

## **ORDINANCE COMMITTEE**

## **COMMITTEE MEETING**

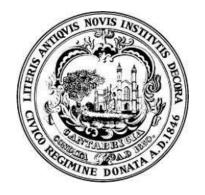
~ MINUTES ~

Tuesday, November 12, 2019	12:00 PM	Sullivan Chamber
		795 Massachusetts Avenue
		Cambridge, MA 02139

## I. Call to Order

Attendee Name	Present	Absent	Late	Arrived
Dennis J. Carlone	$\overline{\checkmark}$			
Jan Devereux	$\overline{\square}$			
Craig A. Kelley		V		
Alanna Mallon	$\overline{\square}$			
Marc C. McGovern		V		
E. Denise Simmons		$\overline{\checkmark}$		
Sumbul Siddiqui	$\overline{\square}$			
Timothy J. Toomey		$\overline{\checkmark}$		
Quinton Zondervan	$\overline{\checkmark}$			

The Ordinance Committee will conduct a public hearing on a proposed amendment to Article 22 of the Zoning Ordinance – Green Building Requirements



## CAMBRIDGE CITY COUNCIL ORDINANCE COMMITTEE

COUNCILLOR DENNIS J. CARLONE, CHAIR

COMMITTEE MEETING

TRANSCRIPT OF PROCEEDINGS

NOVEMBER 12, 2019

12:00 PM, SULLIVAN CHAMBER

COUNCILLOR DENNIS J. CARLONE: Welcome, everyone. Uh, we just had a little, uh, brief discussion beforehand about a different subject. I apologize we're starting a little late. The call of the hearing is as follows. The Ordinance Committee will conduct a public hearing on a proposed amendment to Article 22 of the Zoning Ordinance, entitled "Green Building requirements."

The hearing is being audio and video recorded and separately, uh, recorded by press. There is an attendee and, um, participant signup, sheet where our city solicitor is at this moment, making sure everything is in order. Um, if there are any public comments, and right now it appears, uh, there might not be. Um, we, uh, certainly would accept written comments.

The format of the hearing is as follows. Petitioners will be heard first. Um, there will be a question session for the Council to clarify the petition, uh, if that, uh, those questions exist. Uh, we have a, uh, quorum. We're joined by Councillor Siddiqui on my left, uh, Councillor Mallon, uh, will be back. Vice Mayor Devereux and Councillor Zondervan on my right. And I'm Councillor Dennis Carlone.

So the petitioners will be heard first, as I said. And it looks like we have, uh, most of Community Development here. So this is gonna be a broad, uh, discussion. Uh, we welcome the Assistant City Manager Iram Farooq, who will introduce all of her team. Welcome.

ASSISTANT CITY MANAGER IRAM FAROOQ: Thank you, Mr. Chair. Um, you are right, we have, a, uh, extensive team from multiple depart—multiple divisions at CDD and, um, also the solicitor's office here at the—the table for you.

So, um, you all know Nancy, uh, but from the CDD team, uh, we have folks from our, um, environment and transportation divisions. Suzanne Rasmussen, who's the director of that division, and Seth Federspiel, who is our Net Zero steward.

Um, we have also from, uh, to--to my, um, to my extreme right, uh, we have Jeff Roberts, who you are very familiar with from our Zoning and Development team. And, um, from our, uh, Community Planning team, we have Wendell Joseph, who works on, um, the Green Building review process with, um, with--with upcoming development.

Um, I'm actually, without, um, much more background,
I'm going to pass this over to Seth Federspiel since really

these--uh, this recommendation, uh, or this zoning petition as well as the one we will talk about later today, uh, stem from actions that are outlined in the net-zero action plan.

Um, so with that, Seth.

SETH FEDERSPIEL: Thanks very much. Um, good afternoon, everyone. Thanks for coming out on this heading towards winter day. Um, so we are here for back-to-back hearings on a couple of actions related to the net-zero action plan. The first being, um, amendments to the Article 22, "Green Building Ordinance", and then the second being, um, looking at provisions for exterior insulation for existing buildings.

Um, so in this first hearing, I'll provide a brief background on the net-zero action plan and then I'll turn it over to my colleagues to my right to get into the background of the Green Building requirements and then the, um, proposed amendments that are being brought to the council today.

Um, so as you know, Cambridge is committed to addressing the impacts of climate change and has committed to achieving carbon neutrality or net-zero greenhouse gas emissions, um, throughout our community by 2050, and so

this is the framework in which, um, we are moving forward with these actions.

And in Cambridge, um, our buildings are responsible for the vast majority of our greenhouse gas emissions. All of the blue wedges here are related to building energy in greenhouse gas consumption, and that adds up to over 80% of our greenhouse gas emissions. So, uh, we are prioritizing reducing greenhouse gases from buildings within our netzero action plan.

And that net-zero action plan, um, came out of a, uh, community, uh, concern around the impact of new development in Cambridge and how that new development would affect our greenhouse gas emission profile going forward.

Um, again, acknowledging the significant role of greenhouse—uh, of buildings in our greenhouse gas emission profile. And so the resulting net-zero action plan, um, which was adopted by, um, the city council in 2015, lays out a set of actions for existing buildings, new buildings, as well as the renewable energy supply to phase out our greenhouse gas emissions by mid-century.

And this next graph just gives a sense of what we anticipate that looking like, and the important takeaway

here is understanding that energy efficiency must play the primary role in terms of reducing our greenhouse gas emissions. So we can't, um, import enough green energy to solve this problem, we need to actually go to the buildings themselves.

And so both of the, um, topics—both of the amendments that we'll be hearing today, um, relate to this, um, article—the Article 22 proposed amendments relate to increasing the efficiency and reducing the energy demand of new buildings. And then the exterior insulation, uh, proposal that we'll be hearing in the next hearing relates to reducing the energy demand of existing buildings.

So, again, this just gives the background, um, of the net-zero action plan, um, which as I mentioned, was adopted in, uh, summer of 2015. Uh, the website is here, and this website has information on the entire net-zero action plan development process, as well as the resulting reports and schedule for implementation of the net-zero action plan actions.

And the two actions that we're here to discuss are

Action 2.3, which is, again, increasing the Green Building
requirements under Article 22. And then in the next hearing

we'll be talking about Action 2.5, which is looking to remove barriers to increased insulation in existing buildings. And so with that, I'm going to turn it over to my colleague, Wendell, to talk about our Green Building requirement background. Thank you very much.

JEFF ROBERTS: Thanks. Uh, before we get to Wendell, because he needs a, uh, a good buildup, um, I'm just gonna give a little bit of a background on our Green Building requirements, uh, what we have in the Zoning Ordinance now, 'cause ultimately what, um, the--the current petition is uh, some amendments to, um, our existing standards.

So, uh, those standards were developed following a task force process that, uh, took place in 2008, 2009, um, and adopted by the City Council in 2010. Um, so that was the first instance where the city incorporated, um, a kind of comprehensive and—and holistic set of, uh, Green Building requirements. These are design standards that are applicable, um, generally to all projects of 25,000 square feet or more.

And when those requirements were adopted, uh, the LEED set of standards, uh, by the US Green Building Council were used as the kind of the--the framework for establishing,

um, establishing those requirements. Uh, it was made, uh, a standard that buildings had to be designed to be, um, able to meet the, the LEED standards.

Um, and for large--for the larger developments, 50,000 square feet or more, the, uh, minimum standard was silver. And for, uh, for smaller buildings, 25,000-50,000 square feet, it's certified. So those have been our requirements since, uh, 2010. Um, and the, and buildings, uh, undergo a review process at the city. They don't--they're not required to be, um, to be registered and--and certified with that, uh, third party program. It's--it's, um, it's subject to review, um, through a city process.

Um, that zoning, and just to point out it, it addressed, uh, not just those requirements, but a whole bunch of other things. Um, we spent a long time talking about wind turbines ultimately, um, we haven't seen a lot of those but we did spend a lot of time talking about, uh, various other elements and we'll talk a little bit more about that later.

Um, one of the interesting things about this petition is, it's an opportunity not just to advance our net-zero planning goals, but given that we've got about a decade of

experience of implementing our Green Building requirements, we have the opportunity to, uh, reflect on how those requirements have played out over time.

So, I'm gonna turn it over to Wendell Joseph, who, uh, as you've mentioned has been, um, for the past four years or so, has been our, uh, main, uh, coordinator of the Green Building review. And he's gonna give a little bit of a overview of where we've come to.

WENDELL JOSEPH: Thank you, Jeff. Um, so I'm going to just share some statistics with you on, uh, what the, uh, program has, uh, looked like over the last nine years or so, and then provide a little bit of context as to, you know, why the recommendations that we're putting forward, um, are the way that they are.

Um, so since 2010--before that, I should say that, you know, everything I'm gonna talk about--uh, most of the things I'm gonna talk about in the next few slides are available on our Green Building dashboard. Uh, the link is right there on the screen, uh, cambridgema.gov/greenbuildingdashboard. So I would definitely encourage, uh, city council to take a look at it. It's a fairly interactive dashboard and, um, you can,

uh, see all this information that I'm, uh, about to share with you.

So, since, uh, uh, the, uh, ordinance was adopted, there have been roughly 92 or so projects that have been subject to the ordinance. Uh, these 92 projects, uh, approximate roughly 17 million square feet of new development. Uh, an overwhelming majority of these projects are new construction. Um, and we have a smaller amount that are, uh, major rehab projects.

Um, just to break down the, uh, square footage a little bit more, um, most of the projects are over 50,000 square feet. We have 69 projects that are between 50,000 square feet and 200,000 square feet and 36 projects that are over 200,000 square feet. Um, and the remaining 21 projects are, uh, uh, under 50,000.

Um, so this slide here just shows you how those projects, um, break down across certification levels. Um, the way that the ordinance was originally written, the, uh, uh, the ordinance does not, uh, mandate LEED certification through, uh, through GBCI, rather, it uses LEED as a sort of a framework, um, as like a built to. So projects were required to, you know, designed to be able to meet these

different levels without actually having gone through the certification process.

Uh, so this lab basically shows you that the ordinance has been, uh, roughly doing what it's supposed to. Uh, Most projects have, uh, met the LEED silver threshold, um, and a handful have, um, been LEED, have met, LEED certified, um, and we have a good amount that have, you know, gone above what the minimum requirements of the ordinance were to achieve LEED gold.

And we have, a, a handful of, you know, uh, exceptional projects that have met LEED platinum. Um, so the three projects that have been designed to meet LEED platinum, um, are, one is a residential project. Uh, one is a school, which was the MLK School on Putnam Ave. Um, and also we have an office building, um, on 2nd Street out in, um, uh, uh, East Cambridge.

Um, so as I mentioned, the ordinance does not require or mandate actual certification, but a handful of projects have actually gone on to be formally LEED certified. We have 19 out of our 92 projects that have actually gone on to become LEED certified. Um, Most of them are residential and office, and then a handful, you know, are different,

uh, uh, uses.

In terms of project use, um, this might not come as a huge surprise but, uh, over half of these projects are all residential projects. Um, and those residential projects, roughly 48, um, are just under 8 million square feet of residential uses, which is plus or minus 6,300, uh, units.

Uh, so that's, excuse me, um, almost half of, uh, over half rather, of the projects that have been subject to the ordinance. Uh, 25% of these projects have been, you know, office or lab buildings and the remaining quarter are split between, you know, other uses such as retail, uh, educational hotel, et cetera.

So this map shows you roughly where those projects are located. Um, this might not come as a huge surprise. These roughly follow, you know, general development patterns. Uh, In Cambridge, the majority of these projects have been concentrated in the, uh, Alewife North Cambridge area. And then we have another, uh, set of projects happening out in, uh, East Cambridge, uh, Kendall Square, um, area. Um, and that's roughly 66% of these projects.

So, roughly two thirds of our, all of our projects that have been subject to Article 22 have been in either

Alewife or, uh, East Cambridge, MIT. Um, Aside from that, you'll notice that, you know, projects tend to cluster around transit nodes around commercial districts and, uh, major retail corridors. So, Mass Ave and Cambridge Street, for example.

So I do want to spend a little bit of time breaking down, um, the, uh, LEED Program and, and why it is an attractive, um, program. Um, one of the things that's great about LEED is that it does account for multiple aspects of development. Um, does not just focus on, you know, the building itself, but it also focuses on how the building, um, interacts with the surrounding community. Um, and I think this is important, um, to kind of like set up the next slide.

Um, so real quick, I'll just roughly describe what each project, each category rather is about the location and transportation category, uh, rewards, decisions about building location and the credits in that category, um, encourage compact development, alternative transportation connection with amenities such as parks and restaurants. The sustainable sites category, uh, rewards decisions about the environment around the building. So credits in that

category emphasize the relationship among buildings, ecosystems, and ecosystem services.

The water efficiency category addresses, um, holistic water use. So it looks at indoor water use, outdoor water use, um, metering, et cetera. The energy and atmospheric category, um, addresses energy use reductions in buildings. It addresses energy efficient design strategies and also renewable energy sources.

Uh, materials and resources focuses on minimizing embodied energy and other impacts associated with extraction, processing, transporting, et cetera, of building materials. The indoor environmental air--uh, indoor environmental quality category, uh, rewards, decisions, uh, or, uh, good decisions made by project teams around indoor air quality and thermal visual acoustic comfort.

So it's really about the, uh, experience on the user and, um, in each of these buildings. And then there's also the innovation and innovation and design category, which, um, rewards projects that go above and beyond what the requirements are in different categories. Um, and so again, it's a fairly holistic approach to, uh, building

construction and again, how the building interacts with the, uh, surrounding environment, but also, uh, building occupant comfort.

And so I wanted to touch on that briefly to, uh, set up this next piece, which is about the optimized energy performance. Um, actually let me pause before I say that.

I'd say again, because of how the LEED Program is set up, um, and that the fact that it addresses more than just the building but building in context. Um, seeing as how we're in Cambridge, a lot of Cambridge, not most of Cambridge is fairly built out.

So as it relates to many of these categories, some of these are fairly easy for the building, for the project to accomplish without really having done much on the project itself. So, location and linkages, sustainable sites, all these are, the credits in those categories are basically layups because by virtue people building Cambridge, um, they, they are the beneficiaries of what already exists.

And so the one category, well, one of the categories where there is opportunity for improvement or bridging that gap is in the energy and atmospheric category. Uh, the

energy atmosphere category is the one category where the majority of points or majority points can be, um, uh, are located, um, usually in the low thirties, um, across different, uh, LEED Programs.

Um, within the energy and atmospheric category, the specific credit, which is pretty important and that's, the optimized energy performance credit. Uh, this credit, the intent is to achieve increasing levels of energy performance beyond the prerequisite standards.

Um, and so the way that that is, um, operated is that, you know, there's a baseline building that you know, is set by, you know, the building code and the points in that credit are awarded based on how much more the designed building is, um, performing. So basically a reduction energy cost, storage, energy use. Um, which is pretty important because again, this is one of the key ways that we can really understand how well a building is being designed and how well it's intended to perform beyond what the baseline requires.

So, here's a slide that basically shows you across the entire portfolio, if you will, of projects subject to

Article 22, how buildings are performing across different categories. And this is basically a percentage of points achieved over points possible. And so again, to the earlier point, because we're in Cambridge, some of these credits are, you know, they're performing quite well.

So location linkages are seeing that 86% of the points that are possible are being achieved. Uh, Sustainable sites 76%. So again, some of these are doing quite well. But if you notice the energy atmosphere category, there are a lot of points that are kind of like not being achieved. Um, so just over a third of the points that are possible in energy atmosphere are being achieved.

And again, I think this speaks to the fact that because there's so many other points that are just being able--that projects are able to achieve, again, by virtue of where they are, you can, they don't--there's only so much that you have to do to kind of like cover the spread in order to meet the minimum requirement of either certified or silver based on your, um, project size.

And so, that's kind of like why we are proposing the, the, um, proposal Jeff will touch on briefly is to be able to like, push the envelope a little bit more, um, and to

really take another step forward in terms of us meeting our, um, targets for, uh, energy, uh, reduction energy emissions. Thanks.

JEFF ROBERTS: Okay, now we get to the exciting part, uh, the zoning. So, uh, this is just gonna be very brief, um, because a lot of this is, is fairly straightforward. So the zoning changes fall into, uh, a few key categories. One is really just the notching up of the, uh, minimum baseline requirements. There's some additional requirements for commissioning. Um, there are some additional, uh, alternative compliance pathways that, uh, are being proposed.

There's a, a part of the process which is being added, which hasn't--um, hasn't been required thus far, which is more of a narrative description, um, that will go into the, uh, projects application process, and then, uh, a lot of the changes of the zoning text are really meant to, to clarify a lot of the, um, uh, process of, uh, review and compliance.

So, um, this is just, uh, a little summary, so the, uh, development that this applies to is still the same under the current proposed zoning. Um, so the--Uh, Wendell

talked about, uh, some of the benefits of the--um, of the LEED program, and that it, it covers, uh, design and development in, in sort of holistic way, um, and covers a lot of different, uh, sustainability topics.

Um, Because the focus of, of this effort and the netzero action plan is largely based around energy, um, the conclusion was reached that there are some other systems; rating systems, that work, um, as alternatives, that are either found to be equivalent or, uh, in some cases, better at, uh, addressing those energy related concerns, um, and those include passive house, which is, uh, an emerging—

Um, at least in this country, an emerging system, which is, is based largely on, um, design to, uh, improve energy efficiency of buildings, and also Enterprise Green Communities, uh, Program, which is, uh, is part of a broader program that emphasizes excellence in affordable housing design and the Enterprise Green Community standards.

Similarly, they, they have a, a particular focus on affordable housing and making sure that that's, uh, as energy efficient—efficient as it can be designed to be.

So, uh, so those two additional systems are, are added. A

lot of what's changed in the zoning text is really meant to--to broaden, um, the zoning requirements so that those different, um, rating systems would fit.

Um, the baseline, uh, requirement changing from, uh, minimum silver to gold under the lead standard for projects of—out of the system, for projects of 50,000 square feet or more. And then for, uh, from certified to silver, for projects that are, um, between 25,000 and 50,000 square feet, um, the, uh, Passive House and Enterprise Green Communities don't have those same, uh, kind of rating scales, but—uh, but the, basically, the minimum criteria to, to qualify were seen as, um, being the appropriate standard.

Um, and commissioning is—is an interesting, uh, component. It came from the—the net—zero action plan, recognizing the need, um, for buildings not just to be designed, um, to meet, uh, sustainability standards, but that they, uh, need to be operated as they were designed to operate, which, um, requires having a, uh, a plan in place for how buildings are gonna be operated and maintained over time.

So, uh, what this does, because zoning regulates, uh,

development at the, at the design level, um, and the construct—and through the construction process, um, what's required under this zoning proposal, is that a commissioning authority be identified and, um, and given a scope of work, and, and a plan be created.

So before a project gets its certificate of occupancy, it would have, uh, have to have a plan for, um, not just, uh, baseline commissioning, but enhanced commissioning that, uh, that takes into account making sure that, uh, systems perform to their, um, uh, uh, to--in their most efficient way. So, uh, that's--those are the really key substantive changes.

The other changes largely are procedural. Um, under the current green building requirements, what, uh, projects have to do is--um, most of these projects are subject to, uh, special permit review, or in some cases, some other type of project review. Um, and at that stage, they have to provide a, a checklist and a narrative describing how they're meeting all, all of the different, um, uh, LEED criteria, um, under the appropriate reigning system, and also, uh, showing overall what, what--what level they're, uh, aiming to meet.

Um, and what happens is they provide that at the special permit stage, and then at the building permit stage, that's, that's revised and refined, and submitted with other, uh, backup information as the, the design of the building has gotten more detailed at that point.

And then at the certificate occupancy phase, they provide all that material, again--again, along with additional backup material, verifying that the, um, project has been--um, has been developed as it was designed, um, and continues to meet those different sustainability criteria. So in the--uh, in the proposal, there are a few different steps that are--that are added.

One, again, at the--at this early project review stage, they'd have to provide a narrative that describes, um, in, uh, a bit more of a descriptive way, what efforts are being made to specifically address the energy use of the building. Um, and that, uh, is information that is helpful to staff, um, also for developments that go before the planning board, it's helpful for them to understand how the project's being designed as they're reviewing it in, in a sort of more holistic way, um, if the project is subject to planning board review.

Um, at the building permit stage, we've clarified in the zoning that, they're required to provide the results of their, um, energy simulation tool, which is also known as an energy model. Um, It wasn't, uh, entirely clear in the, in the original zoning, and over time, we've had to make it clear that, at that building permit stage, uh, in order to be able to verify compliance, we need to be able to see, um, the energy modeling that they've done.

Um, and for projects under the Passive House system, there's a--um, there's a process, uh, of, uh, verification, that takes place, and they would need to, uh, take some steps to, to do that, if they're opting to go under the Passive House system. At the certificate of occupancy phase, um, again, along with the updated material, that's when they would have to provide their commissioning plan, um, to show that they're meeting the enhanced commissioning requirements, and if they're using Passive House, that's when they, uh, will provide, uh, information on how they're, they're testing went.

The Passive House, um, system for, for people who aren't familiar with it, and I'm--I'm certainly not an

expert on it myself, but the way it operates is basically based on, um, design—both design, and then a program of testing and verification that takes place, and that generally takes place before a building is completed. As the building envelope is being built out and, and completed, they conduct various tests to show, um, how it's performing. Um, Just to, uh, wrap up the—again, most of these changes are, uh, in the texts, are procedural in nature.

Um, the way certification works for this, um, uh, set of requirements, is that the developer has to, uh, under the current zoning, have a, um, an accredited, uh, lead professional, um, provide an affidavit, uh, along with all the backup information they provide, um, uh, certifying that the, uh, project has been designed to meet the, um, standards that it's—that it says it's being designed to meet, um, and again, this is, uh, in place of having an actual—

Uh, having a--a registration process, um, uh, a third party kind of registration process, this is, uh, something that's, that's provided by the developer and reviewed by staff. The, uh, key change that's being made here is, um,

that it's, uh, specifically noted that the green building professional has to be a registered architecture engineer, and again, because we're--um, the city is relying on, uh, this affidavit and this certification from the professional, it's important that that professional be, be a licensed, um, professional at, at the state level, so that's--so that's why that's been added.

And in terms of the review, it was not clear in the zoning; in the current zoning, it's not entirely clear what the, uh, turnaround is, and that was something that was important for, uh, the stakeholders who have been working, um, and helping to review this with the city, and it was—so it was clarified that the, um, the process—that the information would have to be provided before a complete application is submitted, whether it's the special permit, building permit, or certificate of occupancy stage, and that CDD would, um, review that material and, and provide a response within 30 days. So, uh, that concludes the presentation.

Before, uh, I get into questions, I'll, I'll anticipate one, that the planning board, uh, had its hearing on this zoning petition, uh, about two weeks ago.

Um, there was, uh, a lot of discussion. There were, uh, relatively few concerns, and the planning board voted, uh, to make a positive recommendation that the city council adopt this zoning petition. So the city council will be getting a report on that at, uh, their next meeting on, uh, Monday of next week, I believe. That's all for us.

**COUNCILLOR DENNIS J. CARLONE:** Thank--thank you. Any clarifying questions, Councillor Zondervan?

COUNCILLOR QUINTON Y. ZONDERVAN: Thank you, Mr.

Chair. Thank you to the staff for your presentation. Um, I have a couple of questions on the, uh, statistics that you provided. So you showed, um, the slides are not numbered, but the project stats slide, you showed the LEED certification levels and the number of projects for each one. Do you have the square footage or a sense of how it breaks down in terms of square footage as well?

JEFF ROBERTS: Yes. Um, so the Green—the Green

Building dashboard that I shared the link, um, there it

does list out projects grouping by size, um, and I

mentioned that it's an interactive dashboard, so if you

were to click on a specific size, then it'll automatically

filter out the rest of the, um, the other, you know, charts

and graphs., so you can see roughly how that breaks down. So yes, it is—it was not included in this specific presentation, but that information is available.

COUNCILLOR QUINTON Y. ZONDERVAN: Thanks. Can you give us a sense, like, my guess is that, most of the projects are the big ones, in terms of how the square footage breaks down. So, you know, is it like 50/50, is it like 80/20?

What--what's the general sense in terms of gold versus silver, or gold and above versus silver, in terms of square feet?

JEFF ROBERTS: That's a good question. So I'm pulling up the dashboard now, just to give you a more accurate answer. Um, Yeah, so most of the projects, um, that are gold, are—so there's roughly—right now the dashboard is showing 12 that are over 300,000 square feet, um, so including—so going out from like 100,000 up, that puts us at about 22, 25, um, that are—that are gold. So yeah, majority of the projects that are gold are larger projects, and that they're a hundred thousand square feet and up.

COUNCILLOR QUINTON Y. ZONDERVAN: Okay, thank you. And similar, um, on the next slide, the primary project use, again, I have a similar question in terms of the square

footage breakdown between residential and, uh, the rest.

JEFF ROBERTS: Okay. So as you can imagine with office and lab, that's gonna skew towards the higher end. Um, Most of those are coming in at over 300,000 square feet. Uh, Residential, there's a little bit more of a spread, you know, on the different size categories. Um, for college and university, um, those were mainly in the 50 to 100,000 square feet.

Um, those are probably, uh, dorms, I would imagine.

Um, Retails, on the smaller end of things. Um, educational uses, which are basically not university affiliated projects, those are on the higher end, so those a hundred thousand square feet and up. Um, Hotel, that's on the smaller end from 25,000 to, um, just under 20,000. Um, so yeah. So it—it kind of like follows what the typical uses might—might be.

COUNCILLOR QUINTON Y. ZONDERVAN: Okay, thank you. So-so we should imagine that most of the square footage here is in the commercial, uh, space?

JEFF ROBERTS: By most, are you referring--oh, sorry.

By most, are you referring to anything that's over a

100,000 square feet or--

COUNCILLOR QUINTON Y. ZONDERVAN: Um, no, just in terms of the use, in this case, so office versus residential, this--this shows, for example, office is about a quarter of the number of projects, but--and residential is about half. But in terms of square feet, I--I would imagine it breaks down a little differently.

**JEFF ROBERTS:** Yes.

COUNCILLOR QUINTON Y. ZONDERVAN: Okay. So again, to the extent that you can help us visualize that, I think that would be helpful.

JEFF ROBERTS: Okay. And I can add just too, 'cause some of these question, I think, is just, what's the--what's been the character of development that we've seen over the past 10 years in this city? It's--it has gone, you know, back and forth a bit, I would say that, um, you know, in some parts of the city, there's been--it's been a little heavier towards, uh, towards commercial office lab. Other parts of the city has been heavier towards residential.

It's sort of balanced out, you know, it--I don't think it's exactly 50/50, but we've seen a lot of both over the past 10 years, for sure. I think that in, maybe this is

what, and the things with what Wendell was saying, and--and maybe what you're reflecting on a little bit, the commercial projects.

The individual projects tend to be larger in size, whereas residential projects might range from, you know, in this case it could be a 25 unit, um, residential project, all the way up to, you know, projects that we've seen that have been 400, you know, units or so. So, so, there's, there's more of a spread, in, in the residential sizes.

COUNCILLOR DENNIS J. CARLONE: Excuse me. So the councilor's just asking you to submit at a later time, square footage on each of the uses. So this gives the impression of one thing, but if you look at the square footage, it's more in line of what the councilor's saying. Please continue, Councillor Zondervan.

COUNCILLOR QUINTON Y. ZONDERVAN: And thank you, Mr. Chair. Thank you for that clarification. Um, so I have a question about the zoning language itself, um, in both the Passive House, Green Building Rating Program, as well as the Enterprise Green Communities, Green Building Rating Program, it refers to achieving the minimum criteria for certifications.

So could you elaborate on what that means? I think with lead, we have some sense that, "You know, gold is better than silver, or platinum's better than gold." But, but when you say minimum standard for Passive House or Green Communities, um, what, what does that mean? What—how should we imagine that?

JEFF ROBERTS: Yeah, so that's a good question. Um, so, unlike LEED, um, Passive House and Enterprise Green Communities don't have levels. It's kind of like a pass or fail type of system. And so, whereas with LEED, you have a sense of, you know, where projects are based on how high their points are, and, you know, by virtue of that, what level they are, LEED, I mean, gold, platinum, et cetera. With the other two, it's either you pass or you don't. Um, and so that's why the language is written as such, where you meet the minimum requirements to be able to achieve certification in either of those.

councillor Quinton Y. Zondervan: Thanks. So in terms of energy efficiency, then, how do we understand what is being achieved there, right? So if somebody meets the minimum requirements for Passive House, how does that compare to if they were LEED gold?

JEFF ROBERTS: That's a good question. Um, so with Passive House, one of the reasons why it is, a, uh attractive program, is because, by design, it is focused on energy use, and efficiency, and reduction, so it is already a more stringent, um, in a lot of ways, uh, program than LEED is.

Um, and there are some documents that Passive House provides, that roughly shows you how, you know, it relates, to, to LEED. So there are ways of being able to gauge how a Passive House project would, would—

Uh, to compare it to, um, a LEED project. But it is already more stringent, um, you know, programmed than LEED.

And, you know, if I could speak for staff, I think we would like to see more projects, um, pursue Passive House for a number of reasons, and that being—that being one of them.

and I think maybe to follow on the chair's direction, I guess what I'm really asking is, can you give us, at a later time, a real comparison? Um, I know with some of the schools, we talk about a 60% reduction in energy use compared to, you know, if it wasn't, uh, designed this way. So, so just so that we have a way in our minds to get a

sense of, "You know, these building's like 80% better, 90% better, 60% better." Um, so we can evaluate, you know, what's really being achieved here.

JEFF ROBERTS: Just to add one thing too, to what
Wendell said, I think it's important about, um, a part of
the rationale for including the alternative systems. Um, As
Wendell said, we, we do encourage, um, buildings to, uh, be
designed to meet, the, the Passive House standard or
Enterprise Green Community standard.

Um, One of the things that we've been hearing quite a bit from, um, developers, in, in some cases, is our affordable housing developers who are, um, seeking to meet those standards, is that, it then becomes kind of a burden that they also have to come in, and, and apply the LEED standards in order to meet our, um, our Green Building requirements.

So part of the objective is by saying, "You know, if you're meeting this standard that we really want to encourage you to meet, we're going to not make you have to go through this additional hurdle, of, of applying the LEED standards."

COUNCILLOR QUINTON Y. ZONDERVAN: Thanks. Yeah. And

that makes perfect sense to me. Um, I think it's helpful for us, to, to just have a sense of, you know, if a building does meet the Passive House standard, how much better is that than if they had just done LEED gold, for example? Thank you, Mr. Chair.

COUNCILLOR DENNIS J. CARLONE: So Vice Mayor, please.

VICE MAYOR JAN DEVEREUX: Um, Yeah, well, I mean, I guess I'm thinking it's sort of a little bit like when you have, um, a high school senior taking the college entrance exams, and some people think they're gonna do better on the A.C.T, and some people think they're gonna do better on the S.A.T, because they test slightly different things.

So, do, do architects developers sort of like compare the two and figure out, where, where they might be able to meet the, whatever the requirement is, and do it more easily? Or is it—are they different enough? I mean, you talked about how broad LEED is, so that, you know, they can meet things by location, which you can't change. I also noticed that one of the lower things where there's room, in theory, for improvement, would be in building material, so you could just say, "Well, my building isn't particularly more energy efficient, but I'm gonna use, I don't know,

more sustainable wood." Or whatever those things are.

JEFF ROBERTS: So that's a good question. I think it gets into the specifics of how each program, is, is designed, um, with, um--so with Passive House, um, the--one of the things that we've heard is that, what's extremely important is how the building is constructed.

And for those projects, whomever the contractor are, tradesmen are working on those project, they have to go through a specific training so that they can know what to do, um, 'cause it's not as straightforward as more traditional building, construction and design, um, so that's a different—because it's a different approach that requires a different, um, you know, uh, skill or expertise level, there's a cost associated with that, and I think that's one of the things that developers, will, will weigh in when they're making those decisions.

Um, so I think that's one way of answering your question, is that the programs are each a little bit different. Again, going back to Enterprise Community--uh, Enterprise Green Communities, that's specific to affordable housing projects and so if you're not--if your project's not an affordable housing project, it probably won't even

be considered.

VICE MAYOR JAN DEVEREUX: And is there a reason why the affordable housing developers decided to create their own standard? I'm just--I'm curious why that--why they needed their own standard?

COUNCILLOR PATRICIA M. NOLAN: Sure. Um, so just to dial back a moment to your previous question, um, through you, Mr. Chair. Um, the baseline for most development, or the most common standard is LEED. Everybody, architects understand it. Um, at this point, contractors understand it. It's, it's kind of, the, the baseline easy thing to do.

Uh, For affordable housing, uh, the Enterprise Green Communities, um, standard was developed, uh, just like LEED, it's broader than energy, um, and it tends to have—in terms of the other points, it tends to have a focus on things that, uh, affordable housing, particularly values, things that have to do with building community, and, and so forth, so those aspects tend to be, um, also thought of in terms of a social sustainability, in addition to just, you know—

Uh, whereas LEED might skew on site sustainability, and, um, transit and so forth. So, it, it ends up being

just a different mix that's more, uh, conducive to the values that are, um, driving affordable housing development. Um, also, it is the standard that oftentimes is referenced by other, um, groups, including other lenders.

And so, they--for affordable housing developers, they would have to do both Enterprise Green Communities, and as, um, Jeff was saying, potentially, LEED, if we--when we retained just the LEED requirement. I mean, when we had just the LEED requirements, so they'd have to do two processes. In terms of Passive--

In terms of Passive House, um, as the name suggests, it originally started as a standard for just housing, um, in smaller buildings, um, but has really, um, been expanded and developed, and, um, has been used more recently also in commercial buildings, but it is, um, by far, the, the harder reach, and I would say only, uh, people who are truly committed, to, to utilizing that standard are doing that right now. Um, it's not, um, at all, the commonly used standard.

But, um, as Wendell alluded to too, we are interested in supporting the standard, and as the name suggests, um,

passive design and actually building your building. Um, some of you have mentioned in previous hearings, uh, at ordinance and, um, in other topics, that building your building to utilize less energy, uh, is, the, the baseline first step that every building should be doing, um, and so-

But, but that's not necessarily, um, quite as straightforwardly, um, prioritized in LEED, and so we have, um, certainly from the city side, an interest in getting people to start utilizing the standard, and if it's not in the set of strategies that they could use, then we don't really have quite the same ability to—

You know, Wendell tries his best to twist people's arms when they come talk to us ahead of time, uh, but our ability to really do that is somewhat limited by the fact that we don't have a standard that kind of, um, prioritizes or values that in the same way as, um, structural or mechanical strategies that could later on, be, be added on. So that's really, the, um, the thinking behind all of that. And we will certainly, um, dig out the information, or, or consolidate the information on how they compare to each other, in terms of energy, um, energy efficiency.

VICE MAYOR JAN DEVEREUX: Okay. Um, thank you. And,

and regardless of whether you're meeting the Passive House, the Enterprise Green, or the LEED, you're all gonna be required to do this net zero narrative, so that's-

Uh, 'Cause that really does get to the energy efficiency, rather than your social cohesion and all the other stuff. Okay. And then one final question. The reason that we have these two categories, the 25 to 50 and the 50 and up, is why? I mean, I know that's in the original zoning, so we're being consistent.

COUNCILLOR PATRICIA M. NOLAN: It's true, Mr. Chair.

Um, Yeah, some of the things that you will see carry on—

uh, carry through, um, were based on extensive decision—

discussion, when we first, um, adopted the Green Building

standards, and that is one of those, um, aspects, 'cause,

um, we used the thresholds of 25,000 and 50,000 because

those mirror, "Article 19." Uh, Thresholds, um, and it was—

-it's sort of an easier way to reference, the, the

different, um, different levels of requirements.

Um, but in terms of--um, in terms of thinking through what is possible a higher--a larger project, um, clearly, is usually--uh, has a larger budget and is better able to accommodate, um, a higher bar, um, than a smaller project

where the margins are typically, um, smaller. We certainly, um, this has been born out, um, from what we--what we hear from the development community as well in terms of feedback.

Um, and as one of the earlier questions, um, posed here, um, spoke to where, which—what size buildings are more likely to go beyond the standard? And certainly it is the larger buildings, so what we are—while you were talking, I was looking at the, uh, the dashboard, and if you click on the gold buildings, you'll see that they are approximately, um, half, you know, half or so, or maybe sometimes even more.

So the larger the building gets, um, you get closer to, or sometimes even beyond the 50% number, uh, but if you get to the 25 to 50, there's only one building that has gone gold. Uh, But if you click on, the, the silver, then you can see that that's, you know, again, the remainder. But which means that in terms of the smaller buildings, they're almost exclusively going, um, for the lower standard. Um, and that's just the economics of a developing project.

VICE MAYOR JAN DEVEREUX: Okay, thank you. I'm

following along on the dashboard. It is pretty cool. Thanks. Okay.

COUNCILLOR DENNIS J. CARLONE: So, uh, before I go to Councillor Mallon, uh, Suzanne Rasmussen stood up, but now she's deferring. Okay. Councillor Mallon, please.

VICE MAYOR JAN DEVEREUX: Thank you Mr. Chair. Through you, um, in terms of the Enterprise Green Communities, it looks like it goes beyond sustainability and into areas like health outcomes and impacts, um, and that's terribly important when we think about affordable housing and public housing, to ensure that we don't have disparate health outcomes.

So it seems to make sense that they would have their own, um, reading system. And another thing that I thought was interesting was that, it goes into the culture and creativity aspect of it. They get points for that, which is, you know, around strengthening, uh, communities and resiliency, and identifying a neighborhood identity. So do we have a sense of, I guess, I just don't even know, um, how many projects; affordable housing projects in Cambridge, fall into this category or have been required to fall into this category up to now?

JEFF ROBERTS: Through you, Mr. Chair. Um, so because it hasn't been a requirement, um, it's hard to--we do know that there are couples that were interested in doing, um, the Enterprise Green Communities, and probably did, but because of the way the ordinance was currently written, they still had to submit, uh, LEED documentation.

Um, so just off the top of my head, I think there might have been at least two affordable housing projects that, were, were or are, or did, rather, um, pursue Enterprise Green Communities. Um, but again, because the language is what it is, we just—they had to provide a LEED documentation. I don't know if that answers your question.

VICE MAYOR JAN DEVEREUX: Yeah. So I guess my question is, going back to this percent of points achieved per LEED category. You know, it seems to me like what were—the problem we're trying to solve for, right, is that there are inherent percentage points that happen just because of where we live, and access to transit and things like that, and we're trying to increase the percentage points in places like energy, and atmosphere, and materials, and resources.

So just going back to the Enterprise Green

Communities, will we face such a similar problem, in that, if we have better health outcomes, and better cultural and creativity, and sense of place keeping and place-making, would we also then lose points in the energy reduction area?

COUNCILLOR PATRICIA M. NOLAN: Through, Mr. Chair. Um,

If we are only using the--I actually have to say that I

would need to look--we would need to look into that a

little bit more closely. Um, but the other thing I can say

is that some of-

Um, If you think about affordable housing, the reason that affordable housing is such a stellar performer in terms of energy efficiency, um, if you look at the current pool of projects, is because they, um, first of all, they have access—

Those, those projects have access to certain funding sources for energy efficiency that other projects do not have. So it goes over and above. Um, and secondly, that is something that, um, typically, affordable housing developers care a lot about because, um, in terms of thinking about the overall cost for their tenants, um, or owners, they are really interested in making sure that they

have a economically sustainable way to pay for housing, um, and, and the efficiency actually helps lower people's energy costs.

VICE MAYOR JAN DEVEREUX: Thank you. I remember having that conversation quite a number of times in here, thinking about the fact that they keep their buildings in their portfolios for much longer than a typical market rate, our commercial builder would. Okay, so just one more clarifying question, um, on the same slide with all the percentage of points. So this is all the LEED categories together, this isn't just gold or silver?

JEFF ROBERTS: Through you, Mr. Chair. I know, this is--um, yeah, this is everything, all the projects that are--that have been subject to, Article 22.

VICE MAYOR JAN DEVEREUX: So I think if we're asking for additional things, um, and information, I think it would be helpful to break this out by platinum, gold, and silver.

**JEFF ROBERTS:** Yeah.

VICE MAYOR JAN DEVEREUX: Um, just to see how those percentage points kind of move around, um, in--in different projects based on their LEED category. Um, and then to

Councillor Zondervan's point around the percentage of reduction in those different categories, I think that's another critical piece of this. So I would like to request that information, um, for whatever next meeting that we have. But thank you.

COUNCILLOR DENNIS J. CARLONE: Good comment.

JEFF ROBERTS: Through you, Mr. Chair. Just to add
one--

COUNCILLOR DENNIS J. CARLONE: Yes.

JEFF ROBERTS: --just so everybody knows it's kind of a small point, but so different, LEED has different ratings systems for different kinds of projects. So the way that the points are distributed across those projects may be a little bit different and the--and with the way the categories are described may be a little bit different, so it's something we'll look into, but it's--it may not fall that neatly, um, uh, for, because different projects are using different kinds of rating systems.

VICE MAYOR JAN DEVEREUX: I think that's fine. I think for somebody who's not, uh, deeply steeped in this information, I think it's just helpful to have any of it broken out, um, to take a look at what we're really looking

at. Thanks.

COUNCILLOR DENNIS J. CARLONE: Before Councillor Siddiqui raises this question, uh, we actually are scheduled to have our second hearing right now. Obviously we're not done. So, uh, the clerk has asked me, uh, to, uh, have a vote to extend our discussion. Um, he suggested a certain amount of minutes. I think it's gonna be longer than that, so I'm going to say 20 minutes.

Um, and if we have to do it again, we'll do it again.

But I think, uh, this discussion has been great and, um,

but we've asked for more information. So all those in favor

extending, uh, this ordinance hearing for another 20

minutes, please say, aye. Those against say nay. Okay, so

that's unanimous. Councillor Siddiqui.

COUNCILLOR SUMBUL SIDDIQUI: Thanks, Mr. Chair.

Through you. This was this just add on to what, uh, there-there's a request for information. Something I'm curious
about that's, and few folks have asked about it too is just
the costs, um, and cost of compliance, saving, however you
want to look at it. Just like some examples of that,
because this is, I understand this broadly, uh, but just
seeing, you know, how if we are working with the

developers, they're obviously coming in to you with concerns they have and others. I just would like to understand those numbers better. Um, so that's just, uh, not a really clarifying question, but, uh, a question if you could have that information.

**COUNCILLOR JEFF MACNARY:** Through you, Mr. Chair. So by cost, you mean the actual cost of the project?

COUNCILLOR SIDDIQUI: Yeah.

**COUNCILLOR JEFF MACNARY:** Okay.

**COUNCILLOR SIDDIQUI:** And the impact of the--the zoning on compliance.

COUNCILLOR PATRICIA M NOLAN: Through you, Mr. Chair.

Um, we--we did--we did receive that question. I did want to say that, uh, being able to identify cost of various provisions or the difference between the various LEED levels is really a challenging, um, question. And, um,

USGVC often, you know, they--they have been doing some work regarding the difference in cost between the--the various thresholds.

Um, and I would say just from knowing some of the folks who work on that, that is a very extensive process. So we can reference some of those--some of that

information. But, um, just for--just the caveat that that ends up being national information, not necessarily focused on building types. So it's a very, uh, gross kind of assessment.

Uh, we can, uh, add some color, um, as just pointed out by, uh, mentioning some of the city projects. The tough thing is that it's really hard usually to be able to tease out what cost gets, um, impacted by what particular provision. Um, but we will—we will certainly do our best. I just, um, I just want to set the expectation that it probably won't be as clear cut as, you know, here's the percentage increase from—from eight—going from A to B.

COUNCILLOR SIDDIQUI: Sure, that makes sense. Uh, But the information in the city projects would be great.

Thanks.

COUNCILLOR DENNIS J. CARLONE: Uh, when I did a LEED building, it was 2%. That was the calculation we came up with. Uh, LEED professionals will say if—if they are hired, since they know everything, it actually is zero because they get to the right solution right of way instead of spending extra time to get to it, learning the process. So it all depends on the team that's put together. And

affordable housing folks do it, as Councillor Mallon mentioned, to save money in the long run. So as assistant city manager said, it all depends on the ownership pattern. And, uh, if someone's going to sell that building in eight years, they're not as concerned about it as someone who keeps the building. So my major clarifying question is on, again, there's no numbers, but a percent of points achieved per LEED category.

Apologize, an old cold. Um, you rightfully called out Wendell Energy and Atmosphere, 35%. But the obvious thing, which I believe my fellow councillor picked up is materials and resources is in the same ballpark. And as an architect, I know glass is very expensive to make, and some glass comes from Germany, which there's travel, um, and that the cheapest materials are local materials, masonry, from New England, for instance.

So I would suggest to you all, we have to look at that, which ties in urban design. Why are most buildings masonry or wood for that matter on—on lower scale? Um, I've done passive design buildings, and there are rules in passive design buildings, uh, such as 40% glass. Most of the glass on the south side, you minimize east and western

exposure. You have overhangs of 40%, you know, all this. And, um, to protect the glass in--in summer.

Um, I think the, um, the question I agree with Councillors Zondervan and others that how do these three systems compare? And—and frankly, I think LEED is a slam dunk, with my experience. And you alluded to many of the reasons why. And most developers will maximize glass to get the tenant in, and it's not their problem. They don't pay for it, the heating.

I think it would be interesting if they had to pay for the heating out of a separate fund. I know they would raise the rent to compensate, but it's night and day compared to affordable housing, the goals. Um, Certification you asked, uh, and you said it would be through the developer, why isn't the city hiring the consultant paid by the developer? I have worked on teams and I know what happens. "Oh, we'll pick Joe Schmo because we've worked with him and he'll do what we say."

Um, I don't get that. I think the city should, and I'm recommending this, the city should be in charge and find the right people, and we use the same good person over and over again and the developer pays for it. Uh, I don't get

it at all. When you pick somebody who's on the team and is being paid by that developer, look, I could be LEED certified. I'm not certifiable.

I'm telling you, I'm not an expert. You need experts, not just an architect or a LEED engineer. You need somebody that just does it all the time. And that reputation is based on that. You don't need somebody with a law degree only, you want somebody with experience when you go to a court case. Uh, did you want to add something?

COUNCILLOR PATRICIA M NOLAN: I was, um, Mr. Chair, I was just trying to clarify, or I think it got clear as you spoke for the--if whether you were suggesting that the city have somebody consistent who was evaluating the work that was done by the, uh, the developers team, or whether you were suggesting that the city mandate who the developer hired to be part of their team. Um, but I think that, as you spoke, that became a little clearer.

councillor dennis J. Carlone: I--I think the city should be in charge of hiring the consultant that's verifying what a private entity is saying, because I've been on teams and I know what goes on. And as far as selecting which of the three, yes, all three will be

evaluated by the development team and they'll pick the one that they meet more easily, which will probably be LEED for all the reasons said, even though passive might be the best one if you're really looking at energy.

But I would—I would add why isn't the impact on adjacent building in public spaces included? Because if you're casting a shadow on a public space, many times of the year, that's terrible. Or if you're bringing wind onto a public space or an adjacent private building, you've taken value away. And I'm just suggesting if we're gonna broaden it to look at urban design issues, which is maybe what the affordable housing—housing aspect does.

GOUNCILLOR PATRICIA M. NOLAN: So, um, I guess, I'm gonna hearken back, Mr. Chair, to the discussion we had back when we first adopted the—the standards, and the discussion was whether it was better for us to utilize existing standards that have a series of well understood criteria or whether we should be creating completely new criteria for Cambridge, um, or additional criteria for Cambridge.

And where we had ended up was that given that this is something that will need to be implement, you know, just

for implementability of it, that it would be better for us to use existing standards, uh, rather than creating a Cambridge specific standard. Because many of the things that we are, uh, we--we also valued are being addressed through things like design guidelines or other article 19 review. Um, yes. So that's all I have to say.

that, but I think we can add a few things to Article 19
then, that does not look into what I just described. I've
never heard one comment on that in the planning board or
from the staff ever. If we're the fourth dense city in the
country, there are other effects that an average lead or an
average passive house, I did a passive house up on a
mountain, wasn't going to affect anything else. So the
specific view of it has to be broader given the location.
Okay. I think we're done --Yes. Vice Mayor.

VICE MAYOR JAN DEVEREUX: Actually, just to--to follow on to what you're saying, um, we actually just got an email from Mike Nakagawa who, you know, is part of the other task force that we have on the Climate Resiliency Zoning. And he is, um, just making a case that there is the other piece of

the impact of buildings, um, on people and--and so forth.

And, um, just asking us not to forget that ultimately there will be a zoning recommendations, you know, similar to the Green Building Index or—or other things that could address some of those urban planning and resiliency things that are outside of the lead criteria, I think if I understand his email to us correctly. So just putting that out there, 'cause those are good points.

COUNCILLOR DENNIS J. CARLONE: Okay. Any, uh, so we're beyond clarifying questions, so we immediately slip into any other discussion, any other points? I think we all agree this is a great step forward. We're just refining it, and please take it as that. And we're asking questions. I think many—many good questions. Uh, Council Zondervan, please.

COUNCILLOR QUINTON Y. ZONDERVAN: Thank you, Mr.

Chair. Through you, I, uh, completely agree this is a great step forward and I look forward to, uh, to moving this forward to the council. Um, but I am, at the same time, a little disappointed because this is what we asked for six years ago when we started the net-zero--when we filed the net-zero zoning petition. And it was, at that time, even a

somewhat conservative step because most of the big buildings were already coming to us, uh, with LEED Gold.

And even the--the Akamai Building in--in Kendall Square is LEED Gold despite it being entirely covered with glass, which to Councillor Carlone's point, um, makes you wonder, you know, are--are these standards that we're putting forward stringent enough at this point, given what we know about climate change and--and the progression, uh, that we're going through with that.

So, you know, we--we have to put this in place. Um, but my mind is already jumping to, you know, what are we doing next? Um, you know, the--the net-zero narrative is -- is a great step forward as well, um, but it doesn't require any movement towards net-zero at all. There's no solar requirement, which--which Watertown has passed. There's no, uh, elimination of gas, which we're considering now in a separate, uh, conversation.

So I guess, you know, what--what sort of thinking in terms of trajectory here, so--so we do these and then do we just go straight to net-zero or are there any intermediate steps? Because if we're talking about the net-zero action plan for large buildings, which again is most of the

buildings that were--most of the square footage is gonna go into those buildings, um, we're talking about 2025 for commercial and large residential and 2030 for--for labs.

So that's a very long time during which we're basically saying we have these relatively conservative standards in place. And then, you know, 10 years from now, five years from now, we're just gonna suddenly jump to all the way to net zero. So I'd be interested in any thoughts about what we could or should be doing in the interim to get us there.

JEFF ROBERTS: Through you, Mr. Chair. As--as you know, Councillor Zondervan, um, the goal of the net-zero action plan was to lay out a set of stepping stones towards the ultimate net-zero requirements. And so those stepping stones are still contained within the plan, and it is still our intention to follow those steps.

So while the current zoning amendment is late, um, in this fiscal year, we are due to review that proposal and look at the next level of urgency that would be an intermediate step between here and the net zero requirements that are slated to take effect in 2025 for most buildings.

And our intention is to do that review and to propose that intermediate step as a potential zoning amendment or whatever the appropriate action is on time, which would be late--late this fiscal year, early next fiscal year. Um, similarly, we are moving forward with, um, completing a study and--and thinking about proposals for a solar installation requirement. Um, so--so those are specific actions within the net-zero action plan that it is our intent to follow through on--on schedule.

COUNCILLOR QUINTON Y. ZONDERVAN: Thank you.

COUNCILLOR DENNIS J. CARLONE: Councillors, any other comments? Well, I have a couple. One is this 25,000 to 50,000 square foot. If it were commercial buildings, I would understand that small commercial buildings. But I would suspect that at least in my neighborhood on Mass Avenue, most buildings, new buildings, and there will be many, um, all the one story sites in the next 20 years, will be in the order of 25,000 to 50,000 residential.

Which tells me if you add all it all up, we're talking about huge amount of square footage, but it's also incremental that we won't really be raising the standard very much. And I would hope, uh, in the session that Seth

just referred to, when we look at the big picture again, we really reconsider that. Um, Now 25,000 is 25 units, and think about any 25 unit building, it is not insignificant.

Um, so it seems to me we have to think about uses as well, and that residential probably is lower, significantly lower than commercial. Nobody--few people are gonna build a 25,000 square foot commercial building, um, whereas many people will be building 25,000 square foot residential building.

One of the reasons why affordable housing is so--uh, it's 1:19 now, so I can feel Mr. Wilson looking over my shoulder on time. But one of the reasons affordable housing is so economic, uh, so energy efficient is it truly limits glass as does most residential buildings. Commercial buildings do not.

And maybe it's in the next year, but all glass buildings have never made sense, energy-wise, no matter what you do all the tricks. And the reason is the cost of energy in creating that glass and putting the gas between the pans is ridiculous. And in the next discussion, I would add that it might be more efficient when we get to it to have three ply windows rather than putting insulation on

the outside of buildings. And we'll get to that in a moment.

So I think this subject, as much as we appreciated and are all in favor of it, we do want to get the additional information back, and to learn. To learn how the three standards that you're proposing are different, what is the advantage, what is the disadvantage with going with each one from a developer point of view so we have a better understanding. I love the notion that passive is more difficult to achieve. Just knowing those things, our help is helpful.

Um, so unless there's other comments or questions at 1:20, wow. Uh, we're on time. We'll close this hearing, so I will close it. There was no public comment by the way, because there's no public. And we will begin the next hearing immediately or with a few minute break, whatever you wish. What does the council prefer? Vice Mayor, you're reaching.

VICE MAYOR JAN DEVEREUX: Well, uh, I'm happy to--to keep on going. I just had--I had one sort of procedural question. So we've basically have kept this proposal in committee.

COUNCILLOR DENNIS J. CARLONE: Correct.

VICE MAYOR JAN DEVEREUX: And we've asked for some more information. Um, in terms of timing, it doesn't expire, does it? Or does it expire?

JEFF ROBERTS: They all expire, through you, Mr. Chair.

VICE MAYOR JAN DEVEREUX: They all expire.

JEFF ROBERTS: --Um, so the--this is the first hearing on this and it's a 90 day, um, 90-day period for the council to act. So I think we calculated that out to February 10th of next year. So unless action is taken by this year, uh, this year by this council, it would--could carry over, but the--

VICE MAYOR JAN DEVEREUX: Okay. Well, I guess my--my one concern, I know for one thing there's urgency because we'd like to get these, given that we've waited for them, we'd like to get them in place.

And then the other thing is that when there is a new council, it sometimes takes a few weeks for whoever is mayor to form the committees and for the committees then to notice their meetings. And February 10th could make it awkward to have held hearings, Ordinance Committee

hearings, do the pass to the second reading and, you know, blah, blah. So just putting that out there, it's not my problem, I guess, but--

COUNCILLOR DENNIS J. CARLONE: Well, I think there have been a number of questions for clarification, which will help in—in spreading the word and being much clearer on what the intent is for people who are going to use this. I have no problem having another meeting in December on this. This seems to be a priority, uh, at least in my mind, and I know a few others.

VICE MAYOR JAN DEVEREUX: I guess—I guess all I'm suggesting, and it's just a suggestion, is that you work with the clerk to figure out, you know, how that timing would work so that if we were inclined to adopt it, we would actually not run out of time this term because otherwise then it gets carried over and there's—

COUNCILLOR DENNIS J. CARLONE: Well, once again, this-

VICE MAYOR JAN DEVEREUX: --the difficulty of
scheduling.

COUNCILLOR DENNIS J. CARLONE: Yes. And this is the first meeting, so we have 90 days to go forward. I

understand what you've said, and my goal would be to get it done before the holidays. Thank you.

COUNCILLOR PATRICIA M. NOLAN: Um, Mr. Chair, if I could just mention--

COUNCILLOR DENNIS J. CARLONE: Please.

COUNCILLOR PATRICIA M. NOLAN: -- the one, uh,

logistical constraint that we have is that we may not have key staff here available in--for much of December.

COUNCILLOR DENNIS J. CARLONE: I'm sorry, when?

COUNCILLOR PATRICIA M. NOLAN: Much of December.

COUNCILLOR DENNIS J. CARLONE: December.

COUNCILLOR PATRICIA M. NOLAN: Yes.

COUNCILLOR SUMBUL SIDDIQUI: Mr. Chair?

COUNCILLOR DENNIS J. CARLONE: Well, this, uh, this will show a commitment on your--no, I'm kidding. I get vacations. Yes.

COUNCILLOR SUMBUL SIDDIQUI: February 10th is my birthday, so, you know. Um, but I did want to say that I agree with Vice Mayor in some ways. Are we--the questions that were asked, I don't know if they're gonna lead to substantive changes in the zoning itself.

Correct me if I'm wrong, and I think it's just more

information. So I would be inclined to--to move it out of committee, uh, because I don't think that substantive information is going to have a bearing on--

COUNCILLOR DENNIS J. CARLONE: Can I do that?

**COUNCILLOR SUMBUL SIDDIQUI:** --our ability. That's my opinion. I'm open to thoughts from my colleagues, but wanted to put that out there.

**COUNCILLOR DENNIS J. CARLONE:** Can I close the meeting?

CITY CLERK ANTHONY WILSON: You can close it here.

COUNCILLOR DENNIS J. CARLONE: Yeah. Uh, well, what does, uh, council want to do?

CITY CLERK ANTHONY WILSON: Is that a motion you want
to ask?

COUNCILLOR DENNIS J. CARLONE: Is that a motion? Um,

Madam, thank you. I knew it was, but I wanted to make sure.

Yes? All right, let's move on the motion.

COUNCILLOR SUMBUL SIDDIQUI: I made a motion.

COUNCILLOR DENNIS J. CARLONE: Yes.

COUNCILLOR SUMBUL SIDDIQUI: Clerk?

COUNCILLOR DENNIS J. CARLONE: Yes. Yes, you did.

COUNCILLOR SUMBUL SIDDIQUI: Motioned.

councilLor DENNIS J. CARLONE: So, uh, the motion is to, um, approve this and move it on with the favorable recommendation to the full council at which time, um, we will have those few questions addressed for the full council.

And I thank all of you for bringing up the time issue and, uh, working like a team to make sure this happens. So all those in favor say aye. Aye. Those against? So it is approved with the favorable recommendation. Thank you, all.

Don't go away. I'm gonna turn off the mic. I'm gonna put the mic back on. Welcome to the second hearing. Uh, the call of the hearing is as follows. The Ordinance Committee will conduct a public hearing and a proposed amendment to the zoning ordinance entitled "Insulation Zoning Proposal."

Um, there is—

## CERTIFICATE

I, Kanchan Mutreja, a transcriber for Datagain, do
hereby certify: That said proceedings were listened to
and transcribed by me and were prepared using standard
electronic transcription equipment under my direction
and supervision; and I hereby certify that the
foregoing transcript of the proceedings is a full,
true, and accurate transcript to the best of my
ability.

In witness whereof, I have hereunto subscribed my name this 21st day of December 2022.

Kanchan Muteja

Signature of Transcriber

November 12, 2019

1. A communication transmitted from Louis A. DePasquale, City Manager, relative to a petition to amend provisions in Section 22.20, which governs Green Building Requirements, and also applicable definitions contained in Article 2.000.

IN COUNCIL 9.23.2019 CMA #5

IN COMMITTEE 11.12.2019

IN COUNCIL 11.18.2019 CRT #2A

**RESULT:** REFERRED

2. A communication was received from Christopher Schmidt, 17 Laurel Street, regarding Green Building Ordinance Proposal

RESULT: PLACED ON FILE

3. A presentation was received from the Staff of the Community Development Department regarding Green Buildings and Insulation Zoning.

RESULT: PLACED ON FILE