Energy Performance Map
- This tool maps the location of each participant building and provides important information such as property characteristics, energy performance metrics and greenhouse gas emissions

2) Climate Adaptation

- Climate change poses serious material risk to Calgarians. Climate-related events are changing in frequency, intensity and duration resulting in cumulative impacts on hard infrastructure, natural systems, socio-economic systems and human wellbeing. Climate adaptation is the process of adapting our systems to reduce our risk and exposure to these cumulative impacts
- **Climate-related risk disclosure**
- Physical climate risks must be managed by both the public and private sectors. Corporate climate-related financial disclosure and public disclosure of climate risks are rapidly emerging practices that are driving investment in companies and cities as a whole
- Following the suite of Canada's leading cities, The City of Calgary is currently developing strong cross-corporate oversight and management of climate-related risks with the goal of moving towards public disclosure
- As city creators, disclosure is an important step in managing a transparent government, reducing material risk to citizens, businesses and the municipal corporation and attracting economic investment to Calgary
- As climate risk is geospatially and context specific, the Climate Team has been evolving the following projects to move us along our continuum of risk reduction:
- **Climate Data/Projections** – Outcome: Refined Calgary-specific climate hazards (daily climate variables out to 2080)
- **Longer term goals:** integration into climate hazard models and subsequent potential impact on infrastructure typologies

<ul style="list-style-type: none"> ➤ <i>Data complete with summary into redefined hazards and potential impacts on infrastructure typologies to be developed Q3 2020 to Q2 2021</i> ➤ Community Climate Risk Assessment Project – Outcome: to Identify community-scaled exposure and vulnerability to climate impacts and utilize the information to better plan and reduce vulnerabilities in our communities. <ul style="list-style-type: none"> ➤ <i>Phase 1: data collection and development of exposure and vulnerability methodologies (Sept – Dec 2020)</i> ➤ <i>Phase 2: development of GIS mapping and community reports (Q1 – Q2 2021)</i> ➤ <i>Phase 3: community planning policy (integration into multi-community plans and Guidebook for Great Communities (Q2-Q3 2021)</i> ➤ Public Infrastructure Climate Risk Assessment – Outcomes: risk reduction (measures) and return on investment to build climate adapted infrastructure for long term service delivery. <ul style="list-style-type: none"> ➤ Corporate process and assessment framework for climate risk screening, risk assessment, risk reduction measures and return on investment to build climate adapted infrastructure for long term service delivery ➤ <i>Phase 1: risk assessment process complete in 2020</i> ➤ <i>Phase 2: development of ROI methodology (Q1-Q3 2021)</i> ➤ Climate Risk Reporting– Outcomes: Financial disclosure of climate risk on the corporation and the community. A framework for annual monitoring and reporting on corporate and community climate adaptation initiatives is currently being developed and it at the very early stages. Monitoring climate events, trends and impact indicators for continuous improvement. <ul style="list-style-type: none"> ➤ <i>First reporting of new indicators to be included Climate Strategy Report Update to Council (April 2021)</i> ➤ <i>Long term goal to include financial disclosure of corporate and community risk through adoption of TCFD framework</i> 	
<p>5. New Climate Adaptation Working Group Proposal from the Co-chair</p> <ul style="list-style-type: none"> ➤ Introduction: Climate Adaptation Working Group – We would like to propose a working group related specifically to climate adaptation ➤ This would support various groups on the panel that have an interest in a climate adaptation approach to risk reduction ➤ The working group is intended to address a gap in terms of implementation of climate projections 	<p>FYI Endorsement</p>

<ul style="list-style-type: none"> ➤ This would support actions in the public sphere and in the business sector on opportunities related to land use planning, infrastructure design and the development of corporate policies, around and safety of workers ➤ The Climate Team will solicit Climate Panel members for their feedback and set up the session for interested parties (Draft Terms of Reference Att. 4) 	
<p>6. Financial Models for Energy Upgrades from Admin</p> <ul style="list-style-type: none"> ➤ Context: The Economic Resilience Taskforce was established in March of 2020 as one of five task forces to help support the City of Calgary by recommending short-term and long-term strategies related to COVID-19 but also other impacts on the economy affecting Calgary’ ability to recover. Our economy needs a lot of support and part of the work of the Task Force is to work on initiatives for the medium and long-term. Commencing in August 2020, members of the Task Force brought proposals to support Calgary’s COVID-19 and economic recovery. Numerous ideas were proposed, the first received consisted of three low carbon finance proposals which the Task Force is reviewing. This is an update on the work underway. ➤ Status from the Calgary Economic Resilience Task Force <ul style="list-style-type: none"> ➤ Based on the proposals received, the Task Force developed a framework for advancing proposals, and using this framework are reviewing three low carbon finance proposals: the first proposal is private sector driven; the second proposal is a public sector emphasis proposal; and the third is the non-profit sector ➤ The three Low Carbon Finance proponent proposals are currently under review ➤ Each proposal is characterised within four categories: Real Estate Sector, Financing/Funding; Repayment Structure; and Program Administrator ➤ The pathway for advancing proposals: The Task Force has developed a set of screening criteria for all proposals: <ul style="list-style-type: none"> • Innovation • Role of The City • Net Benefits expected • Implementation ➤ Presented an overview of the proposal ratings and viability as they relate to economic opportunity, timeline to implement, City resources and carbon reduction ➤ The Task Force is committed to stripping out bias from this process to reduce complexity and are working with external stakeholders on to develop a net benefit assessment 	<p>FYI</p>

<ul style="list-style-type: none"> ➤ The Climate Panel was asked to provide any insights or updates from their perspectives – key points will loop back to the Calgary Economic Resilience Task Force and welcomes further engagement with the Climate Panel going forward 	
<p>7. PACE and Utility Bill Financing of Energy Upgrades from Alberta Ecotrust</p> <ul style="list-style-type: none"> ➤ Introduction: Overview about the tools or the mechanisms that are outlined in proposal one in proposal two and for those familiar with PACE and Utility Bill Financing, to expand our understanding of Property Assessed Clean Energy (PACE) versus On-utility Bill Financing. (ref. Att. 3 Summary) <ul style="list-style-type: none"> ➤ Clean Energy Improvement Program (CEIP) – Alberta’s approach to Property Assessed Clean Energy (PACE) Overview of the Process: <ul style="list-style-type: none"> ➤ The Climate Innovation Fund Calgary operates in the low carbon financing space ➤ One of the mechanisms that we utilized to deploy our funds is Direct Investing in emissions reductions technologies and approaches in City of Calgary ➤ Alberta's approach to PACE is distinct as there are differences between PACE programs depending on what jurisdiction you're in ➤ Alberta has enabled a kind of PACE but there are certainly nuances to it that other PACE programs don't share ➤ Focused on the combination of financial return mixed with emissions reductions: The process involves these steps: <ol style="list-style-type: none"> 1) Building owner identifies opportunities Applies to CEIP Administrator (MCCAC) An energy audit may be required 2) A municipality and MCCAC determines eligibility based on the owner’s property tax payment history, among other factors Contractor selection, contract with MCCAC, contractor and building owner 3) Project funded (disbursements administered by MCCAC with municipality as source of capital (Post renovation energy audit may be required) Energy, cost savings and emissions benefits realized 4) Financing repaid via property tax bill (amortized over weighted average of expected useful life of measures) ➤ CEIP – OF INTEREST: <ul style="list-style-type: none"> ➤ Referenced to Commercial and residential ➤ Prescriptive measures list, some customization for commercial 	<p>FYI</p>

- Financing maximums (or double property tax bill): \$50,000 for residential properties, \$1M for non-residential (only 15% of capital costs for non-energy)
- Municipality source of capital (through existing borrowing mechanisms) but does not go towards debt limit
- Municipality manages the financing repayment through existing property tax system, similar to a local improvement charge

- **CEIP – UPDATE:**
- MCCAC designated administrator of CEIP going forward
- Town of Devon and the Town of Rocky Mountain House passed Clean Energy Improvement bylaws in late 2019 (programs not launched)
- Edmonton plans to pass bylaw this year and capitalize a small program in 2021 (borrow \$11.2 million from FCM)
- Ministerial Order to designate the MCCAC as program administrator for CEIP is anticipated to be signed on or before September 30, 2020

- **ON-UTILITY BILL - Mechanism for advancing low carbon financing**
- Pay-on bill repayment really is it is similar in many ways to a pace program in as a customer in a contractor will identify clean energy opportunities then of course the customer needs to find the financing but it would be either provided through the utility itself in these systems or you can go to another your private bank
- This mechanism is focused on the steps:
 - 1) Customer and contractor identify clean energy opportunities
 - 2) Customer selects best financing option from participating investors
 - 3) Contractor completes project and receives payment
 - 4) Administrator verifies project performance
 - 5) Customer saves money and energy

- **ON UTILITY BILL – OF INTEREST:**
- Low to no municipal administration required
- Not totally new to Alberta, compatible with current regulatory environment
- Taps into private capital not public borrowing
- No predetermined maximum upset limits on financing
- No regulatory barrier for energy related improvements
- “Off balance sheet” translating a capital expense into an operating expense

- **THE ‘NEED’ - LOW CARBON FINANCING SUMMARY:** Discussed the components needed to scale up: Opportunity Identification, Finance, Project Management, Repayment/Collection

8. Climate-related Financial Disclosure and Task Force Related Disclosures (TCFD) from Mantle314

FYI

- Introduction to TCFD – Climate-related financial disclosure and Task Force on Climate-related Financial Disclosures (TCFD) Implementation – (ref. Att. 3 Summary)
 - Provided key insights in climate risk infrastructure and sustainable finance as well as environmental leadership to help businesses, governments and nonprofits identify climate risk and maximize the advantages of shifting towards a low carbon economy.
 - TCFD started initially as a voluntary framework although we are seeing a push to make it mandatory – there are recommendations made to the Government of Canada from a Federal Panel to initiate and bring in reporting for publicly listed companies.
 - Since 2017 more than 1000 organizations globally have signed on in support committing to disclosing.
 - Top companies on the TSX are committed to TCFD in one way or another; examples include: Suncor, RBC, Manulife, TD, Hydro One, and the Government of Canada itself are TCFD signatories.
 - Benefits of adopting the TCFD Framework are it's adaptable, designed to be forward looking, and brings the future nature of issues into the present, connecting the dots around the risks and opportunities and how that impacts strategy.
 - While developing a TCFD report is important, fundamentally the process is the most valuable piece. Even if you're not going to publish anything, using the TCFD framework internally to assess and identify risks and opportunities provides value to an organization.
 - This is a very valuable exercise within both private industry and a government context. In the government context it provides oversight for multiple departments and elected officials.
 - What makes it different from a lot of the other sustainability reporting frameworks in particular is that it ties the risks and opportunities of climate change directly to financial impacts. It is about how climate change is relevant to somebody's business and how it potentially changes how the business is going to operate in the future.
 - There is a growing movement among cities to use the Framework and to produce reports that are aligned with it.
 - TCFD is really useful for ensuring you don't miss anything when it comes to reporting climate change. One of the key challenges we often see in the government space is that it's easy to silo climate into the sustainability field, however you need to realistically have it integrated into risk, into real estate and long term capital planning.
 - Discussion: How to think about climate risk:

<ul style="list-style-type: none"> ○ Physical: Acute Risk, Chronic Risk ○ Transition: Policy and Legal, Technology, Market, Reputation <p>Key features of the TCFD recommendations:</p> <ul style="list-style-type: none"> ➤ Adoptable by all organizations ➤ Designed to solicit decision-useful, forward-looking information on financial impacts ➤ Brings the “future” nature of issues into the present through scenario analysis ➤ Strong focus on risks and opportunities related to the transition to a lower-carbon economy ➤ Growing movement from cities on TCFD: Vancouver, Toronto, Montreal all producing TCFD-aligned reports ➤ Applying a climate lens helps inform short and long-term financial planning ➤ Links climate risk and opportunity with strategy and governance ➤ Ensures climate issues are not siloed within an organization ➤ Link to TCFD information: >> here ➤ Link to referenced report: >> Managing Climate Risk In The U.S. Financial System 	
<p>9. Panel Discussion and Recommendations</p> <ul style="list-style-type: none"> ➤ Key themes from discussion were captured to support the Panel Statement and Meeting Summary 	Contribute
<p>10. Upcoming Panel Meetings & Wrap Up</p> <ul style="list-style-type: none"> ➤ Events and opportunities: please forward by email to susan.stinson@calgary.ca ➤ Our next potential Climate Panel Meeting date is December 4, 2020 ➤ The Climate Team will work with the two co-chairs on the planning 	Closing

Meeting Action Items

#	Description	Responsibility	Due Date	Status
1	Contact ENMAX for future agenda item	Climate Team		In Progress
2	Chairs to follow-up with CETF on representation/participation	Climate Team		In Progress
3	Contact Climate Panel members interested in participating in the Climate Adaptation Working Group	Climate Team		In Progress
4	Contact Climate Panel members who expressed an interest in participating in the Building Energy Benchmarking Program	Climate Team		In Progress
5	Explore interest in participation in the Energy Benchmarking Program	Climate Panel		Next step
6	Provide the Climate Team with upcoming events or matters of interest - email susan.stinson@calgary.ca	Climate Panel		Next step