

# **Big G in Conversation Building Sustainable Future September 7, 2021**

## **Transcripts**

Wendy King

Welcome to Big G in conversation podcasts from inside Guelph City Hall. Hi, I'm Wendy King, and on today's show we're talking with city staff about the plan to have all city facilities and operations using 100% renewable energy sources by 2050. Let's get started.

Wendy King

Joining us today is Heather Yate, supervisor of Environmental Programs and Brian Ho Yan, Manager, Corporate Energy and Climate Change. While welcome everybody.

Heather Yates

Hi.

Bryan Ho Yan

Hi Wendy.

Wendy King

So honestly, I can't think of anything more topical right now. After we've all been watching the news with you know hurricanes and major flooding, and you know, hopefully everybody focusing a little bit more on the environment. So Bryan, just to start us out. What can we do as community members to both conserve energy and also reduce greenhouse gas emissions?

Bryan Ho Yan

Yeah, I think there's lots to do and and and you know throughout the community, even as committee member of Guelph, you know it's not all that hard and in their little things that that make the big.

Terms of things at home. You know it's simple as just turning off the lights when you're not in the room. Or you know, using less water.

Uh, shorter showers, but even things like maybe not idling your car so much when you're on in the driveway or even cleaning out that garage and keeping the car in the garage, but it's intended for, right?

Wendy King

So what mom and Dad told us all those years ago?

Bryan Ho Yan

Yeah, exactly. You know, it's something that that really makes my day is, maybe I'm old school, but even just hanging your laundry out there. It's a. It's a great way to to just kind of spend some time outside. Uh, you know, be able to get something done and and save energy while you doing it.

Wendy King

Generally speaking, do you find that the residents of Guelph and also the businesses are really in tune with? Uh, you know. Recycling renewable energy. Just thinking about the environment.

Bryan Ho Yan

I think the Community Guelph is really passionate in terms of the broad environmental stewardship. You know doing what they can to to reduce waste.

Save energy all those things, right? Uhm, but you know, it doesn't mean that you know having those great intentions that we can't do more. And then we're always looking to improve, and how we can contribute more. So yeah, I, I think we're ready for him.

Wendy King

And what does energy conservation have to do with climate change and greenhouse gas admissions?

Bryan Ho Yan

Yeah, so when we use energy being electricity or natural gas or even gasoline or diesel fuel, what we're doing is as we're using that energy, we tend to burn fuels and emit methane and carbon dioxide, and those are all greenhouse gas or contribute to greenhouse gas emissions.

And so because of that, then it's changing the atmosphere and it's also changing the way that our climate reacts and environmental weather patterns and all that. So by using less energy or, you know, emitting less greenhouse gases and doing her part of the planet.

Wendy King

Does the city have energy conservation or greenhouse gas emission targets? I'm sure you do.

Bryan Ho Yan

Yeah, so I I kinda classify them into two targets. You know, as a as a community. Everybody is to to strive towards being a net zero carbon community by 2050.

And then the municipal. The municipality in itself. So looking at all the buildings and the the fleet vehicles buses all the things that the city runs.

Uh, the target is also aligned with that community target, but also has a corporate target of 100% renewable energy by 2050, so meaning that we're supposed to supply all the energy that we use with with renewable sources.

Wendy King

Why 2050?

Bryan Ho Yan

So 2050 was chosen at that time it was aligned with with federal and provincial targets and is is aligned with with UN targets as well.

Wendy King

To a lay person as myself. That sounds like a grand target, like a big that's a big objective. 2050 is not that far off as we all know, this year's just fly. Is it is it, I mean, obviously you consider that doable.

Bryan Ho Yan

Well, I think there's a lot of conversation about targets.

Uhm, and rightfully so. So we do have to to to to reduce our emissions. 2050 is not so far away and it is a big a big ask. I think what we have to do though is is there's with all the conversation in the discussion, I think we just have to get to it now and and really just start conserving. And like we said, there's little things and and big things that we can do. And, uh, our approach is is really conserved. What we can and and keep moving towards that target.

Wendy King

And Heather, as I understand it, your department is kind of made up of three resource specific services. So you your hand all solid waste water and the watershed.

How's that all work together?

Heather Yates

Yeah, Wendy. It's it's Solid Waste, Water, and Wastewater. And of course there's a lot of circularity that exists there, so these three services not only provide operational functions of you know, picking up our our waste at the curb and making sure water is safe for us to drink, and then of course, treating it again before it goes back to where local waterways. But we all work together, ensuring that the public are aware of the right practices to keep rates and taxes low so they can have an impact on that.

In order to do that, the city invests in outreach education and communication. Of course, to engage with our residents and businesses and sort of identifies kind of a bit of a role that they play in ensuring those smooth delivery of the of the Community services so recently, actually, internally our Environmental Services Department, which is made up of those three resource specific services, reorganized to align the programs and public engagement of those three groups into this, this team of environmental programs.

And, so what that meant for us for city staff is that we're considering all of our messages and our tactics to engage with our community and how we measure that success to be aligned. And so while we've always traditionally leaned on one another for opportunities, or or or those challenges for a for improving the services, it kind of formally brings that work together.

For example, most recently it was just come to light, so we're starting to plan for a little bit more of a broader rollout of a communications campaign around wastewater. So a bit of a spoiler alert, but you know our our solid waste team is always been running with a waste wizard app that not only helps you, reminds you when your garbage and recycling day it is, and what's going out, but if you have any questions about what can go into which of your three bins or has to be taken back to the house or just household depot, that information is right there, but it's also can be a reminder for people and used as a tool that they shouldn't be using their toilet as a garbage can like it's pee poo paper. A bodily waste only in the toilet. But it and it also can be used to promote things like flushable wipes, contoured at the packaging. They are not in fact flushable.

So another really good example is actually engaging with our school groups. So instead of giving class presentations that strictly focus on water where Guelph gets its water from, how it's protected, treated, and used, hopefully efficiently, it doesn't then parse it out from that of what happens after we flush the toilet and then goes into a, you know a second chapter there of what it actually takes for that water to be treated so well that it can go back to you to our local waterways. So from to touch on your point about watersheds there.

So we really do look forward to getting back to sort of those public and traditional public engagement events and to sort of so that our public actually sees us as they already see us as that one city. And so this, this helps us with being sort of that one voice when it comes to our environmental messages.

Wendy King

I love that idea. Even the fact that you remind people because you know it's it's crazy you recycle and you do your garbage every week or whatever. And there are times when you you just you forget do I put, can I put that in you know you sort of things you know, like you know, batteries don't do that, but there's there's times that you just, you laps and it's like I can't remember or if that's allowed in now sometimes it changes, so that's a fantastic idea to just keep a reminder for people.

Heather Yates

Yeah, absolutely. That waste wizard app. If if people don't have it, it is a helpful. It's a helpful tool for people. We're right now running a campaign around aerosols and not only aerosols. Even empty shouldn't be going into your your recycling, even though it's made of added those back to our our waste Resource Innovation Center to be to be recycled properly or disposed of properly.

But they can contribute to to hazards for our workers as well, so there's fire hazards that that can be caused from these things as well. So one one small, one small prompt there with our waste wizard app is it's. It's a helpful tool that way.

Wendy King

Yeah, very much so now I know you have probably long term projects and when

more short term projects could you run down some of the stuff you're planning for like the next year or so?

Heather Yates

Yeah, absolutely. And there's actually lots of opportunity for public involvement as well. It's been a, it's been a busy few years contrary to the impact of COVID, we've been still running in the background with a lot of our master planning exercises, especially the water centric and our solid waste master planning processes in the background and and and engaging in engaging the community so staff is going to start to be executing on those recommendations assuming a Council is comfortable with the recommendations coming through those master plans later in this year.

In the case of water and wastewater master planning process will be needing to update our current Water Efficiency Strategy, which is is well well regarded in the community, and there's been a broad uptake there.

And so what the without water efficiency strategy will need to be doing as proposed those fiscally responsible direct and indirect water savings programs and projects based on you know Guelph Community and the constraints, but this time around Guelph lights can be really expect a great deal of consideration to be had around the circularity of our water system.

So that be the interconnectedness of source protection, water, wastewater and stormwater. And considering that of reuse as well as affordability questions being at the forefront of the strategy development.

And we'd like to expand on the scope of that water efficiency strategy to that of an integrated approach to water management that better evaluates than the impacts and recommendations may have even on one another, and how it's best to serve the community through that one water or part of one city lens. Also, in the same vein of of circularity, waste is managed in a very circular fashion. It's only now that it's becoming more common for the Community discuss circularity when it comes to waste as a resource. For instance, I believe there was Path podcast around our food future in the work that they've been doing with the Smart Cities initiative as well, and they're bringing a lot of awareness to circularity to traditional food waste, as well as a number of other initiatives, of course, but that that ties in quite nicely to where we're going internally as well to make sure that this update to the what solid waste management master plan is evaluating those greater opportunities for reuse of goods with the end goal of course, to reduce diversion rates, the waste that goes actually into a landfill versus that of of a means that's a little bit more sustainable.

So the the provinces of course, leaning into producer pay models. So looking at how they're going to change that Blue bin program that were also well used to. And you know what our parents have taught us, but it means that that producers are going to be responsible for that, but that's going to have bigger ripple effects across all the streams of wastes, and so we we anticipate some some great opportunities there so the city can always have get involved. There's lots of information at

guelph.ca/environment, and of course, signing up through, have your say Guelph. That'll not only tell you where some of those projects are, but also give you an opportunity to to prompt you where there's public participation, so at: haveyoursay.guelph.ca.

Wendy King

I was looking through some of the things that you have done over the years and I'm not sure if it's Bryan or or yourself. Had there been? If you could comment a couple of these, I thought they were really unique that I had not heard of being done, for instance cold water ice flooding.

Bryan Ho Yan

Yeah, yeah, that's smart. But yeah, I think makes sense. Exactly, there's there's a bit of a trick with that, so yeah, you do have to make sure that we're getting the air bubbles out of there, and we're making sure that the ice is actually even better quality than it was before, so there's a perfect example of where, you know you just use common sense. We're using less energy to go and make a good clean sheet ice.

Uh, and uh, yeah, we're we're we're winning in terms of ice quality, which is the most important part and not screwing up programs and ice skating and saving energy at the same time?

Wendy King

And on a similar vein, electric ice surfacers?

Bryan Ho Yan

Yes, we have. We have three Zambonis that are battery electric and then as we're replacing the other remaining ones will be doing the same. A lot quieter, better air in the arena, so it makes it more enjoyable time for the audience.

Wendy King

So we were talking about how you're gonna have a or or try to have all operations of facilities using 100% renewable energy sources by 2050. Uh, how do you handle residents versus businesses industry?

Same same rules, same idea, is just on a bigger scale or how? How does that work?

Bryan Ho Yan

Yeah, so that's bringing back to those two classifications, so that 100% renewable, again is is is on our corporate facilities, so that would be the West End Community Center to even our wastewater treatment plant or solid waste facility and City Hall.

But also, even looking at our buses or you mentioned ice resurfacers right? So all those things will be doing that and I just want to keep in mind I know renewable energies in the title? But we're not looking at, you know, putting solar panels and paving our streets with solar panels and continue to use lots of energy. This is a

conservation first approach, so we're reducing our energy use. So that means we would require less solar panels to go and do the renewables supply.

The other classification, though, is that community boundaries, so the community boundary. That's everything within the geographic boundaries of the city of Guelph, be it residents or businesses.

And that target, sorry we can't forget the municipality as part of that too. Or we are a member of that community as well.

So everybody is to make that contribution towards that net zero carbon by 2050 target. And again that would be very very similar in the vein of 100% renewable and that it's a conservation first approach, 'cause that's we conserve energy. We use less or we emit less GHG. And it's also taking on smart strategies to get off of dirty fuels and then move towards cleaner fuels. So things like electric vehicles would benefit. Moving towards that target too.

Wendy King

Uh, where is Guelph in that? Do you have a lot of people using electric vehicles?

Bryan Ho Yan

I don't have the numbers at hand, but actually yeah, I remember coming across that and the adoption of electric vehicles is pretty significant in Guelph.

And anecdotally is I'm driving around. I actually I'm I am an EV owner of an older model. And I had you tend to notice these things as I kind of geek out on energy and see that there's a lot of electric vehicles on the streets in Guelph

Wendy King

The other thing that we had talked about, I think in a pot past podcast, was during COVID. A lot of people were. Uhm, maybe trying transit for the first time were doing some biking and and your your paths and you're walking trails and all that. We're really well used. So do you think that might continue? 'cause that I assume kind of works into what you're all trying to do?

Bryan Ho Yan

Yeah, so I think the active transportation network. I mean what a phenomenal network and it's been a savior for me in terms of COVID and and before. And he's like keep exploring it. I find out more trails and more, more pathways and stuff like that. You know with the first day of school today. You know, I like the kids over there and it's fantastic.

Definitely the the the sustainable transportation team is looking to expand the network and actually they did receive some Federal and Ontario supports to do exactly that is expand the active transportation network.

Wendy King

And transit in general, I know your guys are doing a lot with the with your

transportation department, so that'll be a huge huge win for you guys too in terms of saving energy.

Bryan Ho Yan

Yeah, so transit is has done some fantastic things as they continually improve their their operations. You know with things like the on-demand program that they're doing right now.

Uhm, another thing that's coming down the pipe is electric buses, so we're looking to have battery electric buses. Uh, we're going to be doing some pilot modifications to our existing garage and then in future years we're going to be designing and developing the broader city operations campus, which will be home to the new electric transit facility.

Wendy King

Yeah, that's good to be amazing. I can't wait to see what you guys do there. Um, so you expect, really, I think you said this, but that your community you feel will will embrace all of this. They they're very conservation minded. It sounds like anyway.

Bryan Ho Yan

Yeah, I I've been seeing some great support and I mean, you know, we see it through through all the the very engaged community groups out there that are that are keeping us going on on approaching those targets.

I see it through, you know, solar panels on residential homes and even on commercial buildings as well.

Yeah, I, I think everybody is is ready to go and has already been doing things.

I'm gonna I'm gonna even give a high 5 to the water conservation folks too. I mean Dave Dave let the path and Trail Blazers at all and I think it it really got into the DNA of the community and it's really helped as we as we move towards this climate change emergency and and everybody taking a hands on deck approach.

Wendy King

For sure. So let's go to their the rapid fire questions. So for both of you.

How do you think the initiatives that you both talked about will benefit the community? Heather, do you want to go first?

Heather Yates

Sure, we've been seeing a lot like, as Brian alluded to there or or spoke quite kindly of the the water efficiency programming has has quite a history or water supply master plan has always been driven by reclaiming capacity and and water conservation optimization. Efficiency continues to be driving that, so it's sort of defers those costs, or that timeline of large infrastructure investments, and so I think that we've we've shown a great history on on keeping rates lower because of



that, and I I see some of these programs continuing to play a significant role in that.

Wendy King  
Bryan?

Bryan Ho Yan

Yeah, I'd like to add to that. I'm not gonna lie to you. Energy costs are going to increase as time goes on, so the more that we take on this conservation approach the more that we use less now and into the future means a lot less of a dent on our pocketbook moving forward.

So that's from the fiscal side of things we we spoke about, you know those side benefits. And let's look at mental health history using these active transportation paths.

Uhm? Fantastic stuff there and getting us outdoors and you know, it just makes us better people and we get to enjoy the outdoors.

And then even on the water, the water side that that Heather had mentioned, you know, we're a very unique community. Being a ground-source water community, and it's a limited resource just like fossil fuels. But it's a very critical resource as well. So huge benefits there.

Wendy King

Heather?

Heather Yates

Yeah, I just wanted to add to that. Yeah that with the with regards to the fiscal responsibility, we're so used to seeing it through that lens. And Brian, I I appreciate you expanding that scope because I think that we need to value those other aspects of it. It's really hard to model into the future and say what would have been and we've tried to accomplish that through through water and through energy. If we don't do this, this is what it could look like that we are living a different experience because of that investment and in our communities, commitment. And as we spoke about earlier on, we do have such an environmentally-minded community and that's evolved over the many, many years of of the city's investment, as well as just the Community investment in that. So it's been fantastic to see that and and we hope we will continue to see that commitment of our Community and I'm sure of it.

Wendy King

And what one word would you use to describe this with the city wants why the city wants related to move ahead with these initiatives. What comes to mind?

Heather Yates

Oh darn it. I'm a verbose person. I don't have one word.

Wendy King  
We'll give you a few.

Heather Yates  
To lean on Bryan first.

Bryan Ho Yan  
I am stumped, so the one word-thing that that, I'm sorry. Can you just repeat that?

Wendy King  
One word that you know why the city says, we've, we've got to move ahead with this initiative. So why is it so important?

Bryan Ho Yan  
You know? I think I'll use 2 words and I think it's just common sense. It just makes sense that we should be doing this from all aspects and and maybe a third word is: now. Like let's get on with it.

Wendy King  
Yeah

Heather Yates  
Like let's get on with it. I was also gonna add in just. I mean it's such a. It's such a cliché term, but innovation because you know there there is our whole modern society has been built up with innovation and this is. This is the way forward presently so I would. I'll go with innovation, final answer.

Wendy King  
That's great, that's great, didn't even have to phone a friend you guys.

A lot of good information honestly. you. I've always, always amazed about Guelph and all your initiatives and you just always on top of everything. So 2050 as we said not that far away. So lost to consider. Thanks to Heather and Bryan for your time and expertise and I just got to admit you know what I'm gonna take away from this podcast. Pee, poo, and paper. That's that's what I got so.

Nothing like...

Heather Yates  
Stuff like potty talk. So thank you Wendy

Wendy King  
Thank you. See you soon.

Bryan Ho Yan  
Thank you.

Wendy King  
I'm, Wendy King, with the City of Guelph Big G In Conversation Podcasts. Thanks for joining me. If you have ideas for a show or comments, you can email

[biggpodcast@guelph.ca](mailto:biggpodcast@guelph.ca). Until next time, take care and let's keep the conversation going.