



September 16, 2025  
Japan Sewage Works Agency

**Innovative Japanese Solutions for Efficient Wastewater Treatment in  
Northern Climate  
-Under the Partnership between JS and the University of Calgary-**

Japanese small-scale wastewater treatment technology will address water sustainability challenges!

JS and the University of Calgary are currently evaluating a groundbreaking wastewater treatment technology, explicitly designed to address the environmental challenges encountered in cold climates. As communities grapple with the need for sustainable and effective waste management solutions, this innovative approach could provide necessary advancements.

Traditional wastewater treatment methods often struggle under extreme cold conditions, leading to inefficiencies and potential environmental hazards. The Japanese technology being assessed aims to enhance the treatment process, making it more efficient in freezing temperatures. This could significantly improve water quality and environmental safety in regions that experience harsh winters.

The research initiative at the University of Calgary is being implemented by a collaborative team including JS, ACWA, FujiClean, and LM Wastewater, with funding provided by Alberta Innovates. This partnership emphasizes the importance of international and local collaboration in tackling pressing environmental issues.

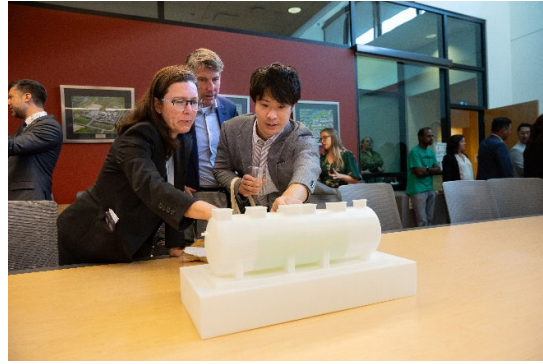
At the heart of this technology is Jokaso, which operates using the same biological processes employed in municipal wastewater treatment. Wastewater moves through five chambers, where solids are broken down and disposed of, and the water is treated via biological filtration and clarification.

This technology hopes to make significant contributions to improving the water environment in rural and Indigenous communities, thereby enhancing public health and well-being in these areas.

As the results of the evaluation emerge, the implications for urban planning, infrastructure, and community health could be profound in North America and beyond.

For more information on this project, please ask the JS International Affairs Department or visit the University of Calgary News website.

<https://www.ucalgary.ca/news/innovative-japanese-wastewater-treatment-technology-being-evaluated-ucalgary-use-cold-climates-and>



The facility completion event on August 13, 2025



Exterior of the demonstration facility



Interior of the demonstration facility

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