

# Dr. Anne Koven's Mass Timber Pitch to the Ontario Economic Summit

November 14<sup>th</sup>, 2019

"Good Morning,

Thank you, Christine. At the Mass Timber Institute, housed at the University of Toronto, we collaborate with universities, colleges and industry partners across Canada, connecting the dots between the needs of consumers such as architects, engineers, developers and the construction industry with educators and researchers. I also teach forest conservation to master students and I am a forester.

This is how I was introduced to mass timber and recognized the opportunities for Ontario's companies and citizens to participate in profitable innovation in the forestry, design, construction, prefabrication and manufacturing industries.

Mass timber in the old days brings to mind the large post and beam buildings along Spadina Avenue, still going strong after 150 years. Today there is excitement about designing and building with new types of wood construction products such as the glulam I am holding made by family owned Guardian Structures in St. Mary's, and cross-laminated timber, this block of wood manufactured by Nordic in Quebec, a Canadian leader among the few in the sector. Mass timber is a technological advancement that uses engineered-wood for load bearing structures and is considered a greener addition to conventional reinforced-steel-concrete construction. Assemblies of floor, wall and ceiling panels can be manufactured offsite and erected much more quickly and, therefore, with cost savings compared to conventional construction. While it is ideal for low-to-medium-rise building structures, we are seeing amazing tall wood buildings more than 80 stories being planned in Tokyo, Chicago and London.

In Canada surprisingly, we have a very undeveloped mass timber sector with Ontario lagging behind Quebec and British Columbia, even though 40 % of the Canadian construction market is in the GTA.

Let me introduce you to a visual of the future of mass timber as we see it at the University of Toronto. This is the model of our tall wood academic tower that will be built near St. George and Bloor. This beautiful 14-storey building will contain offices and classrooms and its main tenant is the Rotman School of Management. In 2017 the University of British Columbia built its Brock Commons student residence called Tallwood House. Laurentian University built a mass timber home for its School of Architecture, and another partner George Brown College also has plans for a mass timber building on the waterfront called the Harbour. Why are universities and colleges building demonstration projects that will further spur the design and construction industries to use mass timber? Governments provided a small amount of funding to help with some of the design costs, and as I was told by UofT's

head architect, it is the job of universities to lead the way in doing difficult things that others will not or cannot do, especially when the benefits are great.... such as those associated with mass timber.

There are three compelling reasons for public investment in the mass timber enterprise in Ontario:

First, there is lots of evidence that mass timber is the direction of the future for the construction and forest industries. Ontario should lead, not follow, if we want to participate in this high rate of return business.

What is your reaction to learning that Austria, a small country with few forests, invented cross-laminated timber and is the global leader in producing and exporting it? Will Sidewalk Labs, a company with plans to construct ten large mass timber buildings (2 of which will be 35 storeys) on Toronto's Eastern waterfront be required to import mass timber products? What a missed opportunity that would be. There are too few examples of companies in Canada producing and exporting mass timber.

Katerra is a construction company started by Silicon Valley private equity investors in 2015. It already has 7500 employees and recently built its first mass timber production line near Spokane Washington, a 270,000 sq. ft. facility featuring the largest CLT press currently in operation globally. Why is this not happening in Ontario?

The second reason for public investment in mass timber is that we are at the intersection for solutions to some of Ontario's most difficult problems—climate change, affordable housing and regional disparity.

Construction with renewable mass timber can offer a sustainable alternative while providing climate mitigation solutions. While conventional construction is one of the largest greenhouse gas emitters globally, wood and specifically Mass Timber has the environmental bonus of absorbing carbon dioxide emissions from the atmosphere and embodying them.

The GTA has a major housing supply deficit and affordable housing is needed everywhere. The potential for mass timber and prefabricated wood construction, which is described as cheaper, faster, cleaner, quieter, and less disruptive, is a huge market across Canada and globally. It is noteworthy that the renowned Canadian architect Douglas Cardinal has designed culturally inspired affordable mass timber housing for Indigenous communities.

Regional economic disparity is a fact in Ontario. The recent Chamber of Commerce report, Mosaic, reveals that most regions of Ontario have not kept pace for years with the GTA, Waterloo-Kitchener and Ottawa. Benefits of mass timber do not stay in Toronto, but flow also to the rural and northern communities through forestry, transportation and mills. For example, one of our partners,

Whitefeather Forest Management Corporation is striving to build a mass timber mill in their remote Pikangikum community in northwestern Ontario, to use their abundant black spruce.

The third compelling reason for investment in mass timber is that Ontario needs to capitalize on its sustainably managed resources so that we add even more value to our forest products and produce more high paying jobs for designers, engineers and mill operators across the province. We've done well for centuries with commodities like softwood lumber and pulp and paper, but mass timber is the opportunity to optimize the value of every tree we harvest.

Forests in Ontario are about the past, the present and the future. You know about the past and the present. Mass timber is the future and no jurisdiction is better positioned than Ontario to capitalize.

Thank you for your attention."

*Dr. Anne Koven*