

February 15, 2024 Community Meeting - Questions & Answers

If you missed the meeting, [you can watch the recording here](#).

The meeting included the following presentations and updates:

- Mayor Denise O'Connor – Opening remarks
- Lucas Coletta of Natural Resources Canada – Advantages of net zero construction
- Robin Urquhart of RDH Building Science – Wildfire-resistant construction
- Village of Lytton staff
 - Rebuilding in 2024 – timelines and programs (Diane Mombourquette, Chief Administrative Officer)
 - Who to contact for help with rebuilding
 - “How to” guidance documents
 - Development Services update (Birte Decloux, Planning Team)
 - Village infrastructure planning updates (Mike Blaschuk and Don Wong, Recovery Managers)
- Mayor Denise O'Connor – Closing remarks

27:08 Question (Councillor Lightfoot): Lucas you suggested that Robin would give us more information about the exterior insulation (wood fiber or wool fiber). I'm wondering if Robin could expand on that.

Answer (Robin Urquhart): We are developing one-hour Wildfire Resistant Rated wall assemblies to conform to the requirements in the National Research Council Wildland-Urban Interface guide. The walls are not yet finalized, but the way it is looking right now is that adding mineral fibre exterior insulation can provide enough fire resistance to the wall. Another option may be to add 5/8” Type-X gypsum outboard of the structural sheathing layer. These wall assemblies will be available soon and will be very helpful for the industry in coming to terms with exterior fire-rated wall assemblies.

Answered after the meeting

28:27 Question: So, is that just framed on the exterior? Could you apply it to an existing house, so you would just frame it on the outside and then do your sheathing on top of that?

Answer (Robin Urquhart): You have stud wall assembly and your sheathing, then your weather-resistant barrier, and then you have your exterior insulation and that usually gets attached with strapping so 1x4 or something like that's screwed and it screws through the insulation, and it traps the insulation and that forms a truss, so it's structurally fine. That's how you usually attach the exterior mineral wool. The strapping cavity also creates your rain screen barrier and then your cladding goes on outside the strapping.

29:15 Question: I'm all for making more fire resistance I'm all for making Lytton more fire resistant, but first of all NRC isn't approved in Canada and the other thing is zones don't work in a town where houses are 10-feet apart, because your zone two goes right into the yard and the house. So, I think there has to be a different approach, because it's not reasonable.

Answer (Robin Urquhart): I agree. The zone approach (the way that FireSmarting works) means that the zones bleed into each other and you can't always control what your neighbour does. So, that's where the resistant construction plays a bigger role, because you can protect your house a little bit more and maybe you are the bulwark, so maybe someone else's house catches fire and yours doesn't spread to the next house. That's one idea.

As for the NRC, the NRC is the National Research Council of Canada, and they produce the building codes that we use like the National Building Code of Canada. They've produced a guide, which is the Guide to Wildland and Urban Interfaces where they specify construction recommendations; they're not requirements, they're recommendations for wildfire-resistant construction. In going through that guide, I think this might be what you're thinking. There were some issues we found with that guide that we've fixed for the PacifiCan program roll-out in Lytton.

31:14 Question: I've done the research, and you don't get heat out of the air when it's -30C, so what you do is you get heat when you compress the air. It is still more efficient than natural gas; well natural gas is just a little bit more efficient than heat pumps right now moneywise. But the thing is with Lytton a lot of people didn't have insurance and even the ones with insurance they don't pay for a heat pump. I checked it out. For Lytton people, it's about \$24,000, and because we don't have a backup heat system, they sell them with the backup propane system. So, in Lytton, you don't want just a heat pump, you want a backup, so moneywise the government isn't providing Lytton for backup heat. There's no grant for people who build a new house; only for those who are changing over from oil or propane to a heat pump.

Answer (Lucas Coletta): Just to clarify on the PacifiCan grant, there's one component of it which is the wildfire resistance, which Robin has spoken about, and then the other component of it is achieving a Net Zero level of performance for your house. The way we designed the Net Zero portion of the grant was we worked with local builders and we did a number of energy models and we talked to builders who have constructed Net Zero homes in remote and cold communities. So, we brought everyone together and we talked through what would be the cost and what are the technologies necessary to achieve Net Zero in Lytton. Heat pumps are one of them. It's called a cold climate air source heat pump, so you're right they're not all created equally. Some of them only function to -10C or so, and then there are other ones that can go down to -25C. Minus 30C is a stretch. You're right: you're not always getting heat, so you do need a backup source. Often, this is the way we costed it out: we costed a backup system with our cold climate air source heat pump. That's part of the Natural Resource Canada's modelling guidelines. So, anytime an energy advisor or any home is built or modelled to have a heat pump in it as the primary heating device, we always model a backup system in there as well.

So, you have a number of options for backup heat. One that's most common, especially when you have solar panels on your roof or you're going all-electric, is to have backup heating resistant strips, so they sit within your air handler or within your furnace and when it's -30C out and your heat pump isn't

generating enough heat, they're almost like electric baseboards. They kick in and they add that little extra boost of heat to keep the house warm.

There are other backup options, as well. You could go [with a] propane furnace. I think that would probably be a more expensive solution. Because if you were to go to Net Zero, as well, you [would] need a heat pump which is doing heating and cooling, and you'd have two primary heating devices and we know the cost of propane is pretty high. The other option that I've heard is having a wood stove in the house, as well, that's a good backup heat source, although it's not necessarily passive. It requires you to be there and be involved to stoke the fire.

The PacifiCan grant Grant is to cover the cost of building a Net Zero home certified through Canada Home Builders Association Net Zero Labelling Program. [NZE Program Landing Page - Net Zero Program Official Launch \(chba.ca\)](#). The grant covers the cost of a cold climate air source heat pump and it does cover the cost of a backup system [which is] sufficient to get you all the heat you need through the coldest of days in the winter. The grant cannot be used for a cold climate heat pump (with backup heat) as a singular measure. The grant is for a series of measures that must be used together to reach CHBA Net Zero certification. Such as insulation, windows, solar panels, etc.

Answered during and after the meeting

35:36 Question (Councillor McCann): [My first question is] about reaching Net Zero when you have obstructions like hills in the way. So how can you ever get a Net Zero house if the hillside is right behind you and it's going to block your solar panels from being particularly efficient?

Answer (Lucas Coletta): It's a good question and it's a reality of trying to get energy from the sun. If there are things blocking or things in the way between the sun and our panels, we're not getting much energy. Site makes a big difference. Where your house is located, what direction it's going to be facing, if there are trees, if there are hills—that makes it more challenging to reach Net Zero.

The criterion to meet Net Zero is you have to generate as much energy as your home requires throughout the year, so you have to be able to offset how much you generate from the sun versus how much you actually use. What we find is as we get to houses that are more restricted in the amount of solar energy that they can generate, typically we compensate for that by bringing the amount of energy the house needs down as much as we can. So, maybe that means adding a bit more insulation, having a slightly more energy-efficient heat pump.

Your energy advisor and your builder can work together to find a solution to get to Net Zero. If you find yourself in a place where you just can't generate a lot of solar, then an option exists to spend less of your grant on solar panels and put more of that grant into your insulation or your air tightness or your windows, therefore requiring you to know your house needs less energy, so you don't have to have as much solar on the roof.

It's a good point. There are complexities. It's not just we put solar [panels], we're guaranteed to get to Net Zero. We do have to think of what's around us. We've seen people get to Net Zero in some very tricky conditions, so I do believe it can be done.

37:55 Question (Councillor McCann): My second question is about windows. I've been hearing about these fire-resistant windows for the last two years and it's a complete mystery to me. What is a fire-resistant window?

Answer (Robin Urquhart): I think that's [a mystery] to many people, as well. That was one of the issues that we had with the NRC guide, so we developed a different window specification. I can tell you what the PacifiCan's version of a fire-resistant window is as wildfire-resistant as we think is feasible and is based on the requirements in California's building code. It's multi-pane, so you have more than one pane in it like a double pane or a triple pane window, and one of the panes has to be tempered glass, so it's heat treated and it's four times more heat resistant than normal glass.

It adds a bit of cost to the window, but not nearly as much as you'd think. When we had builders in Lytton cost it out, the window package increased from \$10,000 to \$11 or \$12,000 (including the tempered pane for all windows.) Then, the frame of the window can be almost anything fire resistant, except exposed wood and that's also in the checklist. It makes it a bit more specific, but like fiberglass with a fire-retardant resin, thermally broken aluminum frame, wood frame with an aluminum or metal cladding on it.

It's a great question because it was one of the biggest hurdles that we had to overcome with this and it was screwing everybody up. We went to the California standard, and we looked at a whole bunch of other stuff, and we think we have a pretty good specification for a wildfire window now.

Question: How available are those windows with tempered glass?

Answer (Robin Urquhart): You can get them made. Almost any window manufacturer will put a tempered pane in if you ask them from my understanding.

40:04 Question: Unless I missed it there's still the problem of getting a grant for building a new house. Has that changed?

Answer (Lucas Coletta): Is the question do you want to get a grant for a new house?

Question: Most of the ones here are building new houses. Not too long ago I checked into it and the grant wasn't available unless the house was 6 months old, so has that changed?

Answer (Lucas Coletta): So, I think there's one grant that's available right now from the federal government and that's called the Greener Homes Grant that's available to all Canadians across Canada and it's \$5,000 toward retrofitting or renovating your existing home, not a new one right now. So that's a program that's been running for, I think, two years now. It's just ramping down, I think it's going to close out at the end of March. For new housing, though, PacifiCan is offering a grant, which I think probably a lot of folks in the room there will be happy to chat with you about and so will we, but that's for new housing. That ranges anywhere from, I think, \$60,000 to almost \$100,000 depending on the size of your home that burned down in the fire. That's a grant that you don't have to pay back, that is toward a new Net Zero home.

41:42 Question (Councillor Lightfoot): I want to ask this one question because it comes up from time to time and I'm not sure I have an accurate answer: How fire-resistant are solar panels to embers?

Answer (Robin Urquhart): That's a good question. It depends on the panel. Generally, they're reasonably resistant, but you'd have to look into each specific panel to figure out what their sort of combustibility rating is. It's hard to generalize. 'It's a good question and you'd have to follow up with the panel manufacturer, but it shouldn't impact the rating of the roof, even depending on how they're installed (meaning, you have to be careful about not degrading the fire resistance of your roof by installing solar panels). The roof is your protection for your house. There are solar panels on the market that meet certain fire resistance standards. I think this is something we need to look a little further into and provide more information on.

Answered during and after the meeting

42:45 Question (Councillor Michell): I just wanted to clear up Ernie's question. I think what he's getting at is right now there's a grant available if you're retrofitting your house (so renovating) but for a new house you're only eligible for a heat pump grant if you're building full Net Zero. Is that correct? There's no grant just to go out and buy a heat pump?

Answer (Lucas Coletta): That's correct. The grant is for all of the ingredients that will take you to Net Zero, and part of that is a heat pump. You can't just pick one ingredient; you have to come up with the whole recipe to get you to Net Zero, and that's when you get access to the grant.

1:09:02 Question: I've kind of misled a few people in businesses about the building permit. I thought that was change that it was people before the fire course and I thought it was changed to all property owners before June 30th, but they would get 50% reduction in a building permit.

Answer (Diane Mombourquette): It's for all properties that are rebuilt that were lost in the June 30th fire, so it's meant to apply to the person who owned the property, is rebuilding that property, and has applied for their building permit by June 30, 2024.

Comment (Councillor McCann): The archaeology applies to everyone, including people who purchased a property post-fire, so that might be the confusion.

Question: The building permit [fee reduction is for] just those June 30th, 2021. Is that correct?

Answer (Mayor O'Connor): Yes, so anyone who lost their building in the fire on June 30, 2021 and is planning to rebuild can receive the 50% reduction in their building permit fee.

1:10:18 Question: For the future, bought into a new development in Agassiz and probably about the size of Lytton and they're building new houses. When they're mostly done, the icing on the cake is to go around and do all the paving, two or three-inch paving, and made it all brand new. Is there any idea of doing that to Lytton in the future?

Answer (Mayor O'Connor): That would be something that we would consider and look at in the future. We have a lot of construction happening and all of those kinds of pieces, so we've chatted about that a bit. But, at this point in time, we won't make those specific decisions.

Comment: I was just wondering about the money.

Answer (Diane Mombourquette): We're just not quite there yet.

1:12:02 Question: Will there be a contact person in the Village when residents are building, someone to problem solve on the spot when issues arise?

Answer (Diane Mombourquette): There will be a number of different people available in the Village, particularly over this first building season. We have the Community Navigator Jeff Isert, who's just joined us and is getting up to speed on where everything's at. We have Brian Baxter and his team who are here pretty much all day every day, although they're not devoted to recovery. The Village of Lytton staff are all involved, and they're all engaged and if they don't have the answers they know where to get them. Then, we have Mike and Don, our Recovery Managers, who are here frequently and available to assist you. When it comes to resolving issues on the spot, the Village of Lytton will have mechanisms in place to solve the issues that are related to the Village of Lytton. I'm not sure about all issues that aren't under our control, but we will do everything we can to help assist and facilitate.

Comment (Mayor O'Connor): Can I add that you know you talked about these "How to" documents. I think once people see those, once they're out in public, they will also provide some information of who to go talk to depending on the issue and what people are looking for. I think those are going to be valuable.

Comment (Diane Mombourquette): We're happy to create and provide more of those, as we see a trend and things that people are wondering about or need information on. We'll continue to add to the group of them.

Comment (Councillor Lightfoot): We need to remind people that the office is open every day and that some of this information is hard copy on the desk and that Kathy is there to assist people and give direction if they need assistance.

1:15:30 Question: I was interested in the [PacifiCan] business recovery program, but I was wondering if it's for new businesses, as well, or is it just for business recovery?

Answer (PacifiCan): All businesses, returning and new, seeking to operate in the community of Lytton, that is within the Village of Lytton or within 15 kilometres of the Village of Lytton, including on-reserve, may apply to the Lytton Business Restart Program. Funding priority will be given to the businesses identified as critical to Lytton's rebuild and longer-term economic viability.

Information about PacifiCan's Lytton Business Restart Program can be found on the program webpage here: <https://www.canada.ca/en/pacific-economic-development/services/funding/lytton/business.html>.

Answered after the meeting

Comment: I noticed it said it's up to 15 kilometres from town, which would include me. I'm at 11 kilometres.

Answer (PacifiCan): The Lytton Business Restart (LBR) Program is designed to be flexible in the type of businesses that may be supported. Through the application process, proposals will be assessed using criteria that include consideration to the contributions of the business to the economic and commercial recovery of Lytton and support for the emergence of a vibrant and inclusive regional

community, and viability of the business.

It is not a requirement to have a registered business to apply to the LBR Program. Every business is unique, business owners are encouraged to reach out to PacifiCan with any questions:

lytton@pacifican.gc.ca.

Answered after the meeting

Question (Councillor Michell): If we can also make clear whether or not that is only for registered business owners. There was a lot of misinformation in the beginning that it was for everyone, even small businesses and home businesses, and I don't think that's the case. I think you have to have a registered business number. If we could just make that clear, as well.

Answer (PacifiCan): The Lytton Business Restart Program is designed to be flexible in the type of businesses that may be supported. Through the application process, proposals will be assessed using criteria that includes consideration to the contributions of the business to the economic and commercial recovery of Lytton and support for the emergence of a vibrant and inclusive regional community, and viability of the business.

Answered after the meeting

Comment: December 7th, when this came out I had a question because it wasn't for apartments

1:17:09 Question: Is it for someone that builds an office for someone like the bank, so it's not a direct business, they're building a building for say the bank. There wasn't really an answer to that, so hopefully that information will be in what's coming out.

Contact information

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PacifiCan Lytton programs

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Fire-resilient building webinar – March 12, 10 to 11 a.m.

- Robin Urquhart from RDH Building Sciences will highlight critical elements of fire-resilient construction and present info sheets and graphical details to support the requirements of the Lytton Homeowner Resilient Rebuild Program fire-resilient checklist.

PacifiCan Lytton programs

Lytton Homeowner Resilient Rebuild Program

- [Program info](#) (application deadline extended to March 31, 2025)
- [Co-operators Financing Program fact sheet](#)

Lytton Business Restart Program

- [Program info](#)

