## eleven-x and Pinchin Partner to Provide Indoor Environment Monitoring and Risk Management Solutions for COVID-19 Building Re-Occupancy

LoRaWAN® Based Solutions Offer Remote, Real-Time Air Quality Monitoring and Management Capabilities

**WATERLOO, ON – CANADA | June 17, 2020 –** eleven-x, a global leader providing complete, wireless, full-service low power IoT solutions, and Pinchin, one of Canada's largest building science, environmental and health & safety consulting firms, are pleased to announce a partnership to deploy innovative new building and indoor environment monitoring as part of a comprehensive solution to help minimize the spread of COVID-19 in support of safe building and workspace re-occupancy.

Risk assessment has been identified as a necessary step in opening more workplaces and, in lieu of a vaccine, following a structured risk assessment model is an important strategic tool in terms of reoccupying workspaces. Part of the risk mitigation involves addressing potential airborne transmission by managing ventilation rates, relative humidity and monitoring and communicating these conditions to staff and tenants. The solution is based on a partnership that brings together two companies with very complimentary areas of expertise in indoor environment monitoring with Pinchin, who possess a rich history of providing solutions that ensure safe and healthy spaces in complex environments, and eleven-x and their world-class expertise in integrating wireless, cost-effective solutions designed for real-time monitoring. The solution includes wireless, real-time monitoring of carbon dioxide (CO<sub>2</sub>), temperature, and humidity for indoor environments. As businesses look to re-occupy in a post-COVID world, real time continuous environmental monitoring including the measurement of humidity and CO<sub>2</sub> levels and optimizing ventilation will be crucial.

 $CO_2$  is an indicator of how well an area is ventilated relative to the occupant load. High  $CO_2$  concentrations can indicate poor ventilation and / or locations where groups are gathering. ASHRAE has suggested a variety of ventilation strategies to help mitigate airborne transmission. ASHRAE has also identified that humidity also plays a key role in limiting the potential exposure to viruses. Research supports the theory that keeping humidity levels between 40% and 60% reduces the transmission of viruses. Realtime monitoring of  $CO_2$  and humidity levels can help building owners demonstrate that they are meeting ASHRAE's ventilation and humidity recommendations. The data can also be used to demonstrate to staff and tenants that control measures are in place and effective.

The two companies have already collaborated on a solution that includes eleven-x's XIU LoRaWAN® interface enabling wireless connectivity for Pinchin particulate monitors. The interface enables remote, real-time monitoring of the airborne particulate concentration in occupied public areas in busy retail and office settings adjacent to active construction sites. Additionally where measures are undertaken to maintain the construction site under negative pressure (ensure air only flows into the construction

zone and not out) the system continuously monitors that pressure differential drastically reducing the potential for dust and odour to leave the construction site and impact the public.

"Real-time monitoring of spaces and environments is now more important than ever before, and we are excited to be able to help by providing solutions that will have a positive impact on people needing to be in offices and buildings," said Jeff Grossi, Chief Executive Officer at Pinchin. "This collaboration of our indoor environment monitoring solutions along with eleven-x's wireless technology expertise is not only very complimentary, but also very timely in that it offers a lot of opportunity moving forward."

"This partnership with Pinchin is really about our technology working alongside theirs to bring safety to people in many different environments and enclosed spaces, which is going to be paramount as they return to work and moving forward," said Dan Mathers, President and CEO of eleven-x. "We are proud to be able to offer solutions that can deliver an immediate impact, and we're very excited about what we can accomplish with the development of innovative new solutions together."

## **About Pinchin**

Pinchin Ltd. is an employee-owned, multi-disciplinary engineering consulting firm, offering a full range of services to Canadian businesses to manage their natural and built environments. Since its founding in 1981, Pinchin has grown to become a high-quality solution provider with 40 offices and over 900 people across the country.

## About eleven-x Inc.

eleven-x simplifies IoT and facilitates faster, evidence-driven decisions through wireless connectivity and real-time data collection for Intelligent Cities, Campuses, Buildings and Industry. We offer complete device to cloud LoRaWAN® solutions, comprised of accurate and reliable sensor networks delivering secure data to our customers through easy to use dashboards and industry standard APIs. Organizations rely on eleven-x's wireless connectivity expertise to deliver turnkey solutions that improve operations, simplify processes and deliver value in today's connected world. Visit eleven-x.com for more information.

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