

## **Iowa City Climate Action Commission Agenda**

Monday, December 2, 2019, 3:30 – 5:00 p.m.

MPOJC Conference Room

Iowa City City Hall

410 E. Washington Street

### **Meeting Agenda:**

1. Call to Order
2. Welcome new members and Roll Call
3. Approval of November 4, 2019 minutes
4. Public Comment of items not on the Agenda
5. Old Business:
  - a. Request from Council for Commission to research and advise the Council on the carbon footprint of buildings of varying density and scale
  - b. Update on By-laws
  - c. Update on working groups
  - d. CAAP Annual update and metrics tracking (see attached Dashboard from Vancouver's Greenest City 2018-2019 Implementation Update)
  - e. 100-Day report released 11/14/19
  - f. Big Grove event review
6. New Business:
  - a. Request from Council for the Commission review and provide feedback of the 100-Day Report, "Accelerating Iowa City's Climate Actions"
  - b. Request for Commission to get public input on 100-Day Report
  - c. Working file storage - Ashley
7. Staff/Commission Announcements
8. Adjourn

NOTE: January 6, 2020 meeting will be held in Iowa City Public Library Meeting Room B due to a conference room scheduling conflict.

*If you will need disability-related accommodations in order to participate in this meeting, please contact Brenda Nations, Sustainability Coordinator, at 319-356-6161 or at [brenda-nations@iowa-city.org](mailto:brenda-nations@iowa-city.org). Early requests are strongly encouraged to allow sufficient time to meet your access needs.*

**MINUTES**

**PRELIMINARY**

**IOWA CITY CLIMATE ACTION COMMISSION  
NOVEMBER 4, 2019 – 3:30 PM – FORMAL MEETING  
MPO CONFERENCE ROOM, CITY HALL**

**MEMBERS PRESENT:** John Fraser (joined at 4pm via phone), Stratis Giannakouros, Grace Holbrook (via phone), GT Karr, Matt Krieger, Jesse Leckband, Katie Sarsfield, Eric Tate

**MEMBERS ABSENT:**

**STAFF PRESENT:** Ashley Monroe, Brenda Nations

**OTHERS PRESENT:** Tina Nedbalek, Nathan Evertsen

**RECOMMENDATIONS TO CITY COUNCIL:**

None

**CALL TO ORDER:**

Krieger called the meeting to order.

**APPROVAL OF OCTOBER 7, 2019 MINUTES:**

Tate moved to approve the minutes of October 7, 2019. Karr seconded the motion.

A vote was taken and the motion carried 7-0.

**PUBLIC COMMENT OF ITEMS NOT ON THE AGENDA:**

None

**REQUEST FROM COUNCIL FOR COMMISSION TO RESEARCH AND ADVISE COUNCIL ON THE CARBON FOOTPRINT OF BUILDINGS OF VARYING DENSITY AND SCALE:**

Krieger noted there was a request from Council for the Commission to research and advise Council carbon footprint buildings of varying density and scale. He noted maybe a month ago, there was some discussion about as the Council has been reviewing zoning change requests on whether a building was six stories high versus taller, there was discussion about considering impact on greenhouse gas emissions as part of density and scale for development projects. Krieger noted there's a lot of surrounding issues related such as if higher density related to building materials, the amount of carbon footprint that goes into those buildings that are larger or the potential for transportation related items, having people closer to more walkability, etc. So there are different types of emissions that relate to density and scale.

Krieger recommends assigning this topic to the buildings working group to look at closer and report back. Karr spoke to Martha Norbeck about this today, who is also a member of the buildings working group and she thought there is a heavy residential slant and probably beyond the scope of what the building working group would normally do as it is extremely complex. Krieger had a conversation with Norbeck as well because they have both worked on the commercial side and have certain resources that are available, but he feels this is a good opportunity to be able to grow the working group to bring in other voices such as architects, planners, EPA, and others who might be able to provide some research on the topic. Then use the research that exists provide feedback to Council. Krieger noted he did not see a timeline on the request from Council, but his recommendation at this point would be to have the buildings working group work on this and bring in others to that group for help.

Tate asked if this research is theoretical or actual, is it for future buildings or current ones. Krieger noted when Council created this Commission to be able to provide recommendations, however Council doesn't have to take the recommendations, but if a recommendation is backed up by evidence and reasoning they can choose to make it in part of their decision making. Krieger noted their recommendation is a comparative look, is a 6 story better than 10 story. Norbeck noted in the conversation with Krieger there may be a difference between 50 story and 10 story buildings, but it's probably not a big difference between 8 story and 12 story buildings.

Krieger noted Norbeck has had conversations with different Council members in past and resources she provided are from 3<sup>rd</sup> party organizations, not just her opinions, so now is an opportunity to expand on that information.

Monroe stated Council doesn't have a specific time frame in which this should occur, this topic was based on their discussion about bonus and density height. She feels Council is more apt to approach this particular issue once there is a report and then there would be some discussion about modifying some of the policies. This discussion would be very helpful in establishing what those policies will look like such as is it better to have dense 3 story building then dense 6 story buildings. That is the type of answer Council is looking for.

Krieger asked if this discussion is feeding into a revision of other zoning ordinances, regulations or policies. Monroe replied there is not a specific desire to do that right now, but probably starting sometime next year. Krieger stated then if they can get some updates from the builders working group for a plan over the next couple of meetings that would be best and Monroe confirmed that would be helpful

Giannakouros stated there has been attempts to talk about standards for buildings in general that City staff would use a set of regulations policies. Krieger noted this request was pretty specific, but he thinks in the future this group may look at developing or helping recommend specific actions within action areas that are already identified, especially after the 100-day report is delivered.

### **UPDATE ON BY-LAWS:**

Krieger stated there were some notes in the attached agenda item that related to this however the only thing is currently outstanding is the working groups committee's definition on how they're appointed.

Krieger noted the Commission made a motion and voted last time to accept the by-laws per staff finalization, but there were some subsequent questions asked for us to identify or provide input on before the by-laws were finalized.

Nations noted that was correct stating legal went through the by-laws and did make some changes, mostly just small changes. The remaining question was the working group part and legal said it doesn't have to be in there and she looked at all the other commissions and they don't have anything in there about working groups. However, if this Commission wants it in their by-laws, she felt it should be a group discussion. Once the by-laws are finalized by the Commission, they have to sign it and then it goes to the Rules Committee and finally to Council.

Krieger stated he looked at the bylaws of the Recreation Commission and they have one that defines committees, it's just generic committees, and it says the "committees of this commission including composition, duties, and terms shall be designated by the chairperson". Krieger added it could also be worded to say designated by vote of the Commission. It would be very broad and flexible.

Tate asked about other Commissions in the City. Monroe spoke about other Commissions and noted just by the nature of what this Commission does, and the fact that it's attached to more than one City department, makes it cross-cutting. There are ties to transportation, parks and recreation, engineering and development services so it's very broad in terms of policy and the City manager's office is a liaison to policy across the organization. Therefore, this Commission is broader than most commissions.

Leckband states it allows for flexibility and doesn't make us define standing committees in the by-laws because 15 years from now it might not make sense, and this gives broad flexibility as priorities may change.

Giannakouros asked if all members must be a liaison or that all subcommittees need a member liaison. Nations replied they are replacing that language with a broad statement. Krieger stated when they do appoint or create a subcommittee or working group, they will state who those members are including members of the Commission and others from the public.

Sarsfield asked about the future, the by-laws are rules and principles. If it is the intention to have somebody beyond the Commission in the working groups or subcommittees, we can agree as a group to a principle that it makes most sense to have a working group that includes somebody from our group as well.

Leckband stated the principal subsequently would be reflected in the composition of each form at the outset. Sarsfield agreed and stated she is okay with the broad statement.

**Krieger moved to revise item J on the by-laws to state "The Subcommittee's composition, duties and terms can be designated by a majority vote".**

**Giannakouros seconded the motion.**

**A vote was taken and the motion passed 7-0.**

*{4:02pm John Frazier joined the meeting via telephone}*

## **DISCUSSION ON WORKING GROUPS:**

Krieger noted they should discuss quickly the detailed questions about forming working groups.

- I. How will they be appointed? By the chair, majority vote?  
Majority Vote
- II. How will they be created? By the chair, majority vote?  
Krieger stated they need to make sure they have a member of the Commission on each of the working groups. They do for the building work group, the equity in education workgroup, the communications group (now called outreach), and transportation. Krieger asked everyone to send him the names of people that are on the committee's and then they can issue a formal appointment to create the committees and name all the members and see if there is a need to add additional members.

Sarsfield asked when they want to add new members, how will they be added. Krieger noted the Commission will probably seek out new people as well as others who may request to be added to a committee.

Giannakouros noted there is interest and expertise and there should be a balance of that on the committees. The committees shouldn't just be technical experts but also people who are interested in or being influenced by the impact. Krieger stated as they continue to do their outreach, they will try to identify who those other individuals are that could participate in these local groups. The original idea of setting up working groups was to work through and investigate issues and having those with their lives impacted with potential issues have a voice in the decision making.

Nations noted they are going to likely need a working group to help with the climate festival next September. Krieger agreed but noted that may depend on how that's produced. It may be a separate nonprofit entity that has its own organization that this Commission provides input to, or a member of the Commission sits on it. He added it needs to be an official nonprofit so they can get financial donations and be able to run that type of event, unless it will be purely City ran event.

Nations stated there needs to be reporting from the committees to show metrics and progress up to the full Commission. To be consistent in the future, they will all be known as working groups (not committees).

Krieger noted they also talked about having a separate student University working group but would it be better to just have students integrated into these other areas. It is probably better to have integration, rather than just a university focused subcommittee. For example, transportation, there has been discussion on the rollout of the new app that is replacing Bongo and what the City can do there, so there is crossover. A University committee might be different than a student committee. Students may be advocating for students. Krieger noted these discussions were had before the Commission was formed and organized, there were lots of thoughts and ideas.

Sarsfield noted the idea was there were a lot of students that were interested in meeting and

perhaps they could start an ambassador program to work with students and get more information with students and how they could help.

Giannakouros said they currently have an intern, Julia Krist, who wants to be used as a liaison for the climate stuff and is very interested.

Tate asked what the proportion of students are that live off-campus. Giannakouros is unsure. Tate noted there is also Kirkwood, and lots of issues with renters and there may be blind spots for. Krieger agreed and noted that is why they have a student member on the Commission but also thinks having students within each of those working groups would be great.

Holbrook stated it would be a good idea to have students and renters on the working groups because a lot of what they do is geared towards homeowners and there's a lot of things students can't do so they need to come together and be part of the conversations. She feels it is also important for them to have a voice in general across the board.

Krieger noted they do have the applications from when they were filling the role Giannakouros currently has and they asked the question about what kind issues those people would be interested in. They can now reach back out to those individuals.

Holbrook noted that Julia Krist is setting up a Sustainability Student Roundtable. Giannakouros is on that committee as well as other students from the University. Giannakouros stated it was created to be open to all students, not just those in other student government or organization roles.

Holbrook asked the question of if they want it to be just University of Iowa students or open to all other students like Kirkwood or high school students. She is not referring to the roundtable that is already started but if they were to create a committee themselves for students. Holbrook noted that high schoolers don't really have a space in this conversation because they cannot be appointed to a commission since most are not 18 years old, but they could be on a working group. Krieger agreed and noted the working groups are open to anyone.

Giannakouros noted Holbrook raised a good point, his concern is for all the high schoolers and Iowa students to be their own working group and detached from other working groups such as transportation or building. That group would need to be structured so they are not depriving a student of an opportunity to be on transportation and are just in a general student malay. This is a huge contingency that is not always addressed.

Krieger agreed and said as they field the interest from high school groups or high school individuals or any other students they can see if they fit into one of the working groups. They don't want to assign 20 students to one working group, it needs to be controlled a bit.

Giannakouros noted that high school students and University students may not have the same set of interests. If there is going to be just a student working group, what is the function of that group. Krieger agreed which is why they want to keep the students integrated into the already formed working groups.

III. What are duties of the commissioners and working groups?

Krieger stated when they first formed the working groups they had what they called charge sheets, and were expecting each working group to set goals. This Commission can also assign issues for the working groups to work on, but the working groups should be somewhat self-governed. For accountability the working groups should report monthly to this Commission. Krieger noted the buildings working group does not have a formalized charge sheet yet, they've been a little bit fluid in their approach. Outreach does have a formalized charge sheet, a strategic plan.

Tate asked about the student positions and asked if there was an option to reach out to those that weren't selected to gauge interest in working on a working group. Nations stated they should have names of people that wanted to join that they could reach out to.

IV. How often will they meet?

Krieger asked if the Commission should set expectations on how often the working groups meet. If the Commission is asking for monthly reports, the working groups should meet a minimum of once a month. Tate said it will depend on the topic, the need for meeting could ebb and flow.

V. What working groups are needed and a brief description of what they are tasked to do?

Buildings, Outreach, Equity and Adaptation, Transportation

Krieger suggested each of the existing working groups develop a brief description of the working group, and what is tasked with, and then bring that to the next meeting.

*{Holbrook left the meeting}*

**CAAP ANNUAL UPDATE:**

Nations noted in the packet here was a two-page infographic, it will be posted online. She asked if everyone was getting the sustainability newsletter because it is full of climate stuff, and there's a link to it on the website, posted today.

Nations stated it is just a short infographic, it's obviously not all 35 actions or anything real in depth. When we started to put together the information about what they've done in the first year, most of what they had was City data. They went through the metrics of everything for all 35 actions, the Commission will receive the 35-action report in their information packet next month, it's been very time consuming and it's really hard to track what other people are doing. Nations suggests a reporting and tracking group to think about how they can show success because the City knows what the City's done but that doesn't capture all of the data. For example they don't know how many people have like done energy efficiency work on their home or things like that.

Nations reiterated the report is skewed to the City and noted the City is only 5% of the community emissions. What would help is to have the individual working groups speak to most of those action items and help contribute to that.

Tate asked why the flyer doesn't say it is just the City's actions, not what the community did. He feels it needs to be stated specifically as it is such a central point. Nations feels like it does note it is the City Government's actions.

Nations wants to start a file to keep an update of what they want in the next climate action plan because there are already suggestions and the list will keep growing.

Tate asked for Nations to let the Commission know what elements she'd like them to focus on in their review of the action plan. Nations will write a cover memo of the actions when the Excel file is distributed.

Krieger discussed process, not just for this but also multiple things that may potentially come to Commission for review, and things that also would get posted to the public, if it is something City Council or staff are looking for a recommendation or review by the Commission, that it at least come to the Commission before it's made public. If it is made public and they haven't even reviewed it yet or receive the document, then becomes challenging to answer questions from the public during our meetings or to speak about it intelligently if they are doing outreach.

Nations noted some things may not be ready for review of the Commission prior to it going to Council and then Council asking the Commission for input. However since the Climate Expo is before the Commission meets again, she is going to send that so if someone is at the Expo and gets asked about it. Council actually hasn't asked the Commission to review it yet. Nations also stated when she adds something to their packets, it's instantly public.

Krieger asked if it could just be labeled as a draft document. Additionally, each document may also go to the working groups, well the working groups are not official meetings because there's not a quorum, it's fewer than six members of the Commission. They could review it a draft document without having to make it public. Nations could then divide up the document into pieces for the specific work groups.

Tate noted the working groups that are both thematic in terms of these dimensions or initiatives, but then there are also the cross-cutting ones of equity and outreach. How will those concerns be reflected in edits of this report? Sarsfield said Krieger is suggesting the Commission get a draft copy so they can look at it another time, especially the equity workgroup. Krieger would like to be able to see the documents they are working on as a group without everything going public because a lot of it is ill formed and needs clarification. Monroe noted that the City Manager will meet with just a couple of Council members about topics that might need some preparation before they see the final documents in the packet, so that might be one way to go about it and have a smaller group that's not in any way a quorum to review things and ask questions and provide feedback before it's public.

Tate said then in this instance the whole document could go to the equity working group because they need to see it all. Monroe said staff could get more guidance from the City on how best to proceed with on this subject. Tate thinks it is important because with figures in particular sometimes in draft the numbers are erroneous, and those numbers can change 10 times before the final document.

Nations stated this is the 35 actions of the plan, the original plan, not the new plan. She worked for many weeks trying to get baseline data to show where progress was on these 35 actions



and then the 100-day report happened, so she got kind of waylaid. So data that was collected is baseline data for the end of 2018 since the Climate Action Plan was finished in September of 2018. Next year we will collect data for 2019 to see if we can show progress. Tate mentioned that he remembers in one of the previous iterations there as a column along the lines of impacted equity with a scale of high, medium and low for each of the actions.

Krieger noted there were a lot of documents provided to help with tracking and reporting. Monroe has a copy of the equity spreadsheet for each of the actions and will find it and distribute to the Commission.

Tate stated this is a multi-criteria problem and shouldn't reduce everything to prioritization based on emissions data alone. Sarsfield agreed, this should be human centered, not number center.

### **100-DAY REPORT UPDATE:**

Monroe gave an update, as Krieger and Nations indicated they will send the 100-day report to the Commission and City Council in the Council packet on November 14, everybody, including the media, will see it. What they've been doing is trying to develop specific actions that they can stem from the original Climate Action Plan and all of the five categories within there. Monroe went through the Table of Contents as it is drafted now and gave a sense of what's coming and what they're working with. Currently there is a staff review going on right now, fine tuning all the things, working through it, etc. There is a short introduction, the August 6<sup>th</sup> climate crisis resolution, greenhouse gas emissions summary for 2018, key stakeholder initiatives (pinpointing specific community partners to work with), initial plan actions, City Actions (the five categories and the components within those categories). They are looking at what kinds of policies to create, are there regulations that apply beyond the City, are there incentives to be established, are there educational components, and then what projects are either currently or planned that could further the goals. Monroe stated for each of those categories they have these aspects that they are looking at and proposing. Next they talk about equity and how does the Equity Plan fit into what is proposed and how the Commission deals with that, how staff deals with it, how it's integrated in all of what they're trying to accomplish.

Monroe said there is a section of the report on City government roles and responsibilities, the Council's responsibilities, staff's responsibilities, Commission's role and responsibilities. There is a section on funding, and there is a scenario breakdown, what it would look like if these things were implemented. Finally, there is a report summary. The Commission will look at the report, the public will also be able to weigh in on this, as will Council. They are currently going through staff concerns and questions before it gets made public. This Commission especially is needed to review it and see what makes sense and provide guidance on how to proceed. The plan is Council will look at the report, review it, and will talk about it at the work session following the November meeting.

Krieger stated then the expectation is Council will provide potentially some perspective on what they want feedback on from this Commission. Monroe confirmed that was correct, noting Council may right away identify products or issues or ideas that they want to address for sure and with other things ask the Commission for a recommendation about what we to.

Monroe said the packet will go out on November 14th with the report, and then discuss it at the November 19<sup>th</sup> meeting. Krieger asked if there should be some members of the Commission at that meeting to hear directly from them. They won't be able to speak to anything at the meeting but they can at least hear Council feedback.

*{Monroe left the meeting}*

### **PLANNING FOR BIG GROVE EVENT THURS. NOV. 21ST :**

Nations noted the event is planned at Big Grove, she feels that perhaps it was a mistake to call it an expo because many have been asking if they can have a table there and there's not very much room. There will be a few organization at the small high tops and there will be a City table and Big Grove food will be available and it's all plant based. The beer is plant based too, but while the City is buying the food but they are not buying alcohol for anybody. They've had about 400 people interested on Facebook and are expecting 100 to 200 depending on weather and other factors. The event is in the one party room and it's going to be shut off from the rest of the venue, there will not be any PowerPoints, but there will be a stage and a mic. The event will begin at 5:30pm for people to mingle and talk, and at 6:00pm, there will be some short talks from people, no lectures or long speeches, every talk will be five minutes or less, a City's communications staff will be the emcee. Nations will give an overview account, some Council members may say something, some partners like Big Grove talk about what they've done. There will be different people in the community talking about what they have done, it will be a collaborative community event and not heavy city but more about the partnerships.

Krieger asked if it would be open mic where others who were not scheduled to speak could speak. He noted it could get chaotic if that happens. Nations stated the original idea was to have one-minute open mic times but the group mentioned maybe it would be better to have wipe off boards where people can put their thoughts or questions. Overall the event will be open and flowing and they don't want anybody feel like they were excluded. She is telling people there will be a climate festival next year in September where more people and more tables will be available so more people can participate.

Krieger asked if there would be a sign-up table for people who want to get more involved. It is a good opportunity to bring people in and let people voice concerns.

Tate asked about people attending who are under the age of 21. Nations said Big Grove is open to all ages and the event will be done way before 10:00pm when the City ordinance takes effect.

Krieger asked if City staff will be identified as City staff with badges or shirts. And should Commissioners be identified as well. Nations can make nametags and would also like a Commissioner to speak at the event. Options due to schedules are Tate, Sarsfield or Holbrook.

There was discussion on the venue of the event and recognizing it is a bar, after work. Nations remarked hopefully they will reach different people than they usually do at an event similar. Everyone can come, everybody's welcome, it's a public issue.

*{Sarsfield left the meeting at 4:58pm}*

**ADMINISTRATIVE:**

Working File Storage: Monroe was going to give an update, since she has left this will be tabled to the next meeting.

Meeting Room Options: Nations did her homework on this issue and checked out all the different rooms that are in the City. In the library the only room with the computer is meeting room A with the big screen, all the small ones have no computers, but there are TVs that can be hooked in like the Helling Conference room. The Rec Center doesn't have any rooms with computers or anything, plus it's a little chilly because they is no carpet and the chairs aren't as comfortable, so the Rec Center is probably not a good option. There is the Senior Center, and there is a commission that meets there, but she hasn't seen the room and hasn't been able to get that arranged yet. Within City Hall this room has the best kind of computer and table but it's up to the Commission on wherever they want to meet. She has reserved this room for next six months, just in case. The Commission agreed they are okay with the current room for now until they outgrow it. If more members of the public attend the meetings they might need a bigger space.

Krieger noted the applications for this Commission close this month, Council would appoint the three new members to begin January 1. Nations and Commission members have been reaching out to people to get them to apply. Would like to have somebody from the Chamber as well as somebody from school system and from county public health.

**STAFF/COMMISSION ANNOUNCEMENTS:**

Nations went to the Urban Sustainability Directors Network meeting in Detroit.

**ADJOURNMENT:**

Krieger made a motion to adjourn.

Giannakouros seconded the motion.

A vote was taken and the motion passed 6-0.

CLIMATE ACTION COMMISSION  
 ATTENDANCE RECORD  
 2019-2020

(Meeting Date)

NAME	TERM EXP.	10/7/19	11/4/19	12-2-19										
John Fraser	12/31/20	X	X											
Stratis Giannakouras	U of I representative	X	X											
Grace Holbrook	12/31/21	X	X											
G.T. Karr	12/31/20	X	X											
Matt Krieger	12/31/20	X	X											
Jesse Leckband	MidAmerican representative	X	X											
Katie Sarafield	12/31/20	X	X											
Eric Tate	12/31/21	X	X											

KEY: X = Present  
 O = Absent  
 O/E = Absent/Excused  
 NM = No meeting  
 --- = Not a Member

# DASH-BOARD

<sup>1</sup> Made three totals for baseline year (40% of trips in 2008) was based on data gathered through a TransLink "Trip Diary" survey that is conducted about once every 2 weeks. To obtain more regular statistics, the City began an annual survey of Vancouver residents that is slightly different in methodology but is believed to better capture the full range of travel by residents. This will be used to measure both of the Green Transportation Indicators going forward.

<sup>2</sup> Solid waste data is compiled first at a regional level and then at the city level. As a result, Vancouver's data is always one year behind the reporting period.

<sup>3</sup> Vancouver's Park Board is improving the measurement for five-minute access to green space. The City will transition to the new measurement in Vancouver's next environmental plan.

<sup>4</sup> Food assets include: number of community garden plots, farmers markets, community orchards, community composting facilities, community kitchens, community food markets, and urban farms.

<sup>5</sup> Air quality metrics are measured by Metro Vancouver from data from one monitoring station at Robson Square in Vancouver. The Kitsilano station is offline and awaiting relocation. Four indicators of air quality are used for comparison to world standards. Four indicators are used for comparison to world standards. Four indicators are used for comparison to world standards.

<sup>6</sup> 24 hour average particulate matter (PM 2.5) concentration >25 µg/m<sup>3</sup>, one hour average nitrogen dioxide (NO<sub>2</sub>) concentration >200 µg/m<sup>3</sup>, 24 hour average sulphur dioxide (SO<sub>2</sub>) concentration >20 µg/m<sup>3</sup>, and eight hour ground-level ozone (O<sub>3</sub>) concentration >52 ppb.

<sup>7</sup> The 2016 green jobs study refined the method for calculating the number of green jobs, resulting in a change in the 2010 count. Methods have been reviewed by Delphi Group, and targets going forward will be based on this recalculated total.

<sup>8</sup> "People empowered to take action" are defined as those who are enabled by City-supported programs to change their lifestyle or are implementing a community project that helps Vancouver achieve its Greenest City goals as a result of support provided by a City-led or City-supported program. Examples include learning to preserve food or ride a bike in a community centre class, as well as people involved in projects supported by the Vancouver Foundation and City of Vancouver Greenest City Fund. The definition excludes people participating in a dialogue or consultation, attending an event, using infrastructure (e.g., bike lanes, food scraps collection), or receiving a personal incentive (e.g., from energy retrofits).

<sup>9</sup> Without universal water metering of our civic facilities, metric tracking is a best estimate only, based on available data and extrapolation. Accuracy will increase through continued water meter installations at prioritized City buildings.

GOAL AND TARGETS	INDICATOR	BASELINE	2018	CHANGE FROM BASELINE	IMPROVED OVER BASELINE	2020 TARGET
<b>CLIMATE AND RENEWABLES</b>						
Target: Reduce community-based greenhouse gas emissions by 53% from 2007 levels by 2020.	Total tonnes of community CO <sub>2</sub> e emissions from Vancouver	2,765,000 tCO <sub>2</sub> e (2007)	2,440,000 tCO <sub>2</sub> e (2017)	-12%	Yes	1,865,000 tCO <sub>2</sub> e
<b>GREEN BUILDINGS</b>						
Target 1: Require all buildings constructed from 2020 onward to be carbon neutral in operations. <sup>1</sup>	Kilograms of CO <sub>2</sub> e per square metre of newly built floor area	20.7 kgCO <sub>2</sub> e/m <sup>2</sup> (2007)	11.8 kgCO <sub>2</sub> e/m <sup>2</sup> (2017)	-43%	Yes	carbon neutral
<b>GREEN TRANSPORTATION</b>						
Target 2: Reduce energy use and GHG emissions in existing buildings by 20% over 2007 levels.	Total tonnes of CO <sub>2</sub> e from all community buildings	1,585,000 tCO <sub>2</sub> e (2007)	1,415,000 tCO <sub>2</sub> e (2017)	-11%	Yes	1,270,000 tCO <sub>2</sub> e
Target 1: Make the majority of trips (over 50%) by foot, bicycle and public transit.	Per cent mode share by walk, bike and transit	40% <sup>1</sup>	53% of trips	+13%	Yes	50% of trips
Target 2: Reduce average distance driven per resident by 20% from 2007 levels.	Total vehicle km driven per person	5,950 km (2007)	3,690 km	-38%	Yes	4,760 km
<b>ZERO WASTE</b>						
Target: Reduce total solid waste going to the landfill or incinerator by 50% from 2008 levels.	Annual solid waste disposed to landfill or incinerator from Vancouver <sup>2</sup>	480,000 tonnes (2008)	347,000 tonnes (2017)	-28%	Yes	240,000 tonnes
<b>ACCESS TO NATURE</b>						
Target 1: Ensure that every person lives within a five-minute walk of a park, greenway or other green space. <sup>3</sup>	Per cent of city's land base within a five-minute walk to a green space	92.6% (2010)	92.7%	+0.1%	Yes	95%
Target 2: Plant 150,000 additional trees.	Total number of additional trees planted	-- (2010)	122,000 trees	+122,000	Yes	150,000 trees
Target 3: Restore or enhance 25 hectares of natural areas between 2010 and 2020	Total hectares of natural areas restored or enhanced	-- (2010)	27 hectares	+26	Yes	25 hectares
Target 4: Increase canopy cover to 22% by 2050.	Per cent of city's land area covered by tree-leaf canopies	18% (2013)	Survey results available in 2020	--	--	22% (2050)
<b>CLEAN WATER</b>						
Target 1: Meet or beat the most stringent of British Columbian, Canadian and appropriate international drinking water quality standards and guidelines.	Total number of instances of not meeting drinking water quality standards	0 instances (2006)	0 instances	0	Yes	0 instances
Target 2: Reduce per-capita water consumption by 33% from 2006 levels.	Total water consumption per capita	583 L/person/day (2006)	456 L/person/day (2016)	-22%	Yes	390 L/person/day
<b>LOCAL FOOD</b>						
Target: Increase city-wide and neighbourhood food assets by a minimum of 50% over 2010 levels.	Total number of neighbourhood food assets <sup>4</sup> in Vancouver	3,344 food assets (2010)	4,960 food assets	+49%	Yes	5,016 food assets
<b>CLEAN AIR</b>						
Target: Meet or beat the most stringent air quality guidelines from Metro Vancouver, BC, Canada and the World Health Organization.	Total number of instances of not meeting air quality standards for ozone, particulate matter (PM <sub>2.5</sub> ) nitrogen dioxide and sulphur dioxide from both the Kits and Downtown stations combined <sup>5</sup>	27 instances (2008)	227 instances	+200	No	0 instances
<b>GREEN ECONOMY</b>						
Target 1: Double the number of green jobs over 2010 levels.	Total number of green jobs	18,250 jobs (2010) <sup>6</sup>	24,700 jobs (2016)	+35%	Yes	36,500 jobs
Target 2: Double the number of companies that are actively engaged in greening their operations over 2011 levels.	Per cent of businesses engaged in greening their operations	5% of businesses engaged (2011)	9% of businesses engaged (2017)	+4%	Yes	10% of businesses engaged
Target: Reduce Vancouver's ecological footprint by 33% over 2006 levels.	Total global hectares per capita	4.27 (2006)	3.40 (2015)	-20%	Yes	-33%
<b>LIGHTER FOOTPRINT</b>						
Target: Reduce Vancouver's ecological footprint by 33% over 2006 levels.	Total global hectares per capita	4.27 (2006)	3.40 (2015)	-20%	Yes	-33%
<b>GREEN OPERATIONS</b>						
Target Zero Carbon: 50% reduction in GHGs from City operations from 2007 levels	Total tonnes of CO <sub>2</sub> e from City operations	495,000 tCO <sub>2</sub> e (2007)	220,000 tCO <sub>2</sub> e	-56%	Yes	247,500 tCO <sub>2</sub> e
Target Zero Waste: 70% waste diversion in public-facing City facilities, and 90% waste diversion in all other City-owned facilities	Total diversion rate (public) Total diversion rate (other)	65% (2013) 85% (2013)	86% 90%	+21% +5%	Yes Yes	70% diverted 90% diverted
Target Healthy Ecosystems: Reduce water use in City operations by 33% from 2006 levels	Total water use by City facilities (m <sup>3</sup> ) <sup>9</sup>	2,600,000 m <sup>3</sup> (2006)	2,329,000 m <sup>3</sup>	-10%	Yes	1,740,000 m <sup>3</sup>

## GREEN OPERATIONS

Number of people empowered <sup>8</sup> by a City-led or City-supported project to take personal action in support of a Greenest City goal and/or to reduce levels of consumption (cumulative)	600 people (2011)	29,100 people	+28,500	To be determined
Total diversion rate (public)	65% (2013)	86%	+21%	Yes
Total diversion rate (other)	85% (2013)	90%	+5%	Yes
Total water use by City facilities (m <sup>3</sup> ) <sup>9</sup>	2,600,000 m <sup>3</sup> (2006)	2,329,000 m <sup>3</sup>	-10%	Yes