Water Efficient Fixture Upgrades
General Services Building | 2015–16

Water efficient fixtures were installed to assist the university in prioritizing water conservation and stewardship. The university takes a proactive approach to water management—these efficient fixtures were installed before water efficiency requirements became part of the plumbing code used in Alberta.

Water efficiency reduces water use without compromising performance

ENVIRONMENTAL IMPACT
Reduction in water use saves energy that would otherwise be used to treat, transport and distribute the water

Sensor activated faucets ensure that water is not left running when the faucet is not in use

Switching from manual to automatic faucets and flush valves improves hygiene by reducing the surfaces that a user must touch. It also ensures a proper flush every time. Taken together, these result in a cleaner, healthier washroom

INNOVATION & TECHNOLOGY
Faucets use small solar cells to generate power from the room’s lighting, which is used to power their internal electronics

Toilet and urinal flush valves generate energy from flowing water, which is used to power their internal electronics

ESTIMATED SAVINGS
$4,040 per year in utility costs from the upgraded valve

1,324 m³ of water per year
Toilets went from 13 L per flush to 6 L per flush
Faucets went from 7.6 L per minute to 1.9 L per minute

28.6 mg of steam per year that would have been used to heat domestic water

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PROJECT TEAM
- Energy Management and Sustainable Operations
- Trades Infrastructure and Maintenance

LESSONS LEARNED
Schedule installations where maintenance is already taking place to reduce labour time.