

# CAMBRIDGE CLIMATE EMERGENCY CONGRESS

## FIRST MEETING – DECEMBER 12, 2009

### GROUP REPORTS

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## Introduction

--By Todd Schenk

On December 12<sup>th</sup> 2009, 99 Cambridge residents convened as the Mayor's Climate Congress to discuss the climate emergency. Most delegates were chosen with an eye towards assembling a representative cross section of Cambridge society, others based on their institutional affiliation. The challenges and responsibilities the City of Cambridge and its residents – both individual and institutional – face were the key issues of the day. The Congress is an innovative forum, born of citizen initiative but fully embraced and sponsored by the Mayor, Council and Staff, illustrating how serious the issue is, but that the will exists to do something about it. This was the first of two scheduled meetings, the next following on January 23<sup>rd</sup>.

The day included a mix of short presentations designed to frame and contextualize the issue, and breakout group discussions. A copy of the agenda is attached as *Appendix XIII*. The culmination of the group discussions represents the product of the day, and is the focus of this report. The summary below begins with a synthesis of key findings from across the twelve groups, and is followed by key findings or takeaways that each group arrived at. The latter is taken from the short presentations each group made at the end of the day, with some additional material added based on a review of their notes. The largely unedited notes that each group produced are attached as *Appendices I – XII*.

## Key Overarching Findings

A range of issues and ideas emerged across groups, suggesting that these are concepts with wider resonance or support. There was concern across the board that the City set a reduction target back in 1999 (20% by 2010), but instead has witnessed a 27% emissions increase. Many interpret this as a sign of failure, though it was pointed out that Cambridge experienced a tremendous amount of growth during this period, particularly in energy-intensive sectors like laboratories. Nonetheless, to many this is a sign of how poorly we are doing in the face of what is a real emergency that is already having serious consequences. Many also want more information on who is responsible for this increase – by sector, individual institution and so on – and how it can be addressed.

Failure to reach the previous Cambridge target – and others like it – has led many to conclude that broad long-term goals are relatively useless. Instead, **groups proposed approaches to developing and mobilizing around shorter term, personalized and tangible targets**. A couple of groups suggested that these should be community-wide efforts, helping the range of individual and institutional community members to set personal goals that they can work towards with their peers in the community monitoring. Robust information management tools could help to make these goals meaningful and measure and track progress, while games, the media and other social marketing and communications tools can be used to increase participation and attention. In general, there

was sentiment that a **culture of sustainability needs to be fostered**, with citizens rallying around the climate change issue in the same way as American society mobilized in response to World War II. This requires both a much greater emphasis on information dissemination, targeting the range of unique groups in the community, and then the much more difficult task of engendering deep cultural, and subsequently behavioral, change.

Recommendations made around how emissions might be reduced ranged widely by sector and scale. Given the overwhelming share of emissions attributable to **buildings** in Cambridge, it is unsurprising that they received attention. Ideas included: Training teams to conduct energy audits and perform renovations; changing incentives and educating so that building users (i.e. employees) are motivated to change their behavior; supporting mortgage and loan instruments, and tax policies, that encourage retrofits and efficiency; and incentivizing landlords to care about the efficiency of their properties (e.g. by making past utility rates available to prospective renters).

Many recommendations were also made in the **transportation** sector. Delegates were particularly interested in strategies to shift the population away from private automobiles and towards walking, cycling and public transport. Ideas included: Making parking more difficult by, among other things, reducing the number of spots and sharply increasing the price of resident parking permits; improving pedestrian and cycling infrastructure; and increasing the number of buses and their hours of operation.

To many, meaningfully addressing the climate change issue is contingent on **personal behavior change**. Diet changes like eating no (or less) meat and sourcing locally were proposed. The notion that we all need to consume a lot less in general was also raised.

On the other hand, many suggested that this is also a **broader systemic problem** that cannot be addressed at the individual level alone. According to delegates, the City of Cambridge has important roles in incentivizing and/or mandating change among community members. It naturally has a central role in changing the infrastructure as proposed above. The City should also lobby higher levels of government for changes that will both empower it to take more aggressive action, and push actors in the right direction in their own right. Finally, many felt that the city is doing some things right, but could do much more to reduce its own emissions. Examples raised included converting the vehicle fleet to natural gas and controlling temperatures in its own buildings.

On the question of whether the City, and other levels of government, should be counted on to foster change in a top-down manner, or citizens should engender change in a grassroots bottom-up fashion, there was significant debate. To many, the answer is both; citizens need to push governments for change and find creative ways to respond to new regulations, incentives and norms, but governments have an important role in listening to their constituencies and putting these regulations and incentives in place. It was pointed out that the Congress itself is the fruit of citizens and the City working together.

## Key Findings By Group

--By Todd Schenk

### Group 1

- There has been a 27% increase in emissions when there should have been a decrease. We need to know where we went wrong. Which sectors are responsible for the increase and why? Need to bring those responsible to the table (Universities and corporate).
- Need to do a more systematic analysis of the best practices out there and identify which are most relevant for Cambridge.
- Should adopt a transparent process that identifies optimal choices by starting with a common definition of the problem and addresses them with all stakeholders, from the least to the most powerful. Requires an education of the problems so that we are all on the same page.
- Should create an ongoing city funded and run workshop to train and enable people to weatherize their homes; this could be a subset of the DPW. The workshop would provide the equipment and supplies needed for weatherization.
- Should also consider starting a ‘Temperate Zone’ program in which buildings are neither heated nor cooled during the fall and spring when the climate does not demand it, saving resources. The program could possibly start small and pick a month that would be easy to get agreement on like May or June.

### Group 2

- Increase the knowledge base of the entire Cambridge community, reaching all populations, including recent immigrant communities. Targeted communications plans should be developed.
- Develop a plan to measure greenhouse gas emissions. Really sound metrics that make sense to everyone but are comprehensive, looking at the lifecycle implications, should be developed. Part of the exercise might involve identifying three major employers and measuring their transportation-related emissions.
- Study and publish the response to the 1999 goals and what prevented us from meeting them.
- Provide tax incentives for better performance.

### Group 3

- Transportation funds should be devoted to pedestrian-friendly infrastructure and public transit. The city should eliminate on-street parking on major roads and link to better cycling infrastructure. Residential parking permits are also far too inexpensive

and should be raised, earmarking the funds for improved public transportation and cycling infrastructure. A goal should also be to reduce, and potentially completely eliminate, all on-street parking.

- Should conduct lifecycle analysis when the city is making purchasing and expenditure decisions so that they are not just short-term accounting. The City of Cambridge can also leverage it's supply chain to demand that every firm supplying to the city meet some of these green requirements (within the RFP process).
- Setting long-term goals does not work. Instead, need to monitor and set a goal for the coming year—needs to be measurable and attainable.
- Given government inaction, a bottom-up model of education and change is required.
- Parks, intentional community forums, festivals, and so on provide the social infrastructure to do green things.
- Work with landlords to improve the efficiency of their buildings through incentives, requirements, trainings and so on.
- Encourage personal behavior change, like less meat consumption and public transport, walking or biking instead of driving.
- The city should lead by example (e.g. many city hall rooms are overheated, wasting energy).
- Implement pay-as-you-throw billing to incentivize a reduction in household trash.

#### Group 4

- The city should set two-year credible, measurable goals. We already have goals – 20% by 2010 – and we haven't met them, people don't know them. We need one concrete goal we can all see, to help people connect the dots – and a plan to reach it. We then need to form short-term sub-goals around that central goal, with physical tasks (e.g. number of houses retrofitted), not just intangible percentage emissions cuts.
- The city should support energy performance mortgages, leveraging private sector lenders. The city could take out a bond, then loan funds to residents for efficiency and clean energy, and lobby the MA government for enabling legislation so people can repay with property taxes.
- Need to institute proper pricing mechanisms, providing transparency on the true costs
- Should be harvesting best-practices from other cities: Watching, applying, improving, and sharing lessons learned
- Education and strengthening community, and the local economy
  - Reaching out to churches, schools

- Need to balance of adaptation and mitigation
- Need leadership and means for the community to communicate to the leadership
- Cambridge can and should be a national leader in this area. Need to do a better job of leveraging the resources we have, including the universities.
- Cambridge should be doing more to lobby state and federal representatives to take action.
- Change from a car-centric to a people-centric city by making streets for pedestrians and cyclists only (pedestrian arcades).
- Need a stronger climate change task force.

### Group 5

- Discussion about how the issue is presented, with some emphasis on how climate change is an emergency and we must act immediately (or may be too late), while others concerned that when the mood turns to frustration and despair people tend to zone out and/or give up.
- Need to integrate information throughout the city, from city employees to students, to seniors.
- Aim should be zero emissions and zero waste. There are examples of firms out there striving for this (like DuPont).
- Work can and should be done in the area of traffic and alternative transportation. Possibilities include banning or eliminating parking in certain areas and providing more bike lanes and bike parking, including via a new ordinance that buildings must provide bike parking.
- The group agreed that the city is heading in the right direction, but is not doing enough or the right things if GHG emissions have increased.
- Need mix of both public (i.e. government) and private (e.g. HEET, Green Decade) action to meet the challenge.
- Comparison to the city's conventional emergency response system, which is very strong. The city needs to invest more staff and money in this emergency.
- Need to consider the food system, with more community gardens created, more funding for farmer's markets, incentives for greenhouses, urban bee keeping and fruit bearing trees in parks being just some of the options.
- Should pay attention to waste and waste management, reducing packaging, introducing more comprehensive recycling (e.g. batteries and CFLs), and so on.

- Should look at potential for renewable energy in the city.

### Group 6

- Need to consider the ‘positive feedback loops’ like the carbon that is being released from melting permafrost, which is likely to highly exacerbate the problem.
- We need to consider not only how we ‘think’ but how we ‘feel’, as we are biological beings after all. Focusing on these emotional components can help us find ways to address the problem.
- This is not an individual issue in many ways; there needs to be larger top-down decision-making and effort at the municipal and national levels. It’s not enough to have individual change - we need citywide and nationwide change. On the other hand, there are personal lifestyle changes which by themselves do not amount to much but do create social pressures. Events like this Congress can, for example, make a spark.
- Education is huge, but not a lot happening in schools. The relationship between students and parents is a great way to catalyze. We have to take advantage of structures that are in place.
- Idea that Cambridge could come up with a nine-month plan engaging people through the media, signage, public talks, schools and so on, reaching everyone and asking them to make specific short-term reduction commitments. The city could provide guidelines and later collect and compile the results.
- Cambridge should move in the direction of economic change, creating a locally based economy.
- Should have neighborhood congresses to export what we are doing here.
- Should have a “transitional city” exercise to brainstorm what Cambridge will look like in the future, or an “ideas competition for a plan for a post-carbon Cambridge.”
- Should institute an energy audit service in which a thermal imaging scanner is used to show people how much energy their houses are really leaking.
- For these efforts, should look at innovative city-citizen cooperation, like the Congress.
- Should encourage walking and biking. One suggestion is having ‘Streets of the Year’ where people work to enhance a street artistically so it’s more fun to go through, encouraging people to walk and bike through it to see the sights.
- Approaching people from a financial perspective, for example calculating how much they would save by turning the thermostat down and asking what they would do with that extra money, encouraging them to use it in a way that does not increase carbon footprint.



## Group 7

- While cycling and walking are part of the solution, and should be encouraged, concern that warming and more severe storms could actually make these modes of transport less attractive, counteracting attempts to promote.
- For the community's disadvantaged, CC could exacerbate the root causes of their social/economic vulnerabilities, leaving them more marginalized. Or the city could take this as an opportunity to tackle the root causes and raise everyone in the community up with new job initiatives. On the same note, we must consider the most desperate – including those recently out of prison and those on welfare – that have more immediate concerns.
- Where there is a will, there is a way. For World War II, America changed its factories overnight. Change is not the problem. The will to change is.
- Although Cambridge isn't doing enough to combat CC, the government has come a very long way in 20 years. Recognition of that makes moving forward easier and eases tensions. However, Cambridge is still not ready to put up the windmills and residents want to see real investment in alternative energy.
- Should focus on making connections to the community via various programs, from green jobs to increasing the focus on climate change in our schools.
- The media should be more involved, including in these meetings. An effort should be made to get them out for the January meeting.
- As a community, we need to break down cultural barriers and meet on our neighborhood streets. Follow examples like California's neighborhood wardens for earthquakes. Cambridge could give someone the responsibility to go door-to-door to inform neighbors about opportunities for retrofits and so on.
- Implement programming, particularly in low-income neighborhoods, to initiate the conversation about the community's GHG footprint. While all socioeconomic levels require outreach, low-income residents are often forgotten about in the CC discussion. However, they must also reduce their footprints and/or adapt.
- Do a major door-to-door campaign informing homeowners of what they can do – detailing the costs, savings, amortization period, etc. Make the incentives and city resources more real to the average person. If there are existing resources, such as the Smarter Cambridge website, people don't know about them and these need to be communicated more effectively.

## Group 8

- 100% awareness of the climate emergency by 2010, leading to citizens movement with action steps.
- Set annual GHG reduction goals and report back detailed information about measurement in a clear and understandable way.
- Drive less and walk/bike/use public transportation more. To promote this, establish government policies to create incentives, and work to raise awareness (e.g. Low Carbon Day or stores close on Sundays).
- Information on Cambridge's climate goals is not well distributed, nor well understood. Increasing understanding of these goals may help promote behavior change.
- 2050 goals are necessary, but short term and long-term goals and assessment processes are also necessary. In addition, goals should be set around awareness.
- Need to emphasize raising awareness. We need to get attention first, and then emphasize the importance of taking specific simple steps.
- Need to think about the diversity of the population living in Cambridge. The well educated are present today and may be aware of climate change, but others that are not educated are less aware. Let's not assume that everyone has an understanding.
- This is a general discussion and it is set up as a general discussion because we lack the expertise to give specific best practice advice. After establishing the general goals, need people to be responsible for each sector and figure out the best ways to come up with best practices and tools.

## Group 9

- We have very large institutions and companies that use vast amounts of energy. Cambridge has the highest proportion of people who walk to work, so we want these companies to be here rather than in suburbs. However, to reduce GHG emissions from energy use we have to focus on these big users.
- The city should create incentives for action, make it easier and raise awareness of what is possible. For example, it should accelerate the adoption of stretch building codes so that people can energy-proof their houses, perhaps financing via NSTAR (with payments included on utility bills).
- There should be a program through which people can borrow kilowatt monitors (e.g., Kill-A-Watt) from the libraries to better understand where and when they are using energy.
- Improve public transit by, among other things, increasing the hours and range of service and making it easier for cyclists to access.

- Encourage bicycling by improving infrastructure, including more and better lanes and parking facilities, and promoting bicycle safety.
- Promote walking by creating more pedestrian streets and improving crossing infrastructure (signs, signaling and so on).
- The city vehicle fleet should be converted to natural gas, and city filling stations should accommodate private natural-gas vehicles.
- Resident parking permit prices should be increased from the current \$8 rate, but with an eye towards equity issues.
- In terms of buildings, the largest consumers are commercial facilities, like labs. Need to find ways to encourage them to improve their performance, which is difficult given the disconnect between those that use the spaces, those that manage them, and those that pay the bills.

### Group 10

- Need to change community norms and expectations such that it is all right to tell your neighbors what they can and cannot do in the realm of climate change-related behavior.
- We should be empowering change through better distribution of, and ability to interact with, the data. People are familiar with using numbers and scales, from sports scores to the stock market, to understand things and make decisions.
- There are things to praise about city life – we live in smaller spaces, walk rather than drive and so on. We need to do more to let people know that they are doing something and give them a nudge to do more.
- Most people don't see the emergency, and probably don't know that the city council has declared one. When step out of the world in which people are absorbed in these things, realize that most people do not have these issues front and center.
- Is it a politics of individual virtue (agency at the individual level) or is it at an institutional level (demanding standards, change, etc.) from our elected officials? While both, some degree of consensus that we need to push for broader institutional change.
- The changes the City of Cambridge has made are positive, but still a lot that hasn't been changed; certainly haven't met the goals set. However, hard to look just at Cambridge. Upwards of 80% of the carbon footprint of Cambridge as the City inventories it is in buildings, only 20% of it being residential. Huge amount of construction since 1990, particularly in energy-intensive sectors like lab space. If that construction had happened outside of Cambridge, could have been a lot worse (not transit-oriented development), but those projects could still have been a whole lot more efficient.
- The city has done some good things, but gives itself too much credit. Twice failed to give itself solar protection standards in zoning; failed to give incentives for sustainability in zoning. Slowly heading in the right direction, but need to have a more honest conversation.

- Would be great to see more price transparency in the rental market – Renters should have access to information online on the electricity consumption before they move in. This would incentivize landlords to improve (insulate, etc.).
- Should use congestion charging or performance parking (market mechanisms for setting parking rates), and drastically increase resident permit parking prices. The funds raised from these increases should be used to fund public transportation and/or cycling and pedestrian-friendly infrastructure.
- We have the goals, now we need to act. On the other hand, still room, and need, to translate the large-scale goals we have established down into clear and measurable goals for individual departments, private firms, households and so on.
- What is missing is the implementation plan. We have these macro goals, but need to find ways to make slow but steady progress; set yearly goals and say 'OK, this is how we are going to accomplish that this year'. Need an implementation plan that says, 'OK, this is how we are going to accomplish concretely'.
- Would be great to have numbers so that we know where the impacts are coming from and where the greatest opportunities for change are. City departments should use these numbers when making decisions. Need to make these agreements at commissions or boards, but also follow-up, which typically does not happen.
- Most people in the community need to make decisions around what they buy, where they live, etc. Need to provide data for these choices (e.g. replace refrigerator?)
- At least one of the mailings each year from the city should talk about how our carbon footprint is changing, much like we currently get budget information each year.
- Should lead by example, starting now, with each of us making an effort to understand our own household carbon footprint – how much carbon we released in our own lives in 2009, and how we are going to do better than that in 2010. Then, ask the city to do the same. For example, 'this was our footprint in 2009 and we are going to improve by 3-4% in 2010'. Have to consider how we will calculate, and support each other in meeting these goals.

## Group 11

- Overall, the group believed that the Earth will experience catastrophic changes if we do not prevent future global warming. They see it as their duty to act to mitigate climate change for the sake of their children and grandchildren. It was the opinion of the delegates that sea levels will rise, and some feared this may put parts of Boston underwater. In addition, delegates believed there will be an increase in flooding, droughts, and tsunamis if we do not stop global warming. They feared that food and water shortages may lead to conflicts around the globe. However, they also admitted that there are climate change skeptics and that not everyone in the community believes climate change will affect them.

- The consensus was that Cambridge's current efforts to respond to climate change are not enough. This was based on the announcement that CO<sub>2</sub> emissions have risen by 27% in Cambridge since the reduction goals were set. The group could not answer questions about whether Cambridge is headed in the right direction because they do not know why the city failed and what the biggest problems to tackle are.
- It is hard for the city to make aggressive carbon reduction targets without stricter federal numbers. We need to have commitments, but they need to be achievable, and things that other municipalities will join.
- Cambridge could do something to address reparations, with youth helping people in developing countries adapt to climate change.
- Should focus on enabling a sustainable community in Cambridge. A community that fosters these things, providing support to businesses around how they can make their buildings, supply chains and so on more efficient.
- Should create rating and certification systems so that there can be some kind of Cambridge label for businesses.
- Commercial and residential buildings should be well insulated and include energy efficient appliances and lighting (including mechanisms for lights to go off automatically after hours). Public transportation (especially buses) should be efficient, on time, and affordable for Cambridge residents of all income levels. Cars should be shared rather than privately owned. Steps should be taken to make it harder or less affordable to drive and park private vehicles while safer to walk and bike in Cambridge.
- Key to the success of these and any actions is community involvement and education. For this reason, a Sustainability Support Service (aka Community Energy Outreach Group) should be created that reaches out to businesses, universities, and individuals to educate, engage and empower them on issues of energy efficiency, the availability of services and resources, best practices from similar groups, grants or funding opportunities, and so on.
- A sustainable food system that produces food within the city via community gardens, supports local farmers, accounts for the true cost of currently 'cheap' foods like hamburgers, and provides healthy, sustainable food in schools and hospitals should be fostered.

## Group 12

- Cambridge is moving in the right direction, and doing well, especially with regards to waste/recycling and energy, but we need to be doing a lot more, moving at a faster pace to reduce energy. Though Cambridge does more than most U.S. cities, we need to look on a more global scale to other cities and nations that are taking bolder steps than us.
- Prioritize low, low per capita carbon emissions by 2020
  - Provide revolving financing for building efficiency
- Foster a network of open source and freely available data on emissions. That is, a resource through which any party can access data and use it to promote change.
- Explore cultural options to bring about change.



## Appendix I – Group 1 notes

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**Facilitator: Iram Farooq**

**Delegates: Stephen Aldrich, Kristian Bodek, Jonathan Chapman, James Herod, Kidus Moges, Linda Pinti, Monica Raymond, Susan Redlich, Sylvia Saavedra (afternoon)**

**Recorder: Bjorn Jensen**

**Observers in attendance for one or more discussions, Group not reported: Yumi Izuyami, Heather Henriksen, Minka van Beuzekom (organizer), Joanna Herlihy (organizer)**

### **Discussion 1**

**What do you think the future holds if we don't take action on climate change.**

- Worried about floods and drought and all of the other consequences that were mentioned in the opening remarks.
- Worried about flooding of Cambridge and disaster preparedness.
- Concerned about how to get youth involved.
- Worry about resource conflicts.
- Concern that the worst impacts of climate change fall on the vulnerable. This is not fair.
- It is possible to live a carbon-neutral life style. But there are institutional barriers and actions often meet with community disapproval.
- There is a need for plentiful heated public spaces to allow people to reduce their energy consumption and as part of disaster preparedness.
- Coastal cities could develop relationship with an inland sister city to prepare for relocation away from coasts when sea level rises.

**How do others view climate change**

- There is apathy; people are overwhelmed.
- It is difficult to think long-term when there are short-term needs.
- There are institutional barriers to radical actions for a low-carbon lifestyle. Actions often meet with community disapproval.

**Themes**

- Personal responsibility vs. culture, the choices we need to make are not supported by the current culture. There is need for profound cultural change. There is the potential

that for this need to lead to unity and positive change. Group action/social action is necessary. Individual action is important but not enough.

- Taking moral responsibility for future generations and acting on that responsibility.

### **Discussion #2, thoughts on current city efforts**

- Rather than reducing emissions, emissions rose 27%. Need to analyze failure to meet emission reduction target in order to understand how to move forward. Need to learn from what has been tried. Where exactly are the shortfalls.
- Analyze performance by fuel, sector (business, household, government, institutions).
- Current initiatives are cosmetic. We need to go deeper.
- How to decide first step?
- Need for data on energy use and emissions in order to make decisions. Frustration over being asked to suggest actions in a vacuum

### **Suggestions for additional community programs**

- Integrate issue of climate change into curriculum and make it experiential.
- Pressure universities and other institutions to be efficient. City funded minimum wage jobs for youth weatherizing homes.
- Provide money and incentives for energy efficiency (German example, feed-in tariff).
- Add additional energy efficiency requirements to the city's LEED requirement.
- Create a best management practice info center with information on the best practices from around the world for reducing emissions and adapting to climate change.
- "Temperate Zone" program in which buildings are neither heated nor cooled during the Fall and Spring. Possibly start small and pick a month that would be easy to get agreement on like May or June.
- Move towards zero waste and adopt the principle of mutual need by connecting those discarding items they no longer want to those who need it. The city could provide storehouses to hold the items until residents come to take them.
- "Vanguard" program that gives an award to the person, business, or institution that uses the least energy each month.
- Create an ongoing city funded and run workshop to train and enable people to weatherize their homes; this could be a subset of DPW. The workshop would have the equipment and supplies needed for weatherization.



- Enforcement mechanism for underperforming sectors to meet emissions reduction targets.
- Boston metro area should adopt Paris-style bike sharing program and greatly increase the number of safe bike lanes and bike paths.
- Change goal from sustainability to self-sufficiency.
- To enable self-sufficiency, institute direct democracy through community assemblies.
- Increase efficiency of potable water, stormwater, and wastewater management systems.
- Use “green infrastructure” for flood control, to increase efficiency and to improve water quality.
- Save Alewife’s Silver Maple forest.
- Adopt Berkeley, California’s innovative financing model for renewable energy through tax districts and require energy audits when homes sold.
- Break out of the box of “limited resources,” tap into underutilized and unutilized resources (students, unemployed...).
- Militaries use lots of oil. Cambridge should join the movement to criminalize war.
- Learn from low-income people who are using very little energy in their lives.

### **Themes**

- Problem of ownership. “You can’t be part of the solution unless you are part of the problem.”
- Frustration at lack of background information and analysis. Feeling that group was being asked to make suggestion in a vacuum. Concern over the transparency of the decision-making process and skepticism about how decisions would be made.

### **Points reported back to plenary**

- Clear analysis of what has been done to meet the emissions reduction target set in 1999, and performance by fuel, sector (large business, small business, industrial, institutional, residential), and use to determine why it failed and to develop a policy with real consequences for failing to meet emission reduction targets.
- Look at worldwide urban best practices for reducing emissions and adapting to climate change.
- Adopt a transparent decision making process that starts with building a common definition of the problem and that ensures broad participation of all interests from the least to the most powerful; and identifies the lethal costs of inaction and optimal

choices for action. An example of the process is “Rising Waters,” a scenario building process recently completed by the Eastern New York Chapter of The Nature Conservancy and its partners.

### **Questions**

- Why aren't Cambridge's state and federal representatives at the climate congress?
- What is Cambridge doing to access federal stimulus and Green Communities Act funds?

## Appendix II – Group 2 notes

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**Facilitator: Christine Giacobbe**

**Delegates: Joanna Barth, Jonah Decola, Paul Elwood, Tiana Higgins, Steve Lanou, Charlie Marquardt, Laura Meredith, Paul Robillard, Lorenzo Williams**

**Recorder: Michele Farnum**

What does the future hold if we don't take action?

- Impact of sea level rise—flooding. Will our property/investments even be here?
- Increase of really bad weather—more rain and snow.
- Forest in West—more fires, increase in bark beetles.
- “It’s a bit vague” There is considerable confusion about what will and could happen as a result of climate change.
- Impact on nature is largely outside of urban areas and this is a problem for raising awareness and action (out of sight = out of mind).
- Hope is that the timeframe is long—100 years out.
- All green space in Cambridge will disappear because of development.
- Value by city of economic savings over environmentally friendly practices (ie city continues to maintain old, inefficient boilers instead of replacing these).
- Growth of inequity (greater separation between the haves and have-nots).
- Food shortage.
- Separate climate with structural change (?)

How do people in your community view the climate emergency?

- Many teens are unawayre...don't realize their ability to impact. For example, they spend a lot of time at the mall consuming and don't purchase from eco-friendly retailers.
- Many neighbors don't know and need to be educated. When they learn, they want to know more.
- People often believe that there is a strong connection between climate change and recycling. They think recycling is all they need to do.
- Most people are unaware of the impact of their food choices—particularly regarding the connection between red meat and methane gas emissions.
- A “community” view does not exist about the climate. Viewpoints are determined by where folks get their news...opinions are often polarized.

- Limited options are available for the general public to change their actions (ie city won't pick up compost, schools only recycle paper).

What do you think about current efforts to respond to climate change?

- The number of programs and initiatives is not important (Cambridge does a lot by this measure). Impact can only be measured in terms of reduction of imprint.
- Cambridge's efforts have not yielded a reduction: carbon emissions have gone UP, despite efforts.
- City did not meet its own commitment of 20% reduction. The city gets an F. They are continuing to maintain outdated HVAC systems that emit HUGE CO2 levels.
- Without a plan to address Cambridge's failure, there is no accountability.

What else should the city be doing?

- We need to address the other constituencies who need to be involved: landlords, commuters, etc.
- There is a lot of good technical information out there. Why aren't we implementing it?
- We need more education and better policy.
- Government is looking at cost for implementing new efforts but should also be considering medium and long-term savings when making decisions.
- Opportunity to combine job creation with energy efficiency improvements; put unemployed to work making structural improvements to buildings.
- Convert electrically-heated schools because it's both a cost-saver and an energy saver.
- Raise awareness and understanding of citizens.
- Raise awareness and understanding of politicians, including City Council.

Are their specific goals the city should address?

- Each city dept measure their energy use and compete to lower emissions.
- Provide incentives for citizens to reduce their energy use at home.
- Provide more (and better, more specific) advertising, PR and communication to the general public.
- Conduct a detailed analysis of the contributing factors that led to Cambridge's failure to meet their reduction and instead, to increase in carbon emissions by 27%. Is there a group responsible for overseeing this currently?
- Use this analysis to create an opportunity matrix for reducing carbon emissions.

- Provide better transparency and more accessible information about the City's effort and accomplishments (or failures) to reduce carbon emissions. Grant political amnesty so that City officials (and citizens) can honestly address concerns around GHG reduction.
- Offer utility rebate programs to residents.
- Measure and rate efforts of landlords and businesses to reduce their own energy consumption.
- Begin an educational campaign around climate action. Begin in housing developments and CRLs.

How can we affect regional and national policies?

- Use Cambridge as a model.
- Help develop/devise solutions to improve international energy usage ratio (countries like India and Brazil have rates that are ballooning).
- Involve low-income residents in the discussion.
- U.S. bears a higher responsibility in global energy reduction because of their own emissions, but also, because the U.S. standard of living has become a model for other countries.
- Help developing countries recognize the strength of their current, more green way of living.
- Look to China's success to reduce energy consumption as compared to increasing GDP in Lawrence Berkley's labs.
- Explore our trade relationship with other countries through food—buy locally instead.

Should the City government re-assess its allocation of resources?

- Should city focus on affecting policy beyond its borders? Where is the greatest need and what will provide the biggest impact? Although relative to other US cities, Cambridge has done a lot, it has not actually reduced its carbon emissions. Perhaps we could make a greater impact by focusing our intellectual capital on global needs?

GOALS/IDEAS for REDUCING GHGs:

- Increase the knowledge base of the general Cambridge population: residents, employees, students and faculty.

- Reduce Cambridge's global GHGs by 50% by 2015.
- Reduce # of cars coming into Cambridge by x%. Reduce speed limits to make roads more navigable by bikes. Subsidize by local businesses.
- Reward homeowners, tenants, landlords and businesses that successfully reduce their energy consumption.
- Implement a city-wide home energy-efficiency program targeting residents.
- Develop and communicate simple actions that residents can take in their homes (caulk windows, lower thermostat, insulate boilers, change toilets, etc.)
- Create an oversight body to monitor the City's emissions level and target areas for improvement.
- Publish GHG emissions of City residents and businesses. Implement an incentive and opt-out option for participation. (Must pay fee to opt out.?)
- Develop and implement a plan to measure GHG emissions of the entire City (including residential emissions).
- Utilize unemployed residents to work on reduction efforts.
- Create tax incentives and credit system (similar to community service) for citizens to provide education and outreach on climate action.
- Continue the Climate Congress!
- 

#### TOP THREE GOALS/IDEAS for GHG REDUCTION

- 1) Education/outreach campaign targeting all constituencies: politicians, residents, employees, businesses to increase knowledge base of city population.
  - o implement workshops in schools
  - o develop learning materials
  - o create climate information center
  - o train residents (youth and immigrant/ESL) to reach new and important population
  - o develop a "communication plan"
- 2) Provide incentives for energy reduction
  - o Publish City's energy consumption and GHG emissions on web.
  - o publish a newsletter to residents that describes the climate plan and shows City's progress in meeting goals.
  - o
- 3) Develop a plan to measure entire city's GHG emissions
  - o Select three major employers and develop a 50% reduction of employees transportation emissions.
  - o Measure and document current emissions and include resident (individual) emissions as well as lifecycle emissions (emissions produced in the making of products and food that are purchased).

4) Accessibility/Transparency of information

- Research, analyze, document, and publish reasons why City did not meet its goals for emissions reduction.
- 

- Increase the knowledge base of the entire Cambridge community, reaching all populations, including recent immigrant communities. Targeted communications plans should be developed.
- Develop a plan to measure greenhouse gas emissions. Really sound metrics that make sense to everyone but are comprehensive, looking at the lifecycle implications, should be developed. Part of the exercise might involve identifying three major employers and measuring their transportation-related emissions.
- Study and publish the response to the 1999 goals and what prevented us from meeting them.
- Provide tax incentives for better performance.

***--Notes transcribed from flip charts by Joanna Barth***





## Appendix III – Group 3 notes

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**Facilitator: Elaine Thorne**

**Delegates: Peter Crawley, Robin Finnegan, Renee Jackson, John MacDougall, Paul Tammaro, Monica Valenzuela, Elie Yarden, Quinton Zondervan**

**Recorder: Xi Yu**

### **Discussion 1**

- Effects different people in different ways. Need social justice in this sense.
- Behavioral change:
  - On the one hand, structures determine behavior. On the other, never doubt the potential to alter life.
- Though sciences is not clear on what will happen, we do know we need to watch what we do now. Need to start finding a way to move forward.
- Concern regarding negative health consequences.
- If something is not done by each of us, the planet as we know it now will be no more.
- How do we continue to feed the poor?
- It's a matter of communication.
  - People need to have basic health information.
  - Science out there now is not being read by 40 percent of the population.
- Education along the entire socio-economic spectrum is important (RF comment - I think this is what was intended)
  - Higher level education institutions to be aware of communal aspect (business leaders, etc.)
- Concerned about things that will effect generations to come: Flooding; disease – new versions of flu; war.
- Meals – Problem is cheapest vs. organic. Need to educate people from dumpster divers to gourmet eaters.
- The United States, in general, is a wasteful society. You can try to educate, but you can't force people; should educate to make tiny changes first.
- Have Americans chosen private excellence and public squalor? Need to pay more attention to the public sphere.
- Immigration cannot be treated as a problem of legal versus illegal anymore. Migration is the new trend and requires complex thinking.
- Doesn't necessarily have to be called "climate change" – another term might have more meaning to people
- By allowing illegal immigrants to vote, the United States will turn into a global community. Fear of being caught as an illegal touches upon what you eat, how you throw trash away and so on.
- So much medical waste.

- Issue of food and immigrants –a lot of what immigrants want to eat is not grown locally.

## **Discussion 2**

- Current efforts are inadequate
- Cultural challenge
  - Denial: CHA housing is producing horrors
  - Depression—chief problem of institutionalized housing
- Obsolete ideas keep weighing us down
- Maslow’s Hierarchy of needs – basic needs need to be met before people can be expected to change behavior.
- Public housing is not allowing for social mobility. The children who make something of themselves are of immigrant parents. Gated communities are splitting people into units.
- The two elephants in the room are war and taxes.
- Revenue from taxes should go to pedestrian/public transportation.
- Irresponsible financial markets bring about financial crisis.
- Opportunity to connect dots for landlords who actually fund the city; property tax dollars go toward green solutions.
- 15 percent of condos are kept empty as investment, not housing - “Property” vs. “home”
- Think about who the biggest landlords for both residential and commercial real estate are in Cambridge.
- How do we extend Cambridge initiatives to other cities?
- Setting long-term goals does not work. Instead, need to monitor and set a goal for the coming year—needs to be attainable.
- It’s only going to get more expensive in the years to come.
- Cambridge needs to be willing to learn from other cities.

## **Discussion 3**

- Trash/rodent problem – current things in place: Dumpster ordinance; single stream recycling; and composting program for businesses but not residents.
- Political action is necessary—we currently don’t have alternative political parties.
- Your government is not going to solve this problem for you.
- Have a structure that incorporates minorities and low income people.
- How are we going to educate the community? Must come from a bottom-up model.
- Weatherization—what we need to do now.
- Peer-to-peer education—starting where you are.
- Big citizenship concept of Alan Khazei —get citizen groups to work together towards one agreed upon goal, to accomplish this there must be compromise.
- Keep in mind crime—Worcester, Alewife.
- If Harvard Square were a garden, how many schools would it feed? 15 people/acre.
- Need changes in consciousness to adapt to new conditions.

- You need a certain density of population if you are going to have certain resources available to you.
- Maybe open up Cambridge initiatives by writing more papers that spread the word; really get into the educational component.

### **New Solutions**

- Treat people in public housing with dignity.
- Recognize the power of conversation, the creation of community.
- Parks, intentional community forums, festivals, and so on provide the social infrastructure to do green things.
- Greening Cambridge will bring people together.
- Education within low-income communities of Cambridge.
- Teach people to caulk windows.
- Increase price of parking permit, hike upward over 10 years.
- Reduce amount of parking places in certain areas.
- Make Harvard Square pedestrian only—remove street parking.
- Remove all on-street parking within 20 years.
- Require institutions that have private transportation systems (i.e. Harvard shuttle, Longwood shuttle, Paul Revere) to allow riders from the general public.
- Never remove emissions controls.
- Encouraging taxes through both state and national initiatives.
- Carbon taxes—different based on income; revenue goes toward public transportation.
- Don't drive your car one day a week.
- Try not eating meat for 1-2 days.
- Monitor and set a short-term goal—what you will achieve in one year.
- Make those markets that do not now accept food stamps.
- Work on regional government-transportation.
- Turn one of Route Two's lanes into a bus-only lane.
- Bike borrowing program and better bike paths.
- Life cycle accounting at the city level and make it part of building codes.
- Sustainability—infinite growth through fiscal planning.
- City works with large landlords to encourage local independent tenants.
- Adopt sister cities—get in network with them and exchange ideas.
- Incentives to create less trash—pay as you throw and have a deposit on recyclables.
- Needs to provide leverage over food chain/supply chains.
- Manufacturing operation for farming wind.
- Other organizations should ask their clients their opinions on how to be green.
- Cambridge needs to be more self-sufficient food-wise.
- Need to have balance.
- Should collaborate with universities to research and perform, and publish reports on green initiatives.

***--Edited by Robin Finnegan***



## Appendix IV – Group 4 notes

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**Facilitator: Owen O’Riordan**

**Delegates: Milton Bevington, Harry Chung, Lara Gordon, Laurie Leyshon, Brad Nissenbaum, Brianna Perkins, Heather Saucedo, Joyce Lee Smith**

**Recorder: Tyler Corson-Rikert**

**Also in attendance: Allison Crimmins (presenter), Kathy Reine (volunteer)**

### **Discussion #1**

#### **What does the future hold if we don't take action?**

- We'll face a great many impacts from climate change including flooding, impacts on food and agriculture, changes in rainfall and many associated costs. We'll lose the benefits of the pollution reduction we could achieve. It is important what legacy, what model we leave: of pessimism or hope.
- The question should be: What will be different if we take action? Energy efficiency and clean energy efforts may only slow global warming, but we need to buy that time to adapt.

#### **How do other people view the climate emergency?**

- Many people are not focusing on this issue, for a variety of reasons: They don't understand it, it's not bothering them, it's too big, they have other immediate concerns, they don't know what they *can* do, the behavioral changes are too hard, the media is misleading them.
- There are a few types of people: Skeptics; don't know; know, don't care; care, but think it's the government's job; care, but important other priorities; and those who work 24-7 on this.
- We can show people how they can help by outlining easy, meaningful steps, mandating some actions, and in general assisting them in connecting the dots.

### **Discussion #2**

#### **Are current efforts to respond enough? Right direction?**

- The current focus is on mitigation versus adaptation, there needs to be a balance. The response so far has been abysmal and in the wrong direction; we need new approaches.

## **How to inspire national leadership on climate change? How can we affect regional, national, global policies?**

- Cambridge can and should lead by example, as cities like Berkeley and Chicago have (Berkeley developed a program that became federal policy). Cambridge can look at other cities' plans and find ways to implement and improve on them here. What's done here need to be documented – the successes and failures – and communicated to other communities.
- People here are just as smart and capable as people dealing with these issues anywhere, and Cambridge can leverage it's youth as well as university human and financial resources. Cambridge can make state, federal representatives aware, and get them lobbying for federal legislation. Cambridge should also question the need for economic and population growth.

## **Should the city community do more?**

- Yes, as there is too much self-congratulation now, when other cities are doing more. Here are some specific ideas to pursue:
- *Public services:*
  - More recycling containers in public areas
  - Change infrastructure to support cycling
  - Improve public transportation - Needs to be cheaper, easier than driving
  - Do life cycle assessments before making purchases and investments
  - Year-round farmer's market
  - Set Requirements for city employees, like that they take alternative transport certain days, and (especially the city manager) live in Cambridge.
  - Change from car- to people-centric city: Make streets pedestrian or bike-only and build pedestrian malls and arcades.
- *Regulations:*
  - Strict rules limiting packaging
  - Enforcement of laws to reduce GHG and support cycling (e.g. on double parking)
  - Change to cleaner energy sources (e.g. Ban coal energy in the city)
  - Tax carbon emissions and use revenue to fund renewables or public transportation; OR give it back to people (so they are aware of GHG emissions but do not bear burden).
  - Make people pay the true cost of carbon.

- Enforcement: Car emissions; polluting companies; anti-idling campaign.
- No plastic water bottles and bags (or charge for).
- Address particulates too (black carbon)
- *Programs:*
  - Energy performance mortgages: The city should take out a bond, then loan funds to residents for efficiency and clean energy, and lobby the MA government for enabling legislation so people can repay with property taxes.
  - Incentivize hybrid cars, cooking oil cars, etc.
  - Promote local manufacturing
  - Do a competition with another nearby city
  - Promote local food
  - Block grants and/or revolving loan fund for energy efficiency and to create green jobs
  - Subsidize local retailers
  - Requirements for non-local businesses to provide space to community
  - Local currency
  - Identify where CO<sub>2</sub> is being used
  - Ride share programs
- *Outreach:*
  - Education about the social and economic costs of how we live
  - Mobilize the younger generation
  - Communicate real cost of energy not just the monetary cost
  - An iPhone application to help people see products' carbon footprints
  - Community seminars using technology and just face-to-face
  - Ask corporations to make contributions
  - Leafleting to communicate
  - Workshops where people are (not just in city hall)
  - Create an 'I'm A Climate Hero' button to spur discussion

- Get community groups out walking
- Broadly, the city should make good choices the default and engage in more education and outreach. We need to find ways to address climate change and solve other problems at the same time.
- We have solutions but there's a lack of political will, as it is everywhere. Cambridge has a particular challenge with its transient (student) population making it hard to engage people. Also, frequent leadership changes, unwillingness to consider new ideas, and city staff who don't live in the city inhibit progress on addressing climate change.

### **A different model of business development?**

- The city should promote local manufacturing and retailing. It should offer businesses carrots and sticks – both incentives and penalties - to show them their responsibilities. They should publicize businesses' energy usage and let them market progress they make. Broadly, they should redefine good business practices. We need a framework for sustainable economic development and not automatically look to growth. We need to get past the idea that there's a tradeoff between progress on climate change and prosperity.

### **Should we have specific goals? Why?**

- We already have goals – 20% by 2010 – and we haven't met them, people don't know them. We need one concrete goal we can all see, to help people connect the dots – and a plan to reach it. We then need to form sub-goals around that central goal, with physical tasks (e.g. number of houses retrofitted) not intangible percentage emissions cuts.
- Once we have goals, we need:
  - Ways to measure and track them
  - Funding to back them up
  - Systems to ensure accountability
  - Buy-in from citizens, businesses, and city government
  - To communicate our progress (or lack thereof)
  - To recognize and reward successes
- The existing climate change task force has too little power, though it does provide continuity across leadership changes. We need a stronger link from the community to city leaders.

### **Discussion #3**



## What can we do as individuals?

- As individuals we can do many things:
  - Educate ourselves, family, friends (for example at gatherings)
  - Lead by example
  - Drive less, walk more
  - Live near where we work or telecommute
  - Join walking clubs
  - Set personal carbon footprint goal, monitor it, hold to it
    - Consider this in all our decisions
  - Aim to live like Norwegians
  - Grow our own food, share resources, consume less
  - Bring own containers for take-out
  - Foster community through carpooling, sharing, preparing for emergencies
  - Demand more from city government, hold it accountable
- Sometimes it is difficult for individuals to make the ideal choices though (for example in where they live and how they commute), so we need action at higher levels too.

## Action the city should take

The city should assess each program item John Bolduc mentioned, rate their effectiveness and drop ineffective ones. They should identify what the barriers have been to progress and ensure accountability on specific measures of success. The key is effective programs that deal with the problem at a more concrete level, not a high levels where you can't track progress and hold leaders accountable. Success will come through Cambridge setting two year, credible, measurable goals (don't let the leaders set their own goals) with publicized assessments of progress shortly before elections. The mayor should be more active on this issue.

**What can your community or organization do?** Involve church communities and schools.

## What can we do to be more resilient?

There was concern that adaptation presents a whole different can of worms, and may divert attention from the mitigation effort. The key question in adaptation is how can we help the people who will be affected here and around the world. Cambridge should make

sure its emergency response plan addresses climate change, specifically: Food, water, energy, health care, shelters, evacuation, the disabled and the elderly.

## Appendix V – Group 5 notes

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**Facilitator: Becky Fuentes**

**Delegates: Ellen Aronson, Michael Corbett, Joan Fitzgerald, Robert Hurlbut, Tom Meek, George Mokray, Hector Rodriguez (some Discussions), Abigail Tischler**

**Recorder: Stephanie Stern**

### **Discussion #1**

**When you hear about the climate emergency, what does the future hold without action? How do you think other people in your community view the climate emergency?**

- For older generation, not much impact, have to consider future generations, will begin to have a catastrophic impacts like disease and environmental impacts (e.g. Katrina).
- If we don't set precedent, future generations will continue to live in same manner > not caring about climate change and live in wasteful society.
- Disagree - We have already seen changes - arctic ice is disappearing; first hard frost in Cambridge used to be around Halloween, now not until December; with Katrina, warm Gulf waters contributed to storm intensity - and within the next decade we will see big changes.
- Missed our chance, should have continued the Carter administration's policies.
- During 2008 election, lots of interest, now not much action.
- Frustration, despair - can we do enough? tends to zone out when issue is too overwhelming, we need to think in a non-linear way, age of networking, but community is not strong, emphasis is on individuals.
- People are confused about this issue, don't understand the global connectedness of the planet, e.g. why is it cold today if the planet is warming, a few degrees change in climate doesn't seem very big to people.
- People know that environmental protection is a good thing, but there are many definitions of the problem. We should empower people by word of mouth – talking to people one-on-one.
- Need good images: Bathtub image was powerful, parts per million makes head swim.
- Impressed by various efforts that different groups have made, but bottom line is total failure to achieve targets.

- Powerful to put climate change in terms of public health.
- People agree that we should do something, but it's not pressing; media often makes climate change advocates look extreme; thinks this is somewhat unique to US media.
- Want a society and culture of zero emissions, zero waste; can be motivating, have fun dealing with this; DuPoint has had a zero emissions, zero waste, zero injury policy, and has made money on this consulting for other companies.
- Bill McDonough - food is waste, respect diversity, love all children.
- Is zero emissions possible? Too lofty a goal, and need to be honest (e.g. DuPont doesn't manufacture anymore, probably their manufacturers emit).
- Pushing down the supply chain can be a good thing – WalMart, for example, is trying to green their suppliers.
- There is awareness of the issue, but not in forefront of to do lists.
- People are making small changes, but no motivation to go further.
- Positive attitude - we can make a difference. Obama election was encouraging.
- More people see it as a problem than an emergency, some people are less motivated
- We do live in Cambridge, more people are working towards this, need to spread out to other communities.
- Living in the Cambridge bubble, people are aware of climate change, but more concerned with immediate issues, no sense of urgency.
- Psychology of emergencies - Sometimes people come together, sometimes they give up.

## **Discussion #2**

### **Current efforts to respond to climate change**

- City is working on things, but need to translate to actions at personal level.  
Despite all of the actions, still an increase in total CO2 emissions (more building).
- Increase in **traffic**; city traffic calming efforts; lots of discussion on traffic, maybe city should look at holistic picture of traffic.
- Are intelligent things going on (e.g. Alewife and Galleria garages).
- **Regulation** needs to happen (at local level), how do people feel about this? Or you need to pay for garbage, or water from runoff etc.

- Don't have all of the tools we need, need industry.
- Usage charges (if go over a certain amount of water, trash etc); also what are we subsidizing? Need more political pressure on national government.
- Regulation gets into personal political beliefs, beyond just environmental values.
- Need urgency first, people have to feel that it is very important.
- Could ban parking
- Counter to regulation- why not provide incentives?
- Provide more bike lanes and parking; ordinance that buildings must provide parking
- Current program not enough because still have GHG emissions, but heading in right direction?
- Biologists and ecologists should develop real costs (including resource depletion, public health) – full cost ecological accounting.
- Some regulations harmful, e.g. prohibit industrial cogeneration; need rationalization of current regulatory structure
- Neighborhood green associations (e.g. Green Decade, Green Port, HEET barn raisings) > need more action that is practical, on the street level.
- Need both government action and local action; need urgency and empowerment for individuals.
- Efforts in Cambridge have been great so far, but we need more.
- Need urgency, but not panic to reach significance.
- Changing culture- e.g. from 60's when you would leave trash behind without thinking about it, to now; schools are key in changing culture.
- Cambridge can lead by example. The City should be a classroom - places that have emphasized green also see economic benefits.
- Need persistence in effort to address climate change, not heroic.
- Importance of solar as a security measure, practical things, off-grid.
- Where is this effort going? What can we take from this, what's our first step? Need to not get overwhelmed.
- Individual next steps: inform others about what they can do; also how do we get Cambridge to do similar things.

- We need to actually do something out of this congress, then send people as delegates to other cities.
- Follow the money- emergency services for health are strong, we put money into medical, but amount of money put to climate change is small - **more staff and budget for city (invest more)**. The City's fire department can deal with nuclear, need same type of response to climate change.
- Outside influences to do positive things for the climate vs. to do harmful things (e.g. advertising).
- Build on university knowledge. MIT- students pushed administration to be more sustainable; need to get the kids on board, but can't frame as big problem.
- Translating desire for action into real solutions, CEA is starting slow; HEET is being looked at as a national model.
- Schools can lead charge: Afterschool programs.
- New Cambridge library: \$90 million project, LEED
- Need more community connection ("friend raising" events).

### **Session #3**

#### **Brainstorming: goals and actions items**

##### *Goals*

- Increase efforts for alternative modes of transportation, reduce car use
- Improve quality of life through public transportation, public space and gathering and safe bicycle paths
- More green space, more trees
- Reduce waste (recycling and composting)
- Share ideas and encourage actions through outreach and education
- Strengthen, improve work by local government, agencies, officials
- Zero emissions, continuous improvement in ecological design principles
- Think about solar as civil defense (especially in terms of emergency preparedness, also connect to developing world through BOGO lights)
- Integrate environmental education into curriculum for all students

## ***Actions***

- Coordinate with Boston on bike share, more bike lanes, bike parking, especially at T stops
- Reduce the number of parking spaces
- Create core bicycle network, ban parking on Mass Ave (at least on one side) and create big bike lane, model after Amsterdam, more biking and more public space (pedestrian malls)
- New buildings should have green space integrated on ground and/or roofs > city mandate or incentives
- More community gardens for growing food, more funding for farmers markets
- More nature preservation, especially indigenous species (e.g. Fresh Pond)
- Subsidize or incentivize greenhouses, and eat with the seasons.
- Plant parks and green spaces with fruit bearing trees; street trees should be ones that will improve air quality
- Citywide food composting (curb-side pickup), e-waste recycling through curb-side pick up (for batteries, CFLs, etc.)
- City should look at traffic light patterns to reduce the need for cars to stop and idle
- Leadership from government, increase education of city agencies
- Better website presentation
- Pay for more resources of solid waste compliance
- Push for reduced packaging, or leave it at the store
- Property owners take responsibility for water that falls on their land. Need better stormwater management, including permeable pavements and greywater reuse
- Involve community gardens in leaf composting, encourage worm composting
- Urban bee keeping
- Continuous monitoring and analyzing emissions levels
- Look into geothermal energy, district heating, seasonal storage and solar thermal, wind; individual level, but also push city to do this for their own buildings
- Conduct a solar census > find south facing opportunities

- Local government can set an example in their buildings
- Balance local with corporate
- Integrate ideas from this forum into school system to create an environmental education program. -Schools should have an environmental project either at school (e.g. garden, compost) or as public service.
- Ban development of valuable open space, including forest, areas bordering waterways and so on.
- Keep the Climate Congress going after January; maybe develop neighborhood congresses.
- Public education about solar and other environmental issues, either through workshops or list serves, “Green Buddy” partnerships
- Have citys work with sister ICLEI cities - Cities with climate change actions should have better bond ratings.
- Property tax benefits based on “green improvements”.
- Make the golf course a green space, at least don’t spray pesticides.



## Appendix VI – Group 6 notes

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**Facilitator: Martha Flynn**

**Delegates: William Abrahamson, Susan Agger, Marilyn Castriotta, James Eliscar, Nurul Kabir, Sayem Khan, Anna Miller, Mary Smith, Steve Wineman**

**Recorder: Reena Joubert**

### Discussion #1

**When you hear about the climate emergency and you think about your community, families, neighbors, what do you think the future holds if we don't take action?**

- Systemic breakdown of the planet due to climate change. Moved by exponential growth curves in Al Gore's presentation.
- The reason people are here today (at congress) is we are all aware of this issue, question is how do we integrate it into our lives, and get it to people who are less aware. The most important thing is how do we take our personal needs for recognition and get more cooperation and collaboration in terms of meeting the need that we all see for the environment and the planet?
- In terms of the apocalyptic side, thinking of this as stress on society, if we can reduce the stresses involved for any component, we will reduce stresses across the board. In our community right now there are two layers of action that people believe in and trust: Informal and formal, this is a problem that bridges the two.
- Positive feedback loops are important to consider; the release of carbon by permafrost is an example, forest fires are another. Positive feedback loops define the point where it stops being a question of human caused emissions, and nobody can tell if we're past the tipping point right now. Question is not what we think, but what we feel. Maybe we are numb, but it is critical to get past the numbing and use our feelings for motivation to confront the crisis.
- If we do take action, reach across cultural, religious, economic lines to create coalitions, we can make progress. We should emphasize collaboration, including with the City of Boston on this issue. We have a duty to educate other people about this, breaking down the science and expressing what's going on in simple terms so that people can understand.
- Bound to be a lot of competition for resources worldwide. Populations having the most basic needs will be much more greatly affected.
- Climate change is ultimately a moral issue.
- People are already feeling the effects now, like expanding ranges of disease vectors and abnormally hot summers.

**How do you think other people in the community view the climate emergency?**

- People are aware, but have varying degrees of concern, and then real limitations in terms of what they think they can do about it. Some organizations are taking action, but it is not clear to many which decisions have impacts on climate change.

- A huge amount of awareness, but also a huge amount of denial. Some of us have aspects of each, very few people really take in the magnitude of the problem and of the changes we have to make. The magnitude of the change we need to make is just enormous, and that is what we need to communicate. There is also, however, a hunger to take action, to come together in the community.
- Depends on a lot of factors, for example background. Most Americans do not travel far outside of their comfort zones to see what is going on in the rest of the world. Should connect people to people in other places so they get an idea that these impacts are real.
- It is really misleading to call it global warming; should emphasize that it is climate change.
- Alarming that some people think this is all a hoax for scientists to get funding and so on.
- In high schools, there is a lot of awareness even if not a lot of understanding. People are making small changes, but it is not something that they can control in many ways; much of it comes down to large corporations and the government.
- People don't really see this impacting their daily lives, even if they know and trust the science. Need to find ways to personalize for people and get them plugged in.
- The title of Al Gore's book - An Inconvenient Truth - is brilliant because this problem really calls for a big change in our lifestyle, our consumption.
- Should emphasize 'feel' rather than 'think'. In essence we are biological systems and our bodies are overwhelmed. Whether we realize it or not, we are in essence having to deal with not just climate change, but social unrest and war and the economy and it's overwhelming.
- Need to remember that this really is a global issue.

**What do you think about current efforts to respond to climate change? Are they enough? Are they headed in the right direction?**

- Current efforts are not nearly enough. We have a short timeframe in which to make enormous changes, but are not even close to meeting any of the modest goals already set. Sustainable growth is an oxymoron; we need to find a way to make enormous reductions in our material consumption in a small amount of time and no one is talking about this.
- We don't have the technical know-how to deal with the problem. We were trained with no knowledge of this problem approaching.
- Another constraint is defining the process. We need to get a consensus that this is the problem and this is how we need to solve it.
- This is not an individual issue in many ways; there needs to be larger top-down decision-making and effort at the municipal and national levels. It's not enough to have individual change, we need citywide and nationwide change.
- May be pointed in the right direction. There need to be more community efforts, and business efforts. More efforts and better organization.
- There are personal lifestyle changes which by themselves do not amount to much but do create social pressures, for example this congress we are having today is a great example where people can plug in and these things need to happen more on a worldwide scale. These events can make a spark.
- We are doing more now, but it is not enough. We are responding amazingly; hearing John Bolduc speak about what's happening in Cambridge in ten years is remarkable. There seem to be two things happening; there is this planetary system coming undone and there is this need to respond. Our economy depends on consumption and on people being in debt, morally she has issues with that. Morally, wants our country to survive, but we shouldn't be eating our planet to keep consuming. It is self-destructive, an odd human behavior.

- In some of the things we do, we get so bogged down in making them organized that we don't get anything done.
- There is a lot we can do, from scrubbing CO<sub>2</sub> from smokestacks to building highly efficient homes, but if we do that and we still consume at the rate we are going at it will all be for naught.
- Social pressure coming from the people is a very good thing. We need to look at the problem at the local level first, then at the regional, national and global levels.

### Should we do more as a city community?

- Education is huge, but not a lot happening in schools. The relationship between students and parents is a great way to catalyze. We have to take advantage of structures that are in place. High school students could also serve as ambassadors, visiting elementary schools.
- Cambridge has many great efforts, but they are not adequately translated into the community. The question is, how do you get the message out, how do you get people involved? The community has to take it into their own areas, to translate efforts into actual effects.
- Need to think about how a bottom up and a top down approach might work, as there is a place for both the unorganized and organic to emerge, but also need for some things to be organized and mandated.
- Idea that Cambridge could come up with a nine-month plan engaging people through the media, signage, public talks, schools and so on, reaching everyone and asking them to make specific reduction commitments. The city could provide guidelines and later collect and compile the results. This would involve many more people.
- One participant introduced the Green Sanctuary program she was involved with, and others thought models like that should be disseminated.
- People are disconnected and atomized; there needs to be a way to bring people together inside their communities. Also an issue of publicity; whatever we do will have a greater value if we take it outside, be leaders and set examples.
- People in the scientific fields should broaden and study policy, and policy makers should do the opposite, studying science.
- Is there a stigma ton billing things under the climate change banner?
  - Not necessarily a stigma, but there's not organization in putting the issue out there and pushing it. It has to be political. But in terms of scientists being closed, scientists aren't good at marketing.
  - Need to be open to interaction with people from other fields.
  - Scientists are a community, and maybe they do function better as a closed community and should focus just on what they are doing in their labs and so on. Maybe what is missing is political action from the city.
  - While working by themselves in the lab is beneficial, we have this pyramid of power structure and it is not clear where scientists go. We need to have a connection, channeling science into politics and economy.
  - If we were all politicians and economists, we would be talking one way about climate change, but as soon as we add in earth scientists and educators, we get an entirely different discussion, and this type of connection is necessary.
  - It is ultimately a political issue.
- Should we have specific goals as a community? We need to have goals, but we need to be very careful about how to frame them. What's the value of having a goal that sounds good? We need goals for what we're going to do in the next year or couple of years. Maybe in terms of carbon reduction, the goal for the next year should be *any* reduction; it would be such a huge shift from where we are going. Also issues around how we measure the city's carbon footprint, as it

doesn't take into account consumption. If we Cambridge residents go to Wal-Mart and purchase some cheap article that was made in Indonesia, the carbon footprint from transporting it was not taken into account. The city might meet this goal on paper but not in reality, it's a feel good kind of thing. We need to have a program or something that is about transforming our economy.

- Cambridge should move in the direction of economic change, creating a locally based economy.
- We should make addressing climate change fun. As humans we want to enjoy life, and that's hard to do when we're worrying about the death of the planet. Should have citywide contests on many scales, from who can keep their sidewalks clean to who can have the best solar model house to which business can reduce their footprint the most. We need to have some fun. Socially, people respond better to change and positive reinforcement. The Cambridge Public School's Green Cup is a good example.
- Should enlist the artistic community, perhaps at local high schools on Friday nights for events.
- There are a lot of opportunities, for example, solar energy distributed across a block, when people use shared resources. The barriers for entry into these things are cost. How can the city assist with that?

### **How can we affect regional, national, and global policies?**

- Holistic land management: Pastureland, which is grazed, is a huge carbon sink that takes hardly any time to grow. Grazing stimulates growth and thus more absorption of carbon. While there is not much we can do in Cambridge, maybe parks would be an option. Another thing we could do would be to be a sister city to a pasture area, and only eat grass fed meat. The other idea is freight transport, which has a much smaller carbon footprint than truck transport.
- Cambridge could be doing a lot more in terms of actively initiating alliances with other municipalities.
- If we're thinking about regional, national solutions, and how bad everyone is feeling about the global economy, it's actually a great opportunity for change. There are a lot of people around who are unemployed, but there are people who are available to employ, be it thinking or grassroots or volunteering.
- Any type of transition is going to be shaky, and if people don't have the skills to respond it can cause more destruction. Would like to see people in place who serve as transition counselors. This all has its place, we need to deal with infrastructure and the economy and it's not just what we do but how we do it.
- Returning to the idea of a 'nine month plan' with people across the community asked to make personal commitments:
  - Should be sure to include all parts of the population, and have specific benchmarks while leaving room for creativity.
  - Suggestion that we spend the first three months after COP15 launching our nine month plan, and aim to complete it by COP16 next year.
  - Question of whether or not these ten critical areas should be measurable, so that we have a metric for success, and if so what would they look like?
  - Should incorporate individual pledges and participation into the ten central areas, to make sure every single person in Cambridge is involved.
  - Suggest having a thermometer graphic online that helps the city see how many people are participating and encourages others to become involved.
  - Businesses should provide coupons to people who make changes. Another option would be making the coupons community-oriented, so, for example, when 20% of the population pitches in, everyone gets a coupon to Toscanini's.
  - Important to put resources into it.

- Bring even more life to the Cambridge Science Festival, drawing the whole city around it.
- Should have neighborhood congresses to export what we are doing here.
- Should distribute power generation in tandem with zoning regulations, for example offering relaxations on the rules for those who use green power.
- Should enlist universities.
- Should create a website where people can find out what they can do each week to help the environment, find out about climate talks and events happening at universities (many of which are open to the general public but not advertised well enough), and include the thermometer graphic.
- The public should have better ways of telling their representatives their opinions.
- Should have a “transitional city” exercise to brainstorm what Cambridge looks like in one year or in ten years. Making the process fun will encourage other cities to follow suit.
  - “Ideas competition for a plan for a post-carbon Cambridge.”
  - Should reconvene the Congress in six months to judge this competition.
  - Should make sure the public is involved in this competition, not just professionals and entrepreneurs.
- Should institute an energy audit service in which a thermal imaging scanner is used to show people how much energy their houses are really leaking.
- For these efforts, should look at innovative city-citizen cooperation, like the Congress.

#### **What can we do as a city community?**

- Urban agriculture, neighborhood composting, promoting private or block gardens.
- People would easily be supportive of local businesses, and that since people are generally philanthropic, it could be suggested that “donating money” for this cause means, for example, shopping at the farmers’ market.
- Should make micro loans available to small businesses, and spread the word on local eco-businesses, because so many people don’t know where they are.
- The [reuse@mit.edu](mailto:reuse@mit.edu) mailing list could serve as a model for a Cambridge-wide list. Could also have a city location for reusable items.
- Should encourage walking and biking. One suggestion is having ‘Streets of the Year’ where people work to enhance a street artistically so it’s more fun to go through, encouraging people to walk and bike through it to see the sights.
- Street art would be a good venue for getting artists involved.
- The infrastructure for public transportation is there in this city, we just need to capitalize on it and use it more effectively.
- Approaching people from a financial perspective, for example calculating how much they would save by turning the thermostat down and asking what they would do with that extra money, encouraging them to use it in a way that does not increase carbon footprint.



## Appendix VII – Group 7 notes

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**Facilitator: Brad Garratt**

**Delegates: Marsha Gorden, Ileana Jones, Lynn Lazar, Audrey Lee, Ellen Mass, Eitan Robbins, Eran Segev, Robert Winters**

**Recorder: Sarah Hammitt**

### **Discussion #1**

**When you hear about the climate emergency and you think about your community, families, neighbors, what do you think the future holds if we don't take action? How do you think other people in your community view the climate emergency?**

#### *Impacts*

- For homeowners, CC will mean flooding, especially in lower areas of Cambridge, backed-up drains and flooded basements, and mold.
- For pedestrians, the more unpredictable weather, such as heat waves in summer, heavy storms, high winds and sleet, means that people will want to drive more and walk/bike less. For Cambridge's vibrant outdoor sidewalk community, this might take away from the urban feel.
- For the community's disadvantaged, CC could exacerbate the root causes of their social/economic vulnerabilities, leaving them more marginalized. Or the city could take this as an opportunity to tackle the root causes and raise everyone in the community up with new job initiatives.
- Increased diseases, such as West Nile and other water/insect vector diseases.

#### *Perceptions*

- People talk about climate change like it's a joke; for example, people say they welcome warmer weather. Perhaps it is a defense mechanism but it is a form of denial.
- The CC movement needs broad support or it'll be an ongoing fight. Most people realize it's a problem, know a little about the science and numbers, but most disconcerting are those who take it as a joke. People do not look at things holistically.
- Youth in Cambridge take climate emergency lightly and do not understand the consequences. They know global warming exists and it's not good, but they don't understand the grave consequences. Organizations like Green Streets are teaching the youth to understand the consequences. You can't teach a connection to nature in school, kids need to be given the chance to make it for themselves by interacting with nature.
- Apathy has to do with confusion between weather and climate. People can relate only to the present and near future and it is difficult to pull people outside of that narrow view.

Cambridge residents are known for being caring, but on a day-to-day basis, climate is far from people's minds.

- Talk about densification is a turn-off. Cambridge is already a very dense city and increasing density may start to take away from the physical and social factors that make Cambridge so attractive. Need to balance between densification and maintaining the attractiveness of a city. There is concern that Cambridge's dense residents will pay the costs for the nation.
- Thinking about CC and acting personally means that people have to give something up to do something good for the environment. Need to focus on the positive aspects of changing behavior.
- Lots of NIMBY-ism. People interested in having the improvements, but don't want to have it near them.
- People hear that emissions are up 27% over 1990 levels, but they don't know what that means because it's not disaggregated into sectors. One percentage is not a useful way to reach people and inspire them to act.
- Feeling that where there is a will, there is a way, and Cambridge government doesn't have the will. For WWII, America changed its factories overnight. Change is not the problem. The will to change is.

## **Session #2**

**What do you think about current efforts to respond to climate change? Are they enough? Are they headed in the right direction? Should we be doing more as a city community? Should we have specific goals as a city community? Why? How can we affect regional, national, and global policies?**

- Although Cambridge isn't doing enough to combat CC, the government has come a very long way in 20 years. Recognition of that makes moving forward easier and eases tensions. However, Cambridge is still not ready to put up the windmills and residents want to see real investment in alternative energy.
- Cambridge needs to do a lot more to publicize events such as the Climate Congress and to highlight work that is already being done in order to create momentum. Should communicate successes, updating websites with better information explaining; producing a special newsletter; emails; WBUR; and so on. Should also provide concrete examples, such as replacing traditional streetlights with LED lights.
- Need to get started NOW! City initiatives take 10 years to get going.
- Discussion and disagreement about top-down versus bottom-up. All agreed that there was a need for both, but disagreement about which to start with. Some want stronger government requirements sent down, while others cited the successes of programs like Sweden's Natural Step grassroots program.
- There are so many Cambridge committees (Climate Action Committee, pedestrian and bike committees, Cambridge Energy Alliance and so on), but there seems to be no follow-up. Residents lose interest if there's no reporting on progress. For example, with Earth hour, everyone participated but no one in the city government followed-up with stats about participants and greenhouse gases saved, and so on. Next time, no one will



participate. It creates an impression that initiatives have stalled or that the focus is not on things that are important to a regular citizen/homeowner.

- Should focus on making connections to the community:
  - Should focus more on connecting climate and jobs, building on Obama's green jobs campaign. Jobs like building sea walls may be a result of climate impacts, but such jobs are not productive to the community. Cambridge needs to create green jobs that will benefit the city, country, and world.
  - Cambridge could help to build connections between youth and nature and climate change, such as through existing programs like Green Streets and the Friends of Alewife Reservation ecology camp.
  - People need to make the connection between their homes, energy efficiency, and resource conservation.
  - Teachers should understand cities and infrastructure and teach in school.
  - Ecological and social injustices need to be connected to CC.
  - Connect caring about CC to saving money, such as energy efficiency or not using bottled water, or public transportation.
- Should take advantage of Cambridge's rich cultural resources: There is tremendous wisdom from older people on resource conservation, which is being lost over generations. Important to learn about how people used to live – living close to work and shops, better waste disposal, and so on.
- Cambridge's city agencies and teachers need to understand why and how to incorporate climate into all aspects of planning and operations.
- Cambridge is not doing enough as evidenced by the lack of city agency representatives (such as Conservation Commission representatives) at city-held climate change expert talks. City reps need to take CC more seriously and understand how they need to incorporate CC into every plan and decision made.
- As a community, we need to break down cultural barriers and meet on our neighborhood streets. Follow examples like California's neighborhood wardens for earthquakes. Cambridge could give someone the responsibility to go door-to-door to inform neighbors about opportunities for retrofits and so on.
- A goal for the city is to implement adaptation measures before their costs grow in the future with resource depletion and emergencies. Some measures will pay for themselves, while other measures will require high expenditures with little monetary return. The latter, in particular, will get more costly in the future.
- Another goal is for Cambridge's CC plans to incorporate the needs of all members of society, including the most desperate – those imprisoned or just out of prison and needing a job, those on welfare – who are thinking of more immediate needs than CC.
- Cambridge also shows hypocrisy in its operations, such as having lights on 24-hours per day at institutions and government buildings when no one is working. Need to assign one person to make it their business to be the squeaky wheel, to enforce efficiency measures and help people to walk the walk. If someone is given ownership, people will listen. Right now no one speaks up and no one listens.

### **Discussion #3**

**What aspirations and goals should we adopt as a city community? What specific actions should we take in 2010 to effect change?**

- Take advantage of tech companies and universities in the area to promote clean energy and to develop more green jobs.
- Take aviation into account in GHG inventories.
- Implement programming, particularly in low-income neighborhoods, to initiate the conversation about the community's GHG footprint. While all socioeconomic levels require outreach, low-income residents are often forgotten about in the CC discussion. However, they must also reduce their footprints and/or adapt. Work to counter the perception that it's only those who are well off who can impact Cambridge's footprint.
- Develop a list of climate change consequences that are specific to the local area, impending costs, and impacts on children and grandchildren. The list can be used to canvass door-to-door.
- Retrofitting activities are great and should be ramped up.
- Attitudes must change at many levels. Agencies and teachers need to be taught how to incorporate climate into all aspects of planning and operations.
- Force some change at the agency level – create bylaws similar to those for wetlands and clean air – so that they are required to consider their impacts.
- Create a sister city relationship between Cambridge and a city or neighborhood across the river specifically around climate, such as Dorchester. Choose an economically challenged community and share resources and knowledge.
- Rather than doing everything, focus on one thing, such as building efficiency. Residents want to help but they need to see the emissions data broken down.
- Cambridge needs to halt development. This may not make Cambridge rich, but it will keep residents safe. Change policies so that open space is attributed value and protected against development.
- The environment and CC needs to be a key criteria for electing government officials, which means that there needs to be a greater level of awareness, a critical mass of people supporting climate policies.
- Encourage people to live near their work place or encourage employers to hire locally.
- Sister Cities: learn from other communities, including the vulnerable communities who need to do something and already are. Share Cambridge's knowledge.
- Increase urban agriculture and organic agriculture, including gardens, green roofs, and the "city sprouts" program.
- Do a major door-to-door campaign informing homeowners of what they can do – detailing the costs, savings, amortization period, etc. Make the incentives and city resources more real to the average person. If there are existing resources, such as the Smarter Cambridge website, people don't know about them and these need to be communicated more effectively.
- Create regular reports on the work of the climate congress and publicize the work.
- Build on existing networks, such as schools, churches, community groups, and even postmen, as community communicators.
- Investigate the zip-car model for car sharing for the municipal vehicle fleet.
- Investigate charging per bag of trash - "pay as you throw".

- Promote composting, and maybe expand the “save our stuff” program to households.
- Increase publicity for metal recycling, which is far under-utilized.
- Make it fun!



## Appendix VIII – Group 8 notes

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**Facilitator: Victoria Harris**

**Delegates: Seth Federspiel, Sayem Khan,\* Suzanne Pearce, John Pitkin, Elena Saporta (Discussion 1), Lynette Saxe, Phyllis Smith, Rachel Solem, Claudia Thompson (\*Assigned to Table 6, attended two sessions with Table 8, one with Table 6)**

**Recorder: Shoko Takemoto**

**Also in attendance: Lesley Phillips (observer for sessions 2 & 3)**

### Discussion #1

**When you hear about climate emergency and you thin about our community, families, neighbors, what do you think the future holds if we don't take action?**

#### *Concerns*

- Lots of scary ripple effects due to people and businesses would happen.
- Green Jobs and corporate action will be impacted negatively, with many of us loosing our jobs.
- Seasonal change, and natural disasters related to climate change. Katrina can happen in a lot of places.
- Climate change leading to the mass migration of people, food shortages and water shortages.
- Global climate issues and conflicts would worsen (by going over the tipping points).
- Leave a world that is not ideal for next generations (grandchildren).
- Creation of a striking division within the United States between those that consider climate change a real problem (emergency) and others that don't see the urgency.

#### *Reactions & Comments*

- Each of us can do lots of simple things like stop driving or stop eating meat, but people are not ready to make sacrifices. However, extreme actions may be necessary.
  - What is the manageable average? Can we find a middle ground? Need a middle ground for everyone to participate.
  - However, in an emergency we can't make compromises.
- We need to raise consciousness but need to find a place where many can participate.
- There is a growing awareness among certain groups of people about the importance of taking action. Not only because of climate but also because of the economy, etc. However, others are not so conscious or worried.
- There is interconnectedness between the global and the local. We need to do a lot more forward thinking in politics both at all levels. We need to acknowledge the global

interconnections and work towards solving a global issue that is going to impact millions of people.

- However, changing the way we do things is hard. There is a lack of agreement regarding what exactly is going to happen to us individually, or as a community, or in other parts of the world. We need to pair the impacts of no action with alternatives (i.e. 350ppm, how much can we drive if we wanted to attain 350ppm).

**How do you think other people in your community view the climate emergency?  
Would we act more urgently if we know the impact individually?**

*How does the community view climate emergency?*

- There are variations in how community members view the climate emergency: Isolated group with extreme interest; don't care and/or don't believe in climate change; and people in the middle (happy that energy efficiency will save money). The latter is pragmatic and good, but not everything that we need to do for the environment is going to save money.
- The majority of people in a place like Cambridge are aware, but have not been active. Many can't do anything because they don't know what to do.
  - It's not an emergency to many people, emergency is economy, healthcare and climate is down on the list.
  - However, people's awareness is changing.
- Businesses are changing: Sustainable businesses leadership program, rigorous review of building and operations to be more environmentally friendly, talking to other businesses (partners) how to do businesses more environmentally friendly (e.g. composting collectively to make it more cost effective).
  - Part of green business responsibility is to work to raise awareness with other businesses.
  - Green restaurant association: want to do a short list of green restaurants in Cambridge.

*Comments & Reflections*

- How do we define a community?
  - A lot of people are not from Cambridge, and also represent a lot of different communities (Southern African American roots, faith, parents, small business owners, etc.). How do we reach out to these many diverse groups?
- We can't see the whole picture now anyways because we can only look at history in a holistic way. Regardless of how efficiently we look at things, we'll be inefficient; although we should try to predict the impacts of things, we need to mitigate things that we can't predict, too.
- There are limits to human wisdom – from a faith perspective. We won't be able to predict everything, but we have the responsibility to mitigate regardless.
- We are not capable of knowing what our best choices are, purely because we have the knowledge because there is too much that we are impacted by (relationships) – natural

system, through feedback loop can adjusted themselves. Perhaps economics can be one way for humans to utilize as a system.

- It is important to put a price and make people pay. This may have a role in making people's action more sustainable.
- Economic systems must be created in a way that it works with the natural system (i.e. need for more insurance in floodplains).
- What we need more is awareness – basic awareness (about climate change) in the culture.
- We need some simple rules, almost a moral (because we are talking about the impacts to our next generation) and spiritual issue (because it determines how family decisions are made, which used to be regulated by religion, not government).
  - But, how do you “sell” this moral issue?
  - Similar to nutritional dilemma (preventable disease such as heart attack). What has worked there? → Behavioral changes that were caused by nutritional education campaigns; nutritional facts signage has helped. Climate change awareness can be approached in a similar way.
- We need to address environmental issues (e.g. coal burning) immediately.
- Raising awareness through environmental education is a battle because you are up against so many conflicting and simultaneous things on the agenda.
- Human beings change very slowly, but for climate change, we don't have that time.
  - People are being asked to shrink their footprint and Cambridge needs to be a pioneer in this process. What are we as individuals willing to do for that? Are we willing to give up our cars?
  - However, our present consciousness doesn't seem effective enough at this point and needs to be raised.

## **Discussion #2**

**What do you think about current efforts to respond to climate change? Are they enough? Are they headed in the right direction?**

*Assumptions behind the numbers and data must be clarified before we assess the effectiveness of the response*

- How was the 20% reduction lower than 1990 levels decided? How is that measured?
- Why has that number increased to 27%?
  - Traffic measured by how many car miles?
  - Measured by environmental and community development departments
- Without being able to understand the number, science, and logic behind the numbers, it would be difficult to understand the significance and relevance of the work.
- National policy on limitation of carbon emissions, but also for incentives: no incentive for coal company to become greener, besides minimizing head counts.
- Having jobs is important.
- The numbers may not necessarily have to be highly scientific (may not be able to have all the data), but transparency is what is important

*Are we addressing the priorities?*

- 27% increase may be showing that we are not. But without knowing the reason of the increase, it is hard to say.
  - Need feedback broken down from experts
  - Citizens should have some information about who the large emitters are
  - The information is not well distributed; the average person has no clue.
  - Should help in understanding the number, as this may lead to more behavioral changes.
  - This will lead to more behavioral changes can be made
- Awareness raising hasn't been enough, nor sustainable. More local involvement and continuous awareness-raising is important.

*Reflections & Concerns*

- Context is important, how it connects with the Boston community and other communities.
- Need to clarify the interconnections. How much of the consumption is from Cambridge (not Boston from Arlington?).
- Where is the energy used in Cambridge being generated?

*Should we have specific goals as a city community? Why?*

- 2050 goals are necessary, but we also need short term and long term goals and an assessment process. If Cambridge wants to be a leader, it needs to set more ambitious goals.
- WE also need goals relating to the level of awareness among citizens.
- Need to have targeted messages and to have faith that the department is using the best science available.
- Trying to decide on what is the most appropriate percentage reduction target is not really an action towards making a difference. This is not the right direction. Instead, we need to look at the big picture and think about how to achieve the goal is more important and deciding on the methodology is important.
- Focusing on goals that we can start now is important
- Must be careful not to scare certain groups of people by setting the goals too high
- Goal is necessary, but the data and justification behind the goal must be fine-tuned. There must be sufficient data that supports and explains why this is an emergency – especially in Cambridge where there are so many inquiring minds.

*Reflections and Comments*

- Use the media to share and disseminate information. The media can play a role in informing the citizens regarding the concerns as well as give examples on what viewers can do to improve their behaviors. Goals and messages should be simple and clear.



- Mitigation is difficult. The city leading by example is important.
- Currently not much awareness about the 20% reduction target.
- We need to raise awareness and understanding of ICLEI; are there other cities around the world facing similar situations?
- How do we know that we are making a difference/impact compared to other cities in the nation or internationally?
- Why didn't we reach the goal that we set? Perhaps because of the lack of involvement.
- Need to think about the diversity of the population living in Cambridge. The well educated are present today and may be aware of climate change, but others that are not educated are less aware. Let's not assume that everyone has an understanding.
- Even if we provide information, information details may be not important to them.
- The government's role is important. The government needs to require people to understand and make a change for the public good. People make individual changes, but there are government responsibilities to make large-scale infrastructure change (e.g. in electricity supply).
- Need to empower people: need everyone to understand vs. can't put the weight to make change on the individuals. Not only need bottom up but also need top down.
- The political regulation is missing and necessary (top down is lacking).
- Is there a possibility for leadership from below?
  - If the top see that people from below are changing, then the bottom can influence the top.
  - Things do have to change at the top, but maybe we need change from below by showing change and living change (i.e. civil rights movement)
  - All of us are leaders and we have to take initiative of the change
- The city brought people in today because they recognized the citizens roles in the effort. This must mean that they value citizen's engagement processes = therefore, need a big goal that everyone can get on board.
- The roles of the government and citizens depend on what our goal is. Can't talk in the abstract. For some goals, individual actions are effective, while for others government action is effective. Ultimately need both, but for each goal, need particular solutions.
- This is a general discussion and it is set up as a general discussion because we lack the expertise to give specific best practice advice. After establishing the general goals, need people to be responsible for each sector and figure out the best ways to come up with best practices and tools.
- Could be a citizen's movement but also a consumer movement.
- It is important to involve companies like NSTAR to be here (at our discussions) and to be seen as resources to figure out information that is lacking.
- How do we organize these conversations to be as productive as possible?
  - In the future, we need to create roles to investigate specific research questions.
- There are entrenched interests (e.g. for coal companies) in keeping things as they are
  - How can we change these systems?
  - Individual-level changes is necessary for political leaders to act.
  - The missing ingredient is the will and commitment from the citizens

- People have to be presented with choices so that at every juncture they can make a choice to do good.
- How do we conceptualize what we individuals can do to contribute to the movement? Is thinking about the individual level effective?
- Raising awareness through public education is necessary, spreading the word that there is an emergency and what kind of emergency it is.
  - Maybe we can take the same approach (PR campaign) as tobacco awareness; a good plan was developed and executed.
- Cities can be a vehicle in achieving the things that they would like. Do we need more city engagement?
- Transparent and accessible and detailed information about greenhouse gas emission on local GHG emissions, can be disseminated through e-mails, television and so on.
  - Clarifying where the information is coming from and what it means is important.

### **Discussion # 3**

#### **What aspirations and goals we should adopt as a city community? What specific actions we take in 2010 to effect change?**

##### *Ideas for Potential Goals & Approaches*

- 100% awareness of climate emergency by 2010 leading to a citizens movement with specific action steps
- Create annual greenhouse reduction goals and report back detailed information in clear and understandable way
- Drive less and walk/bike more, supported by a stronger city public transport program
  - Create smaller vehicles running more bus routes
  - Make streets feel safer for children and bikes
  - Cap on how many miles you can drive (cap and trade program)
  - Secure skateboard and bike parking/racks in schools
- City will work to buy clean power
- Make ICLEI work more visible to community
- City funded public awareness campaign of climate emergency
- Education for and city promotion of jobs and green jobs, and awareness of importance of math and science that leads to green jobs/science/ engineering.
- Tax incentives and other programs for businesses to promote green practices

- City purchasing from green businesses
- Work on green business certification
- Currently, the city has a trans-fat ban – can be a similar approach
- Creation of a city-level civilian conservation core
  - Climate protection core (working on composting, etc.)
  - Cooperative education
  - Property tax rebate for green building (geothermal, etc)
  - Credit-based (not to punish people who have already done green building)
- Increase community buildings through the creation and increase of positive environmental spaces for children’s education and other purpose.
- Turn schoolyards into natural habitats and good spaces for environmental education
- Increase composting for yard waste and reduce pick up (make pick up more efficient)
- Forbid registration of large vehicles (SUVs, etc) or super charge for inefficient cars and incentives for efficient cars.
- Community gardens on parking garage roofs, and increase rooftop gardens generally
- No TV or allow TV 1 day a week; ban internet for a week
- Measure residential electricity usage at least per month, and monitor bills.
- Promote a Low Carbon Day every week.
- Promote green Christmas and green holidays
- Create internship opportunities to acquire energy audit skills
  - Collaborate with Cambridge employment center for green job information
- Encourage planting of native plants in urban areas, and reduce lawns
- Increase carbon sequestration in soils via things like biochar
- Ban leaf blowers
- Grow more local food and encourage purchasing local
  - Tax incentives
  - Equalize sales tax across nations (or internet sales tax)

- Encourage video conferences
- Reduce travel of academics
- No trash. Promote composting and recycling; require better/low impact packaging; require companies to take back packaging; and expand free cycle.
- Make public transit free and fueled by gas tax.
- Plant more bamboo
- People who drive cars pay for improving streets
- Increase ticket price
- Show innovative solutions around the world for awareness
- Green media conference and outreach to schools
- Awareness raising for green jobs, environmental education, etc.

## Appendix IX – Group 9 notes

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**Facilitator: Kathy Watkins**

**Delegates: Garrett Anderson, Kebrina Cantave, Michael D'Ambra, Emily Kanter, Ted Live, Kathrine Lydon, Charles Mielcarek, Elizabeth Wylde**

**Recorder: Deborah Lightman**

### **Discussion #1**

#### **What happens if we do nothing?**

- Compounding effect of warming, leading to more warming (e.g. feedback of glacier melting (albedo effect)).
- You get to the point where so much damage has been done that it becomes a one way street: The longer you wait, the much harder it is to slow things down.

#### **What do people think (emphasis on youth)?**

- Youth are developing projects and ideas re. climate. We need to send them the message that we should take things seriously. Teaching kids that environment is important.
- Student perspective: I hate MBTA, hate the bus and train. I get to school late and then I get in trouble. Bus drivers don't care and don't announce stops. Youth can't wait to get their licenses so that they can drive.
- Public schools must emphasize "the bigger picture", politics, global events and environmental issues.
- Many things tie into environmental issues, e.g. environmental justice
- The majority of youth care, but there's still a subset that doesn't. We need something that gets everyone to take things seriously.
- People care most if it seems personal, relevant to their lives, and what they care about.
- Difficulty in tracking the city's progress: You can't compare GHG emissions from 10 years ago to today because of the large number of new housing/commercial/industrial developments.
- You want to be able to say "We did well, we succeeded...."

#### **Targeting big users vs. targeting individuals**

- We have very large institutions and companies that use vast amounts of energy. Cambridge is the city with the highest proportion of people who walk to work, so we want these companies to be here rather than in suburbs. However, to reduce GHG emissions from energy use we have to focus on these big users.

- It's not "either or", residential or commercial. Also, working with residences provides political capacity, momentum and energy.

### **Discussion #2 The Response so Far**

- We have trade-offs and tension between efficiency and historic character (e.g., white roofs, brick sidewalks) and between short-term vs. long-term thinking and action.
- The City is moving in the right direction, but not doing enough.
- Regulations and requirements (e.g. LEED): Cambridge is unique, so Cambridge can put in its own regulations and requirements. And it can enforce and implement current policies.
- Cambridge should take advantage of opportunities created by its current advantages, things that can easily implemented (e.g. painting flat roofs white; installing solar panels).
- Incentives: making costs/benefits of individual choices explicit (e.g. solar panels, solar heating, geothermal). At what scale is an option most feasible and effective?
- Making things easier, increasing the visible and short-term benefits (e.g. On-bill financing with utility companies)
- Making people more aware of what is out there (e.g. NStar and Mass Save: you can get rebates and tax credits, and energy-saving information)
- Publicity, awareness, so that people take personal responsibility (e.g. CEA software, energy tracking tool to promote awareness).
- Forging new partnerships with business and schools (e.g. projects to map and identify appropriate places for solar panels and contact those home-owners).

### **Discussion #3**

#### **Regulations**

- Establish congestion pricing for driving into "downtown" Cambridge
- Reduce idling time limits (at state level)
- Increase "right on red" to reduce in-city vehicle idling time
- Enact regulation that city must replant trees when they cut them down (and replant with native species)
- No wood stoves without catalytic converters
- Enforcement for littering, of snow removal, of traffic/biking/pedestrian rules – to enhance pedestrian and bike travel

#### **Incentives**

- For white roofs and solar
- Stretch building code
- For retrofitting and insulation
- Collectives for buying green energy
- Local carbon offsets

- Link owner/occupant property tax exemptions to requirements regarding energy audits
- Air conditioner exchange
- On-bill financing for energy upgrades
- Eat locally (incentives and education)
- How can we have incentives for renters?

### **Infrastructure**

- City infrastructure for recharging electric cars
- Natural gas refueling stations
- More bike parking, bike lanes, continuity of bike lanes
- Provide bike cars for peak commuting hours on commuter rail

### **Awareness, education, outreach and partnerships**

- Advocate for increased transit usage
- Promote use of SmarterCambridge.org
- Create sense of urgency: not just fear but culture shift
- Something that is good for the organization, get programs started and continuity [??]
- Reach out to everyone, use/develop organizations that promote, get changes into people's daily routines
- Embed it in the system, make it part of the customs

### **To get support of and change by big energy users**

- Create Biotech/Green Councils where CEOs can talk about actions to save money and improve communications with facilities managers
- Get CEOs more onboard with building maintenance.
- Could the city require companies to report their energy-efficiency efforts/measures? Have incentives, publicity around that.

### **What's the best way of communicating with people? Who are we reaching out to and who is doing this outreach?**

- Where do we talk about this? Use existing groups (e.g. Agassiz-Baldwin Community, with meetings, print newsletter, and e-newsletter) as a model to communicate.
- Start things in schools - partnerships, messages that kids can filter out to the parents
- Immigrant parents need connections to Cambridge culture
- Public transit
  - Longer hours, better service on buses and T trains
  - Commuter rail: bike car at peak hours, increased frequency around peak and just off-peak hours, bus/van connections further out to increase spatial coverage
  - Buses: increase conversion to natural gas
  - "bike cabs" in Cambridge
- Biking: achieving critical mass
  - Continuity of bike paths, regional effort needed

- Bike racks
- Bike safety: enforcement of regulations on both sides (protect bike paths, prevent reckless biking)
- Pedestrians:
  - More pedestrian streets
  - More signage “yield to pedestrians”
  - Signals and crossing, more concurrent signals to reduce pedestrian wait times
- Individual vehicles
  - City fleet running on natural gas
  - Create infrastructure for refueling, encourage individuals to use natural gas
  - Planning ahead for EPA used vegetable oil fuel approval
  
  - INCREASE yearly fee of \$8/car for resident parking, but think about equity (e.g., charging more for a second vehicle discriminates against multi-person households). Thinking about political will and ease of implementation, this could be an easy one to do quickly.
- Think about learning: what sets a good example for the next generation?
- What is the biggest bang for our “buck”?
- Building energy use: 80% of emissions in Cambridge
  - 2/3 of these emissions are from commercial and institutional uses
  - Lots of huge energy users, like biotech lab hoods always on. Should have external standards that labs must comply with (Is there a potential for regulations or incentives re. heat exchange and other efficiency measures?)
  - “Intelligent buildings” are possible
  - Problem: organizational culture and divide between facility staff and lab staff, people at the head of organizations don’t care about saving small amounts of money by changing facility operations.



## Appendix X – Group 10 notes

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**Facilitator: Karen Preval**

**Delegates: Philip Dowds, Sarah Fresco, Mark Jaquith, Judy Johnson, Debby Knight, Rob Riman, Michael Salib**

**Recorder: Todd Schenk**

**Also in attendance: Lenni Armstrong**

### **Session #1**

- Loss of coastal areas like Cape Cod. What does it mean to the state?
- War in foreign lands to protect fuel supply
- Worry about children and young people; they are going to have a completely different world and it is going to be really hard. Everything is going to be so difficult and grim. The world is going to be a hard place to live in; won't be easy.
- The scientists have been very forthright that the challenge is coming, but a lot of uncertainty and unequal impacts. A lot of changes will be unexpected. We need to put the brakes on, but also need to create communities that are adaptable and resilient both physically but also emotionally. Want the model of Cambridge as a place that can adapt and change to continue. Want to be part of a community that is forthright and active, not simply building individual fortresses.
- Will continue to act; question of how we act. Fear loss of beauty, suffering. Beyond the human species, we stand to lose beauty – pain, suffering, these are a natural part of the human experience. Will be here regardless of what happens with climate change, but stand to damage the richness of our communities. Climate change is only one of a series of crises we face.
- Could end up like Venus.
- For us, the consequences of not doing anything are not that severe. For people in the rest of the world, the consequences are a lot worse. We'll be a bit poorer, a bit less materially endowed, but elsewhere real resource-based problems.
- Already a number of people just scraping by food-wise in Cambridge. Problem is, climate change will exacerbate this, making food a lot more expensive. For those that can afford, yes, will survive. But, major differentiation between those that can afford to 'weather' the storm and those that will be more marginalized.
- Why is overpopulation not still discussed as a problem?

- Response that a lot of the predictions from the 70s did not come to fruition – population growth has slowed and things like AIDS have, unfortunately, had impacts on populations.
- Problem is that developed world disproportionately responsible for emissions, while population growth is in the developing world.
- If people are stressed, people may start to have more children as a survival mechanism.

### **How do you think people in Cambridge view the climate emergency?**

- Assumption that people are committed to conservation and action provided it doesn't cost too much. Is this a shared notion?
- A lot more that the City of Cambridge could do. A whole lot more that could be done in terms of changing bad habits; people need to step-up to the plate. Perhaps we shouldn't make these decisions (like recycling) optional; make it imperative that you 'just do it'.
- Not even in some people's minds, thought there are things to praise about city life – we live in smaller spaces, walk rather than drive and so on. We need to do more to let people know that they are doing something and give them a nudge to do more. But, by empowering people to know what they are doing right can foster more positive change.
- Feeling of powerlessness sometimes. Still fly and so on, with large carbon footprint implications.
- Most people don't see the emergency, and probably don't know that the city council has declared one. When step out of the world in which people are absorbed in these things, realize that most people do not have these issues front and center. Where garbage goes, for example, is 'out there'. No connection between the consequences of climate change and our daily lives presently and even in the future. Social and psychological elements.
- There is Cambridge and there is Cambridge - such a diversity of people. Many don't take it very seriously. Might say, 'yeah, it's a problem' but don't act. Don't see their leaders, including in city government, taking effective action so conclude that 'they are not caring about it, why should I?'
- People don't always have an awareness of the costs, like having a four-story building 'looming' over your house in the name of higher density transit-oriented development. They don't connect the dots and are not willing to acknowledge the relationships.
- A lot of this is about information. Some have more access – have the time, energy, opportunity – while others have less. The city could a better job of disseminating data, like the impacts of air travel. People need to see that what they do has some kind of impact. Don't have a very good sense yet of what has 'the biggest bang for your buck'.
- Need for ongoing education that reaches various segments of the community. People need in formation in different ways.

- How do we get the attitude into the cultures of different organizations?
- This isn't a static thing, and hopeful that a sea change is possible and perhaps starting.
- Is it a politics of individual virtue (agency at the individual level) or is it at an institutional level (demanding standards, change, etc.) from our elected officials. Some degree of consensus that we need to push for broader institutional change.

## **Session #2**

### **What do you think of the current efforts to respond?**

- The changes the City of Cambridge has made are positive, but still a lot that hasn't been changed; certainly haven't met the goals set. However, hard to look just at Cambridge. Upwards of 80% of the carbon footprint of Cambridge as the City inventories it is in buildings, only 20% of it being residential. Huge amount of construction since 1990, particularly in energy-intensive sectors like lab space. If that construction had happened outside of Cambridge, could have been a lot worse (not transit-oriented development), but those projects could have been a whole lot better.
- We are starting to ask the right questions.
- The city has done some good things, but gives itself too much credit. Twice failed to give itself solar protection standards in zoning; failed to give incentives for sustainability in zoning. Slowly heading in the right direction, but need to have a more honest conversation. Some of the things not done (e.g. zoning incentives) would have made a lot more of a difference than things done. Need for more follow-through and self-criticism rather than just patting on the back.
- The City has done a decent job (e.g. Transportation Dept.), but maybe could do more.
- Would be great to see more price transparency in the rental market – Renters should have access to information online on the electricity consumption before they move in. This would incentivize landlords to improve (insulate, etc.).
- Another option would be congestion charging or performance parking (market mechanisms for setting parking rates).
- Curious if the efforts that have been made have made a difference. How do we measure these things?
- Motivation is really important – city does have to push more (zoning, etc.). City didn't look at green features when making zoning/code decisions. What voice is the city going to have in convincing us to make individual changes?

- Despite all that we have done, we are not meeting our goals. Certainly are plenty more opportunities in Cambridge for regulation to discourage negative activities and/or encourage positive ones.
- We should stop playing this shell game of committees and so on, and instead saying ‘we are going to cut by this much by next year and how (in terms of fleet and building stock)
- Not going in the right direction. This will be just another meeting unless some kind of legislation comes out of it.
- Why can trees be hacked apart for stupid reasons? Nature has to be protected; how many 80’ pine trees does a city have?
- Lack of hard numbers makes it frustrating to move ahead. It sounds like a lot of what we need to address is in the commercial sphere, so need to have the hard numbers so we can figure out what we should be asking the developers that come into our city, keeping in mind that it is better to have development in cities than outside. Legislation will ultimately be the answer. Also, changing expected norms (e.g. when children enrolling in school, parents asked if their child can come by food or public transport); expectation that landlords will buy Energy Star appliances; etc. We have been afraid to tell people that we expect changes, but need to do so. Need to support lifestyle changes, like carpooling kids to sports and companies giving employees more time to travel to and from meetings on public transit.

### **Should we have specific goals as a community, and why?**

- Question is 10 years out of date. We have the goals, we have the document - it’s been done. We need to act on them now. We have the goals, we have the knowledge. We know what we need to do, we need to act.
- Still lots to do in terms of personal goals.
- Goals need to be specific and measurable (and measured)... the city does have for each department, but how would you set for larger community?
- The city shouldn’t kill itself trying to be hyper-active relative to the rest of the community; there is a point of diminishing returns and killing yourself isn’t an effective use of resources. Instead, should be nudging others to change behavior.
- What is missing is the implementation plan. We have these macro goals, but need to find ways to make slow but steady progress; set yearly goals and say ‘OK, this is how we are going to accomplish that this year’. Need an implementation plan that says, ‘OK, this is how we are going to accomplish concretely’.
- Keeping residents in Cambridge, you are lowering the carbon footprint. We need to promote this lifestyle as attractive and easy. In terms of actual impact, would it be better to be convincing people in the suburbs?

- The best thing Cambridge could do is actually grow its carbon footprint by attracting growth here. What matters is Cambridge's carbon footprint per capita, and that relative to the entire metro area.
- Would be great to have numbers so that we know where the impacts are coming from and where the greatest opportunities for change are. City departments should use these numbers when making decisions. Need to make these agreements at commissions or boards, but also follow-up, which typically does not happen. To educate and motivate people you need information, then give these city committees more teeth to require things and follow-up.
- These goals have not been set by sector, by institution, etc. Some are starting to do (like Harvard) but others are not. We are all influenced by our peers, neighbors and so on; currently not a goal that everyone in Cambridge has and a plan around how to get there. Interesting and important to set specific goals at all different levels; not even mandate them, but rather just put them out there.

### **How can we affect regional, national and global policies?**

- Lead by example, which has happened to a certain degree, but not to an acceptable one.
  - Things like the Walk-Ride scheme created here have spread elsewhere.
- Cambridge may always be in a slightly different spot.
- Need to be less self-congratulatory and more motivated to capitalize on things. For example, the fact that Cambridge is the most 'walkable' city should be translated into motivation to do more, support these things rather than resting on our laurels).
- Should find ways to discourage things like second cars (e.g. charging \$500 for second parking permit).
- If there are enough people advocating on an issue, that is how change is affected. Political pushing and lobbying is key.
- Is there pressure from the city on firms around things like how many parking spots they can create with developments? Lack of national, regional, local, etc. political will to challenge people's right to drive and park.

### **Session #3**

- Would focus on changes the city government can make that affect change outside of City government.(like the ideas of performance parking and requiring landlords to give potential tenants utility usage data from past years).
- Most people in the community need to make decisions around what they buy, where they live, etc. Need to provide data for these choices (e.g. should they replace their refrigerators?)

- City has an important role in educating people for both motivation and information so people make the most effective changes.
- In terms of how to distribute, e-mail is great but also good to work with community organizations around outreach. Door-to-door contact works well. Where are the people that aren't getting messages about the city and how do you reach them? Important to send people out to talk to people, especially the hard-to-reach.
- At least one of the mailings each year from the city should talk about how our carbon footprint is changing, much like we currently get budget information each year.
- Should target underserved communities for different reasons: 1) May not have as much information; and 2) typically have the smallest footprints, and should be acknowledged and encouraged for it.
- Should lead by example, and no more finger pointing unless it is at ourselves. Should start now:
  - Each of us makes an effort on how to understand our own household carbon footprint – how much carbon we released in our own lives in 2009, and how we are going to do better than that in 2010?
  - And, pointing finger at city and asking them to do the same. OK, this was our footprint in 2009 and how are we going to improve by 2010, by say 3-4%
  - Have some expertise here on how we can calculate these things, so should capitalize on that and support each other.
- Real problems in the calculation process - the comparative advantages and disadvantages of the choices we make. Need data from the city to come up with goals at the community-level. Data needs to be Cambridge-specific.
- Not every action is going to work for everyone; targeting is necessary.
- Could grow more trees; the city should be financing more trees and getting laws strengthened to protect them, whether on public or private land ('rights of trees').
- Broader aspirational goals need to be broken out by time and sector, getting clarity on that as a city community would be good. Need some annual goals across sectors or groups.
- France is implementing a carbon no-tax tax. In other words, for most people, will be revenue neutral, but some kind of feedback mechanism for residents, businesses, and governments to encourage lower-carbon choices.
- As far as specific action, a long, long list in various areas (transportation, food, buildings, etc.) A great starting point in terms of a list is the one that came out of the

Climate Protection Action Committee. Need to keep that list alive, adding to it, reevaluating what is possible and so on.

- Need to change community norms - put pressure on our neighbors, including institutions and firms.
- Need to mobilize a la WWII - get to that point.
  - How do you get the message and motivation out there?
  - People are cynical – it's not going to change, why bother? Need to have a mobilization, and get beyond being a 'nation of drama queens' where everything is too much to handle. It's hard to push people back.
- Should have contests, like who can get their home energy bills reduced the most? Advertise through the schools, have the kids push the parents (prize motivates the kids), and so on.
- Get the council to pass the green building standards the committee prepared.
- Cambridge Energy Alliance is piloting something called 'Smarter Cambridge' which is a social networking site designed to encourage behavior change, promote competition between people, and so on. It uses pressure to force people to reengage; puts pressure on people that are well off to engage too; and can be done individually or in groups.
- How can we lead by example?
  - Some kind of exchange between youth groups so suburbanites 'learn to ride the bus' and so on.
  - More on the website promoting these things.
  - A more critical analysis of the 2002 goals and admit what has and has not worked, and talk about how they can happen – implementation. City should have evaluated by an outside agency. Be honest about the other side of the story – i.e. what didn't work.
- Ongoing reporting to the citizenry around what is going well and not so well, so built into long-term lifestyles.
- City of Cambridge could do something to flag the carbon footprints of facilities/ buildings and how they are changing over time. We all react to these statistics from baseball scores to the Dow Jones. We are not getting any feedback on how much carbon we are producing because not part of our culture, and there is no easy data that people can reference.
- Have the city fund and implement the HEET teams (energy audits, insulation barn raising, etc.)





## Appendix XI – Group 11 notes

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**Facilitator: Brian Corr**

**Delegates: Brock Adler, Yikal Bekele, Sam Crawford, David Downing, Martin Driggs, Laura Grego, Barbara Kibler, Joseph Martel**

**Recorder: Bridget Dolan**

**Also in attendance: Ann Cowen (part day)**

### **Discussion # 1**

#### **What will happen if we don't take action?**

*Overall, the group believed that the Earth will experience catastrophic changes if we do not prevent future global warming. They see it as their duty to act to mitigate climate change for the sake of their children and grandchildren. It was the opinion of the delegates that sea levels will rise, and some feared this may put parts of Boston underwater. In addition, delegates believed there will be an increase in flooding, droughts, and tsunamis if we do not stop global warming. They feared that food and water shortages may lead to conflicts around the globe. However, they also admitted that there are climate change skeptics and that not everyone in the community believes climate change will affect them.*

In the words of the delegates:

- We will be in a terrible situation.
- This is a climate emergency.
- Boston will be underwater due to sea level rises.
- Infectious diseases will be a problem.
- The gap between the rich and poor will widen. The poor are focused on working (sometimes two jobs) to feed their family. They don't have time to worry about global warming.
- The poor in our community will be hit the hardest. The poor around the world (especially in developing countries) will be hit the hardest.
- In our community people think, "This won't affect me."
- People in the community acknowledge that there is an emergency but don't think what they do as an individual matters. Our community does not have a consensus, so we need a broader vision, a coordinated effort involving policy and government.
- Even people doing research at MIT on renewable energy technologies haven't changed their behaviors. We need to change the mindsets of individuals in our community.
- Education is key.
- The IPCC report well documents now the Earth will be affected.
- The Union of Concerned Scientists produced reports predicting how climate change will affect various regions in the US in 10, 20 and 50 years. Massachusetts's climate will resemble South Carolina and Boston will be underwater up to Faneuil Hall.

- Individuals should demand change and take action.
- I worry about tsunamis, hurricanes and earthquakes in my home country of Barbados. I worry that there will be no future for our children and grandchildren. I notice shorter summers and longer winters.
- Food and water scarcity will lead to conflicts worldwide, including riots and unrest. We may end up in a military state.

## **Discussion #2**

### **What do you think about Cambridge's current efforts to respond to climate change? Are they enough? Are they headed in the right direction?**

*The consensus was that Cambridge's current efforts to respond to climate change are not enough. This was based on the announcement that CO2 emissions have risen by 27% in Cambridge since the reduction goals were set. The group could not answer questions about whether Cambridge is headed in the right direction because they do not know why the city failed and what the biggest problems to tackle are.*

In the words of the delegates:

- To answer these questions, we must know:
  - What are the most energy intensive things in Cambridge?
  - What are the biggest sources of green house gas emissions in Cambridge?
  - Why has there been a 27% increase in green house gas emissions in Cambridge?
  - What are the biggest problems to tackle?
  - What has Cambridge tried so far (in more detail than given today, though delegates were impressed with the breadth of initiatives)?
- Cambridge is in a unique position to make a difference because:
  - Its central location and public transportation system give people the option to walk, bike, and take buses and the T.
  - It is a hub of innovation and education.
  - The politics are liberal.
- Cambridge could be doing a lot more.
- Cambridge should be an example for others.
- We need to make it "rational and fashionable to be green." Rational measures to respond to climate change will be designed based on a determination of what actions will have the biggest effect. For example, focus on encouraging businesses and people to make changes that greatly reduce CO2 emissions – like choose conference calls over in-person meetings that require air travel – rather than changes that have minimal effect on CO2 emissions.
- Cambridge needs to set clear and obtainable goals and share them with the entire community. Decreasing emissions should not be the only goal or measure of success.

### **Discussion #3**

#### **What can we do as individuals, communities, and a city to reduce our contribution to polluting the Earth? What specific actions can we take in 2010 to effect change?**

*Upon learning that buildings and transportation are the two major sources of green house gas emissions in Cambridge, group 11 decided to focus efforts here. Commercial and residential buildings should be well insulated and include energy efficient appliances and lighting (including mechanisms for lights to go off automatically after hours). Public transportation (especially buses) should be efficient, on time, and affordable for Cambridge residents of all income levels. Cars should be shared rather than privately owned. Steps should be taken to make it harder or less affordable to drive and park private vehicles while safer to walk and bike in Cambridge.*

*Key to the success of these and any actions is community involvement and education. For this reason, the group strongly supports the establishment of a Sustainability Support Service (aka Community Energy Outreach Group) that reaches out to businesses, universities, and individuals to educate, engage and empower them on issues of energy efficiency, availability of services or resources, best practices from similar groups, grants or funding opportunities, and so on.*

In the words of the delegates:

#### *Buildings*

- Our heart is in the right place, but our actions are not always based on science and results. For example, LEED building standards should be performance based, but they are solely based on design.
- Walk through Kendall Sq at night and you will see the lights on in every commercial building. We could have a system whose default is to turn the lights off throughout an entire building every night. These same buildings probably also leave computers on all day and night. Let's encourage people to shut down their computers.
- Work with the Historical Commission to make sure that preserving historic appearance is not at odds with proper insulation and windows. The commission's guidelines do not allow them to make smart, energy efficient choices.
- Encourage use of energy efficient light bulbs and make recycling of mercury-containing CFLs easy for residents.
- Increase support for groups like HEET (Home Energy Efficiency Team) and others that do energy audits of commercial and residential buildings. Increase awareness of these community initiatives, perhaps through the creation of a new group called Community Energy Outreach or Sustainability Support Service, aimed at educating residents of the options, programs, and funding available.
- Help the middle class afford the initial investment required to save energy and money over time (i.e. new windows may be a smart long-term investment, but loans may be required to pay the up-front costs).

- Cap electricity use in homes and businesses.
- Increase the number of recycle bins in buildings and on public streets.
- Move to single-stream recycling to make recycling as simple as possible.

### *Transportation*

- Cambridge's bus system must be improved to be faster and more dependable.
- Public transportation must be affordable for all. In some cases, it is cheaper to drive than take public transportation. In particular, make sure that even low-income residents can afford to make the green choice.
- Bike lanes are a good idea, but not well executed. They are in places that make it easy for bikers to be hit by a car door.
- Bikers do not follow road rules; in this way, they are dangerous. Bike laws should be enforced.
- To decrease the number of Cambridge residents or employees who depend on cars, we could decrease the number of on-street parking spaces and decrease the number of parking spaces required for new buildings. Additionally, we could increase the prices of parking permits and close Memorial Drive every Sunday of the year.
- Support car sharing. Make sharing vehicles with neighbors easier and more affordable than owning your own car.
- Cambridge could be a model of a city that prioritizes pedestrians.
- To make walking easy and safe, residents must clear snow and ice off sidewalks.
- Make the central shopping areas pedestrian only (like in Stockholm, Sweden).
- Provide shuttles (like the Central Sq to North Station shuttle).

### *Community*

- Focus on a community mentality where resources are shared in a sustainable way. Transform neighborhoods so that they share cars, food production, childcare, and the costs of neighborhood windmills or solar panels.
- Make being green easy and affordable to low-income residents.
- Community initiatives and outreach groups can educate, engage, and empower individual homeowners and business owners about how to cut costs and be green (see bullet point 1 under buildings). Make it so people know and understand what is possible.
- Teach Cambridge residents about the real costs of driving cars, buying plastic products, etc. Include the cost to the environment and our national security.
- Get the youth involved.
- Consider a local currency or time trade circle.

### *Businesses and universities*

- Have a rating/certification system to assess local businesses. Post these ratings in the windows where consumers can see them.
- Form coalitions with Harvard and MIT to create audacious goals such as green job requirements. Harvard is doing a lot to be green. Bring Harvard together with other local universities and businesses to compare best practices, hold each other accountable, and compete to be environmentally friendly.
- Use educational and technological expertise from local universities to solve problems.
- Encourage businesses to hire local people who will not have to commute.

### *Education*

- Goal: Make it so that people know and understand what is possible and effective in terms of environmentally friendly choices.
- Inform people of the real costs of their actions. How can we make people pay the true costs that they have on the environment?
- Use web-based resources (including social networking sites) to inform the community or inspire competitions and collaborations.
- Include information on energy efficiency in electricity bills.
- Encourage collaborations among universities or businesses to share best practices and resources.

### *Government*

- Work with other Massachusetts municipalities and the state to affect state and federal policies.
- Have competitions (like Energy Smackdown) to get residents excited about demonstrating energy efficiency.
- Provide leadership or funding to community initiatives.
- Commit a percentage of revenue to meeting climate friendly goals.
- Help low-income residents afford climate smart options.
- Demand that polluters pay reparations.

### *Sustainable food*

- Community gardens should be made to build up our capacity to feed ourselves.
- While delegates suggested that it would be better for the environment if grocery stores sold mostly local food (i.e. no apples from New Zealand), they also expressed concern that green food options must be made affordable. For example, it is more affordable to get a hamburger from McDonald's than organic fruits and vegetables from Whole Foods. Residents who want to make healthier and greener choices may not be able to do so if the cost differential is too high. We as a society should pay the real cost of the food we consume. The real cost includes the price on the carbon released by the cows, planes, and trucks required to deliver food to us.

- Meals could be made by a central group from local produce and delivered on bicycle.
- Schools and hospitals could be mandated to serve only local foods.

*--Edited by Sam Crawford*

## Appendix XII – Group 12 notes

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**Facilitator: Pardis Saffari**

**Delegates: Sue Butler, Jason Cohen, Brian Hayden, Rozann Kraus, Risa Mednick, Alex Patriquin, Syed Rizvi, Cynthia Williams**

**Recorder: Gracie Brown**

### **Discussion # 1**

**When you hear about the climate emergency and you think about our community, families, neighbors, what do you think the future holds if we don't take action? How do you think other people in your community view the climate emergency?**

#### *Future WITHOUT Action*

- Consider the most extreme potential consequences (the upper bounds)
  - 2-3m (8-10ft) sea level rise: Cambridge and Boston underwater
  - Regions around the world made uninhabitable (drought, agriculture, desertification), and thus migration.
- Indirect effects exacerbate the problem (e.g. forests s less efficient carbon sinks)
- Need to consider time-frames; On a longer time scale (200-300 years from now), all that's left is spore and viruses. The world uninhabitable for people, animals, plants with extreme estimates (+15degC).
- Asthma rates increase with changing atmosphere and changing building types.
- Increasing winds.
- City development (economic, quality of life, structural) has impacts on how climate change impacts are felt.
- Food shortages on a 10-year time scale. And economic impacts; how do developed nations share resources with developing nations?
- These are all things that we've experienced before, only they're worse now: flood and famines.
- Heat waves - older population especially vulnerable
- Local problems include hurricanes, increased weather variability (e.g. ice storm in Central Massachusetts last winter).
- What will the impacts on drinking water be? Residents choose to drink bottled or filtered water rather than tap.
- What is Cambridge's ability to help other communities, especially with displaced people? Consider the potential of sister-schools to link communities.
- Jobs: If Cambridge steps up, skilled workers will enter the community, if we fall behind and other communities do more, we will lose workers.

#### *Perceptions of the Wider Community*

- Buzzwords hide the complexity of the issue
- Disinformation and information campaigns lead to confusion
- Limits to the information that can be conveyed (tell people to change their light bulbs, but there's so much more that needs to be done as well)
- General lack of awareness
- Sustainability not a key priority, especially in low-income communities where people have other stresses in their lives.
- The scientific community feels frustrated: understands that the people impact climate and climate change is getting worse - silenced/confused by politics, media.
- Artistic community (and others) feel disempowered - passionate about these issues, but confused/unsure how to help or make a difference
- Need clear goals (e.g. 100% Renewable Energy Now).
- What about smaller measures people can take?
- Need to bridge the gap between citizens, companies, governments, NGOs.
- Issue of affordability: How will people pay to make the changes that reduce GHG emissions?
- People live happily in denial, or they are informed but are so overwhelmed about the issues that they don't know where to start.
- Social norms - people are accustomed to tuning out things they hear about energy and climate concerns.
- Media complicates things – E.g. The dispute over whether the science is real.
- US needs to step up to improve global image.
- What's happening in Cambridge public schools?
  - Environmental issues taught in the schools
  - Children and teenagers often understand what's happening and how to deal with it better than adults.
  - Young people need to take the lead
- Disconnect between desire to be sustainable and world guided by consumerism, capitalism.
- Individualism: everyone wants to do things in their own way

## **Discussion #2**

Are current efforts enough? Are they moving in the right direction?

*General group consensus: Cambridge is moving in the right direction, and doing well, especially with regards to waste/recycling and energy, but we need to be doing a lot more, moving at a faster pace to reduce energy. Though Cambridge does more than most U.S. cities, we need to look on a more global scale to other cities and nations that are taking bolder steps than us.*

### *Buildings/Built City*

- Mandate solar on new buildings and retrofits



- Green Building Codes for cities
- Placing of infrastructure (e.g. schools on River Street are inaccessible by public transportation. Children are bussed to school).
- Plants: more green spaces in Cambridge
- Solar on rooftops of municipal buildings

#### *Public Transportation*

- Light-rail
- Congestion pricing
- Enforce the no-idling laws
- Subsidize public transportation: free public transportation
- Rebates to bikers and pedestrians
- Reduce available parking spaces, esp. for non-residents who work in Cambridge
- Train schedules

#### *Consumption reduction*

- Option to buy in bulk at grocery stores
- More recycling bins
- Recycling for small businesses and hospitals
- Diet changes: reduce meat consumption

#### *Economic Changes*

- Property-assessed financing: put cost of energy retrofits onto tax bill, makes it easier for temporary residents to pay for efficiency upgrades
- Stop subsidizing pollutants at the state and national levels (e.g. gasoline tax - real economic costs reflected in the pricing)

#### *Behavioral change*

- Economic incentives
- Education
- Top-down policy
- Setting examples

- Social cues from peer groups: grassroots movement, action
- People respond to crisis/immediate concerns

### *Community Involvement and Communication*

- Funding/grants for community organizations with earth initiatives
- Idea exchange to share existing best practices
- Easier means for community groups to publicize/share information (e.g. board for public notices)
- *Information Exchange:* There is a disconnect between citizens, businesses, etc. For example, where energy efficient technology has been installed, it is not always used because the entire community is not motivated to make change.
- *Communicate success stories:* Cambridge is a complicated place. Because Cambridge is Cambridge, it is more likely that other communities will take notice, and that they will dismiss Cambridge's actions.
- *Citizens-> Government:* Cambridge has such a huge municipal infrastructure that it limits the voices of residents and it is harder for the trickle-down effect to occur. (e.g. Community gardens are completely operated by the city of Cambridge rather than the immediate communities they are in).
- *Best-practices sharing with other cities:* ICLEI as a vehicle for expanding participation; best-practices sharing for largest emitters in Cambridge: Harvard, MIT, biotech firms; make known the available sources of funding that already exist; and corporate and institutional responsibility.
- *Data Gathering:* EIR from MA Dept of Environmental Resources; need to consider non-CO2 GHG emissions; open-data policy at residential level; study traffic and commuter studies; and environmental data monitoring.

### *How to impact national change?*

- Adaptation: Well-communicated goals on how Cambridge can help other communities to adapt to climate change.
- Accountability for worldwide behavior of Cambridge-based institutions.
- Cambridge Community Involvement and Information Exchange
  - Outreach: cities, national, international (especially accountability for world-wide impacts of Cambridge-based institutions); Data Gathering; Behavioral Change;

Economic Incentives; Buildings/Built City; Public Transportation; Consumption Reduction.

### **Discussion #3**

#### **Long-term goals**

- Cambridge per-capita emissions equal to the world average per-capita emissions, AND/OR less than or equal to the biosphere's ability to take-up CO<sub>2</sub>.
- Set the pace for the nation in making progressive change, changing the culture of consumption.
- Implementation evenly distributed across all socio-economic groups.
- Research negative impacts of alternative energy sources and possibly no biofuels.
- Reduce trash, increase recycling rates.

#### **Short term goals**

- PVs or LEDs on all municipal buildings
- Environmental data monitors
- Feasibility study of light-rail
- Lose car-focused mentality
- Financing: revolving mechanisms and grant opportunities
- Open data on residential consumption levels
- Clearinghouse for community groups to get grants
- Match action plan of best/most stringent governments (e.g. Norway)
- Create public-private partnerships
- Foster individual engagement and cultural change
- Connect the dots": community-specific impacts
- Sister-city program for adaptation measures. Initiate a strategic preparedness plan, and make this public and accessible to the whole community.
- Share perspectives/knowledge from other regions
- Engage humanitarian/social service agencies

- Cheap small-scale renewables: make available and explain how to use them.
- Import/export: tax carbon-emitting things that move across city borders

### **Actions**

- Outreach to low income people: identify networks: government: agencies, libraries, service agencies and so on that can deliver more aid for efficiency
- Work through employers and unions- provide information, time, resources
- Community-based social service agencies
- Advertising
- City agencies: schools: water, utility and paper monitoring
- City goals apply to large emitters: have to meet or exceed city goals- gives private entities the choice of how to reach these goals
- Bicycle registration and mandatory classes about bike safety
- End Mass Ave parking and put in light rail
- Metered water usage in municipal buildings
- All GHG emissions sources reported by large entities
- Environmental monitors and full disclosure of data
- Square footage of available space for PVs on all city buildings
- Assign specific contingency roles for regions by voting zones
- Increase parking rates- meters and permits: vary rates for non-residents
- Bike-share, more access to car-share, carpooling, time-share
- City drivers, city-run carpool program
- Free public transportation
- Inspectional process: monitor recycling, efficiency
- Recycling: share Cambridge experiences with other cities
- Incentivize shifting work schedules so people use more energy at night
- "Turn it off" campaign for both private and public
- Encourage city employees to take public transit

- Monitor gas usage of city vehicles
- Ask city counselors to set a global example
- Large scale public campaigns
- Congestion tax and pricing
- Publicize data around traffic transportation
- Subsidize a good local newspaper

***--Edited by Ann Cowen***



## Appendix XIII – Meeting Agenda

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**Cambridge Climate Emergency Congress  
City Hall, Cambridge, Massachusetts  
Saturday, December 12, 2009  
8:15 AM to 3:00 PM**

The purpose of the Congress on the Climate Emergency is to recommend whether and how the community of Cambridge, its residents, its businesses, and its institutions should respond to the climate emergency. The Congress's recommendations are to be adopted by majority vote and submitted to the Cambridge City Council for consideration in January 2010.

**8:15            Gathering of the Congress and Delegate Registration**

**9:00            Welcome and Goals of the Congress**

- Mayor Denise Simmons , Convenor
- Patrick Field, Facilitator, Consensus Building Institute (CBI)

**9:15            Climate Emergency: The Problem, Consequences, and Causes**

- Allison Crimmins, Kennedy School of Government, Harvard University

**9:30-10:30    Small Group Discussion #1**

- When you hear about the climate emergency and you think about our community, families, neighbors, what do you think the future holds if we don't take action?
- How do you think other people in your community view the climate emergency?

**10:30          Plenary Session in City Council Chamber**

**The Regional, National, and Global Response to Date**

- Gordon Thompson, George Perkins Marsh Institute, Clark University  
**Cambridge's Response to Date**
- John Bolduc, Community Development Department, City of Cambridge  
**Cambridge's Representative to Copenhagen**
- Henrietta Davis, Cambridge City Councilor

**11:00-12:15    Small Group Discussion #2**

- What do you think about current efforts to respond to climate change? Are they enough? Are they headed in the right direction?

- Should we be doing more as a city community?
- Should we have specific goals as a city community? Why?
- How can we affect regional, national, and global policies?

**12:15-12:55 Lunch**

**1:00 Plenary Session in City Council Chamber**

**Brainstorming for New Solutions and New Commitments**

- Steve Wineman, Cambridge resident and board member of Home Energy Efficiency Team (HEET)

**1:15-2:10 Small Group Discussion #3**

- What aspirations and goals we should we adopt as a city community?
- What specific actions we take in 2010 to effect change?

*Nine detailed questions are listed in the background materials under 'Session 3' to help you think of new ideas.*

**2:15 Plenary Session in City Council Chamber**

**Small Group Report Outs**

**Next Steps**

- Denise Simmons, Mayor, City of Cambridge
- *Volunteers are needed to step forward to help hone recommendations for deliberation and decision at the next session.*

**3:00 Adjourn**

**3:00-4:00 Delegates are invited to stay for informal discussion and snacks.**

**Preparing for Session 2 of the Climate Congress, January 23, 2010**

*By January 4, 2010, the Steering Committee will send out a summary of the ideas from today's session and draft recommendations for consideration by the Congress in Session 2.*

*Please tell your family, friends, and your community or organization about the Climate Emergency and find out how they feel about the emergency and the proposals for actions and city-wide goals.*

*Please report feedback to the Steering Committee by January 17 and **be prepared on January 23 to vote on recommendations to the City Council and the Cambridge community at large.***



## Cambridge Climate Congress - December 12, 2009

### City Staff & Councillors

Sandra Albano  
Rosalie Anders  
Steve Arruda  
Jason Alves  
John Bolduc  
Duane Brown  
Brian Corr  
Councillor Henrietta Davis  
Councillor Marjorie Decker  
Louis DePasquale  
Michelle Farnum  
Iram Farooq  
Martha Flynn

Becky Fuentes  
Brad Gerratt  
Christina Giacobbe  
Eileen Ginnety  
Victoria Harris  
Kate Joyce  
David Kale  
Muna Kangsen  
Councillor Craig Kelly  
Councillor David Maher  
Owen O’Riordan  
Penny Peters  
Lisa Peterson

Karen Preval  
Councillor Ken Reeves  
Rich Rossi  
Beth Rubenstein  
Pardis Saffari  
Councillor Sam Seidel  
Mayor Denise Simmons  
Councillor Tim Toomey  
Elaine Thorne  
Councillor Larry Ward  
Kathy Watkins

### Volunteers

*Jane Baldwin*  
Carrier Brown  
Gracie Brown  
Bridget Dolan  
Tyler Corson-Rikert  
Sarah Hammitt  
Bjorn Jensen

Reena Joubert  
Deborah Lightman  
Patty Nolan  
Kathy Reine  
Todd Schenk  
Stephanie Stern  
Shoko Takemoto

Ailina Tsarnaeva  
Cc Yu  
Natasha Whitney

### Planning Committee

Rosalie Anders  
John Bolduc  
Leland Cheung  
Lilah Glick

Joanna Herlihy  
Muna Kangsen  
Laurie Leyshon  
John Pitkin

Roz Springer  
Minka vanBeuzekom  
Quinton Zondervan

### Speakers

Patrick Field, Facilitator  
John Bolduc

Councillor Henrietta Davis  
Allison Crimmins

Gordon Thompson  
Steve Wineman

## Former Mayors in support of Climate Congress

Barbara Ackerman  
Frank Duehay  
Anthony Gallucio  
Ken Reeves

Sheila Russell  
Michael Sullivan  
Alice Wolf