**Kathleen Heymans:** As Alison mentioned, I am the lead of sustainable finance with the Green Municipal Fund at the Federation of Canadian Municipalities. I'm joining you from Sault Saint Marie on Ontario, which is based in Robinson Huron Treaty territory, the traditional territory of the Anishinaabe.

Before we jump into community efficiency financing, I wanted to mention the Federation of Canadian Municipalities as the national voice of local governments in Canada. And FCM's mandate includes delivering programs that build municipalities capacity to deliver innovative, cost effective local solutions to environmental challenges, and to enhance quality of life for their citizens.

And the Green Municipal Fund, as you may know, is the FCM's largest program and is funded by the government of Canada. So today I'm going to be talking to you about the path to market transformation in community efficiency financing. And the first half of this presentation is going to be a little bit about community efficiency financing in particular, and then we'll go into what we're seeing within that program at G M F.

So first the challenge. This is from 2021, but at the current rate, it will take 142 years to retrofit all residential buildings in Canada. And so the Community Efficiency Financing program was created as one part of the solution to increase Residential low-rise retrofits as well as help overcome some of the barriers to low-rise residential retrofits.

And so what are some of these barriers? I'm sure that those on the call today will be familiar with the barrier of the upfront cost of having home energy retrofit work done, as well as process complexity in terms of how to apply for incentives or financing and how to collect quotes and contact contractors, as well as information gaps and understanding what retrofit measures are the best fit for the home. So a lot of this falls on the shoulders of homeowners.

As I mentioned, the Community Efficiency Financing Program was launched as Canada's national initiative, providing communities with innovative financing solutions for home energy upgrades. And to have a look at some of the context of where this comes from in the federal budget of 2019, the government of Canada announced funding for a suite of new G M F programs. And this included the Community Efficiency Financing Program and the Community Efficiency Financing Program is a 300 million funding envelope that helps municipalities create, launch and expand innovative financing programs for home energy projects. And it's a unique program to G M F or Green Municipal Fund in that it is a program of programs.

So rather than funding projects, we are funding municipalities and their partners to, to launch their own full skill residential retrofit programs. And under our community efficiency financing, or we call it CEF, offer three different models are eligible for funding. And this includes the property assessed clean energy financing mechanism.

And each of these three models is Is distinguished by the repayment mechanism that is used for the financing that goes to the homeowner. So in the case of property assessed clean energy financing or a local improvement charge, "LIC" some of you may have heard, the repayment mechanism is an annual charge on the property tax bill. And this financing is not tied to the individual homeowner, it is tied to their property. So allowing that financing or PACE or LIC to stay with the property if the homeowner should move.

The other two models involve third party financing, such as utility on bill financing, where the repayment mechanism is on the homeowner's utility bill.

And then the second, third party financing mechanism is direct lending, and this involves traditional financing through say like a credit union or bank for financing for home energy upgrades for homeowners. So each of these three models is eligible under the Community Efficiency Financing program.

Just to give you a snapshot of what our offer looks like, we have grants up to 175,000 for feasibility and program design studies, as well as a grant up to 500,000 for pilot programs. And then we fund capital programs either through a loan of financing up to 10 million and a grant up to 50% of the loan. Or for a direct lending program, a credit enhancement. So this acts as a loan guarantee or a loan loss reserve to help de-risk private capital and unlock preferential interest rates at a minimum of five to one ratio. And this also with a grant up to $5 million. And then lastly, we also offer grant funding for evaluation studies for existing programs.

Along alongside our funding offer, an important piece of our community efficiency financing approach is to build holistically the ecosystem of local efficiency economies. And so we have a lot of great capacity development work that supports our applicants through a resource library, fact sheets, case studies as well as a community of practice for peer-to-peer learning.

And most recently we had our two-day inaugural staff learning forum which was a hybrid event, again for peer-to-peer learning and knowledge sharing. That was led by the capacity development team for CEF. And these are the high level ultimate objectives for CEF. So they're twofold. For the local programs, we're looking at achieving triple bottom line benefits, environmental, economic and social for all programs.

And then our ultimate long-term objective of market transformation. So by funding programs Validating successful models to build confidence in private investors. We hope to see these programs scale and recapitalize into the future and hopefully become mainstream for leveraging private capital to, to perhaps start new programs with private capital from the beginning.

So to summarize our theory of change or our conceptual path to market transformation with community efficiency financing: again, we are funding studies and we have funded, we have about a two dozen capital programs approved and so we are seeing high uptake across Canada.

And through this proof of concept, we want to continue to fund and scale and replicate successful models and more new programs across Canada. And ultimately we want to see these programs be able to recapitalize, leverage private capital to continue to operate successfully well beyond CEF funding.

This is just a note on pace enabling legislation and where legislation is currently enacted. And this has been consistent with where we also see uptake in CEF. And to date all but one of our approved capital programs is using a PACE or the LIC model. So this has come out as a popular and high demand choice with municipalities looking to launch local efficiency financing programs.

So this is just to give some context. When we look at the uptake slide, when we look at a snapshot of the current CEF portfolio.

CEF Programs across Canada. This is a map you'll see. The blue is our approved capital programs. Dark green is our pilot grants. And then the light green is our study grant. So we see this as the beginning of a big success story whereby pre-CEF, there were maybe a handful of this style of types of programs across Canada, and now we're seeing dozens of approved programs and uptake a across Canada with with many more municipalities expected to be looking for capital program dollars in future years.

Wanted to highlight a couple of a couple of models and a couple of Our CEF capital programs. The first is the Switch program in Nova Scotia and PEI, and this includes Charlottetown, Stratford, and Wolfville. They received a loan of 10 million in a grant of 4.1 million. And as of November 2022, they have 486 projects underway with 1062 tons of annual CO2 equivalent reduction and 130 plus jobs created as well as 565,000 in annual energy cost savings.

So those are highlighting some of those triple bottom line benefits that we are seeing from our local programs for that first objective for CEF. And the second program I wanted to highlight is Durham Regions Greener Homes program in Ontario. And this is was a first of its kind type of program.

So going back to the offer and the credit enhancement. CEF provided a credit enhancement or loan guarantee of 1.5 million to unlock third party capital of 7.5 million. And this also came with a grant of 1.9 million. So this is an example of a partnership with local credit unions to offer traditional direct lender financing to homeowners for home energy upgrades.

And then the grant used to support some of the capacity and energy coaching or concierge services to help homeowners navigate some of those challenges that I mentioned earlier in this presentation around understanding process and bridging information gaps in the energy home energy retrofit process.

The last one, early signs of market transformation, potentially. So last summer the City of Ottawa and Van City announced their partnership and their deal. The second tranche of 30 million that recapitalize the city of Ottawa's Better Homes Pilot program which was initially funded through the community efficiency Financing initiative. And so this is the kind of change that we are thinking of when we are imagining market transformation is how can more of these programs through demonstration and proof of concept be able to crowd in or attract private capital for long-term sustainability of the program.

We've seen this slide before. Just a reminder of this is what we are imagining in that path to transformation. And so I'd say at this point we're midway through where we have Seeded a bunch of different programs and studies across Canada. We're seeing proof of concept and we'll continue to fund to scale and replicate programs in the years to come.

But what's starting to emerge on the horizon for our CEF team is how do we support and prepare programs for recapitalization and positioning them for the ability to potentially leverage private capital to, to do that. All to say is I don't have the answer or all of the answers at this point. And I also would love to have a discussion with the folks on the call and hear your thoughts and questions as well as this is a learning process for us.

So thanks so much for your time and participating and listening. I'd love to, to answer your questions as I mentioned but also had some questions for you if we do have time or if anyone would like to share.

Their perspective, such as what does market transformation in the low rise residential space mean for you or for your organization? How do you think CEF can have the most impact given your view of the ecosystem? I know we're all working in different areas of this ecosystem with a lot of the same goals.

And then lastly more broadly, what other supports are needed to see market transformation in this space?

**Allison Mostowich:** Awesome. Thanks Kathleen.

We've got a few questions in the chat and then I've just got a couple in the background. So we have a question from Nick talking about PACE programs. So the question is, PACE programs in Canada seem to have mixed reviews. Do you have any thoughts as to why this may be the case and why F C M may have chosen this pathway?

**Kathleen Heymans:** Yeah, I think that's a great question. And we, through the Community Efficiency Financing Program do offer those three models that we went through at the beginning. So it's not so much been our choice as the municipalities have. Have opted to apply for PACE programs as what they believe is the best fit for their communities.

However I absolutely agree. There's of course, pros and cons to everything including each of these models. For example, for smaller municipalities administering a pace or local improvement charge may be to o cumbersome for administration. Other jurisdictions may have a credit union that is excited to be a part of it and they may go a different direction. But absolutely, and I do think that there are questions about like how far can pace scale to, depending on how ambitious the municipality is to completing retrofit work through a pace mechanism.

**Nick:** I was wondering also, is it just a lack of knowledge about PACE programs and maybe it's the real estate industry or, there seems to be a lack of education in terms of what that means and people want to sell their homes with some sort of something attached to their to that home that they're buying just a turnoff or, and the real estate agents generally shy away from that.

So I'm not sure if there's a push for a broader education on pace programs in Canada, whether that would be helpful, but just some initial thoughts on that.

**Kathleen Heymans:** Yeah. Thanks so much for sharing. I think that's a great point and definitely need for more education and socialization and also hope as we continue to have municipalities standing up staff programs.

And that have been primarily PACE at this point. It'll start to, to make it more mainstream in, in people's understanding and lexicon.

**Allison Mostowich:** Thanks so much. What are FCM's plans for low to moderate income households? We're seeing a lack of support, especially from the federal government. Is this part of F C M programming now? Is it planned for the future? Can you just talk a little bit more about that?

**Kathleen Heymans:** I guess I'll start with how we are supporting low to moderate income within the CEF program. So being a program of programs, the municipalities have a lot of autonomy in customizing the program that they want, that is the best fit for their community and meets their priorities. And so we are seeing programs that have been taking the lead in trying to address barriers to access to funding and to meet low, moderate income homeowners where they're at. So for example the city of Ottawa though they have recapitalization with Van City, they still have a low income carve out believe like in waived fees to try to support access.

And the program that we have funded in Saskatoon has opted to use some of their funding to create incentives specifically for income qualifying homeowners. And . And then with our capacity development and community of practice there, there has been a focus on sharing lessons learned from that and for for other programs that are interested in embedding equity or accessibility measures into their programs.

And this was also one of the focuses of the CEF learning forum that I had mentioned that we had the other month. So we're still learning how to do this. But we are actively working and supporting on programs embedding equity and accessibility measures into their programs.

**Allison Mostowich:** Awesome. Okay. So let's go to Trina's question. So to what extent has F FCM considered partnering with regional partners to provide direct coaching or educational supports to property owners and communities with established programs?

**Kathleen Heymans:** None that I am a aware of. I know that through the sustainable, affordable housing program also within the Green Municipal Fund, they have a regional coaching program, energy coaching program to help build that support, but I'm not sure if that's what you're talking about either.

**Allison Mostowich:** So Warren has put in the chat that in Calgary, Build is partnering to make the program available to builders and renovators. So I think that's a really good example. Okay, so we've had a couple questions about PACE financing. Again, PACE seems to be a hot topic what the typical time horizon is for repayment and what are the considerations that go into that decision?

**Kathleen Heymans:** One of the benefits of PACE is that the municipalities are able to offer longer repayment terms than traditional financing. And so sometimes that can be 15 to 20 years. But it, each of the programs has the ability to customize that.

**Allison Mostowich:** Fantastic. So the same person had a question about limiting fraud.

I've been part of delivering programs in the past and it's a learning process for sure. So what design features have you seen that limit fraud to make sure the work is actually done well? So like quality assurance. Have you seen any examples of that in the programs that you've supported?

**Kathleen Heymans:** I do know we have created resources for consumer protection measures to help prevent fraud. And so that's provided as part of the capacity developments support for programs. I don't have any that are like really coming to mind at this moment, but I'd be happy to provide more information about that or share a link to some resources on some of the best practices that we've put out for municipalities.

**Allison Mostowich:** Fantastic. Okay there's a question here about private capital and I guess the interest level and the attraction for private capital when they're competing with so many other things like the US investment in infrastructure retrofits. So how are the programs like the one in Ottawa you mentioned working to invest that private capital and like what's, what are the attractive features to the private lenders?

**Kathleen Heymans:** So there's a lot of attractive features for private lenders to, to want to recapitalize PACE programs. So in, in general, lending to Canadian municipalities is quite low risk, especially if the municipality has a good credit rating. And if the program includes things for example, some municipalities had like pre-authorization to collect repayments, so that is built in things like that really lower the risk and make it appealing. Even the proven success of past and current PACE programs make it like a reasonable in terms of looking at the risk profile investment. And then beyond that, of course es environmental social governance in investment is becoming a hotter and hotter topic. And organizations and institutions are looking to diversify their portfolios. And opportunities like programs that are financing home energy retrofits can be an attractive way to, to meet that like green slice of their portfolio. That's what they're looking for.

**Allison Mostowich:** Great. Okay. Another question going back to PACE. Have you seen a PACE model integrated with tif? So Aaron was saying he was thinking about using it as seed funding for a self-perpetuating fund.

**Kathleen Heymans:** That's interesting. I'd love to learn more about that and chat. I have not seen a model like that.

**Allison Mostowich:** Awesome. So I think you and I had talked about a little bit about this in the background. And so Rose is asking a question about the energy Sprong model that aims to aggregate demands and do retrofits by neighborhoods. So are there barriers to doing this here or is there some sort of connection that you're seeing there?

And I know the government have Canada just announced funding for this. Can you talk a little bit about that?

**Kathleen Heymans:** I am not deeply familiar with energy Sprong. I understand, from a high level. So we we're not doing energy Sprong programs per se, but in the in looking at innovative programs, looking at neighborhood approaches or for example, bulk purchasing approaches to local programs to build up that efficiency for retrofits would be like very highly regarded when we're looking at that testing and validating new models, but that's not an approach that we have seen proposed at this time for a capital program. And we don't have any capital programs that are running an approach like the energy sprung type approach currently.

**Allison Mostowich:** Okay. And so what about stacking for those funds? Do you wanna talk a little bit about stacking the funding?

**Kathleen Heymans:** Sure. So our financing would be stackable with say, like the greener homes grant program and can stock with other subsidies. As I mentioned, some of our staff programs opt to also create rebates with some of their funding, either for particular measures to incentivize deeper retrofits or specific to income qualifying homeowners.

Yeah. So it's definitely stackable.

**Jonathan:** So I'm working on a a hackathon in the Atlantic region and it's related to micro credentials.

That new program that was announced, that's called Quick Train Canada. These free courses offered through the Canadian College system. It's new, I think last week. But the big challenge we face in smaller medium sized municipalities is a solution coming from larger municipalities don't work in smaller mid-size municipalities.

And secondly, The labor force we need to make this transition to clean and sustainable futures. And a lot of it does have to do with affordable housing. We have a bakery company that can't hire because there's no housing and they're offering a livable wage. So these are the challenges that small and medium size municipalities are facing and a lot of the innovation coming from the larger centres need to be adapted to these smaller centers and also the labor market needs to be there to attract the private capital.

**Kathleen Heymans:** Briefly, that's something that comes up a lot in our, our existing programs is the difference between rural and urban municipalities and different approaches.

And we are definitely learning different approaches and ways to support smaller municipalities to be able to launch programs. For example, one of the successful models that we've seen is having some sort of a third party support to add capacity to municipalities, such as with the Pace Atlantic example I highlighted, where they're able to support smaller municipalities through the application phase and also the administration of the programs to help remove some of that administrative workload is one, one example. And we are also looking like internally better ways to improve how we do things to, to enable smaller municipalities to collaborate more easily. For example, to share capacity.

**Allison Mostowich:** Fantastic. Speaking of Pace Atlantic, there's a comment in the chat about the fraud question that was asked before and preventing fraud and Julian was saying that for the fraud piece, pace Atlantic administered programs that require both homeowners and contractors to sign certificates of completion, ensuring the retrofits were completed satisfactorily.

**Kathleen Heymans:** I'd love to hear what others think what market transformation means for the residential retrofit space or potentially the staff programs and other programs like it.

Also very curious to hear, like you noted the pace tiff model. Other interesting models or approaches. Capacity or education solutions that folks have seen working in the energy efficiency ecosystem. And and also happy to connect beyond this session as well if anybody wants to chat more or share their perspective or has other question.

**Jonathan:** The other issue is, and I think you already commented on it, and it's the de-risking for private capital, but there's also the issue, especially among decision makers of municipalities at large around insurance and liability issues.

When they do risk assessments for example, when they have to do the seven different municipal environmental assessments here in Ontario, when they're doing a new development, the engineering departments have had a working model that's worked for the last 30 years and to open those models up, Is a big risk for the engineers and the public works departments, and so they're skittish about going into these projects where there is a high risk and there's an unknown.

I'm wondering if you've seen any examples of where they've used what's called the pre-commercial process where you actually will build this ecosystem up through a process that allows for engagement with those staff and going through almost like a hackathon process, like a agility model. And then once you arrive at a full understanding of how that risk is shared across these projects, then you can go through the procurement process.

**Kathleen Heymans:** I've not heard of that approach being done. Do you mean like at the municipal level? Like some sort of like a hackathon sprint process to collaboratively build out like a process that adequately manages risk?

**Jonathan:** Yeah. So a concrete example is we what I do is I work with the environmental technician for the town of Cobourg and her manager who are underneath this engineer who's the director.

And what I do is I bring them into the school and have them talk about what they're doing, and then I link them to other projects where they're using digital and open data. And I could pull them into projects like the one in the pace Atlantic, for example. And then they can see something and then they can teach the students.

And so the students and the staff learn. It's a two directional learning thing. And then when we work with the post sac through collaborative research projects, and we have one now with the Fleming post-grad project, with digital twins, then we can say, okay, what would this look like in this local condition?

And then they feel comfortable. They're not being told to do something totally new. With digital twins, they don't know what it is. So they learn through that process and then through that process, it goes upstairs and they can actually see, okay here's something this helps us to envision this in the context of our strategic asset management plan.

And it's, the key thing is they have to tie it into the lifecycle of those assets through Regulation 5 88 17 in Ontario, which is the asset management plan.

**Kathleen Heymans:** Thanks for sharing. I haven't seen anything like that, but that's really interesting.

**Allison Mostowich:** Fantastic, thanks. Okay, so I think you had a slide about educational resources. What education have you seen that can help municipalities on this journey? I know you've talked a lot about the grant funding, but there's a lot that goes into putting this kind of program in place for municipalities as they're getting the funding.

where have you seen really great education resources for that?

**Kathleen Heymans:** We have a resources library on our website. I can get that link to, to share later with information for municipalities when they're looking at a potential community efficiency financing program.

And I believe we're also in the process of finalizing a market guide to support the feasibility design process for municipalities. So we actively procure those resources.