



PROJECT PROFILE

723 Bloor Street West

In 2022, the City of Toronto put out a challenge to building owners across the city. 723 Bloor took up the call.

The Project

The climate is changing. In Toronto, buildings are the largest source of greenhouse gas emissions today. To support the City's Net Zero Strategy, the Deep Retrofit Challenge (DRC) was created to support and showcase replicable, cost-effective deep energy retrofits.

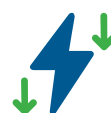
Dream Unlimited has a number of projects on deck for retrofit across their portfolio — a few of which were participants in the DRC — but perhaps the most interesting can be found at 723 Bloor Street West. An older asset, 723 Bloor is a striking 16-unit apartment building, built in the 1920s.

We spoke to Nick Gaudio, Associate Vice President of Technical Services at Dream about the desire to upgrade their buildings in a sustainable way. "One of Dream's core pillars is to be a good steward of the environment," Nick told us. "We see every asset as an opportunity to reduce carbon and the utility output of the building".

Nick works closely with a team of energy managers, project managers, engineers, and designers on smart building technologies to reduce their carbon footprint and keep their buildings running efficiently.

723 Bloor was a first step down a road towards a greener future for Dream's entire portfolio — with two retrofits complete, and four more underway.

Project Goals:



Reduce energy use intensity (EUI)



Reduce air pollution (GHG emissions)



Create a first case project and expand across portfolio



Improve tenant comfort and control



Reduce utility costs

Building owner:
Dream Unlimited

Energy consultant:
Footprint

Building type:
Multi-unit residential

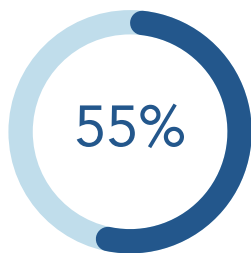
Number of storeys:
4

Number of units:
16

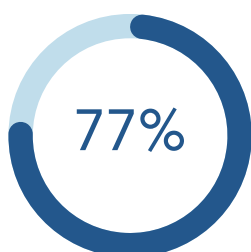
Gross floor area (m²):
1,604

Year built:
1920

Energy Use Reduction*



GHG Emissions Reduction*



* Projected values

The Process

As an older asset, 723 Bloor was a building with quirks. The existing mechanical equipment was nearly as old as the building itself, with cast iron hot water radiators and a natural gas-fired hot water boiler dating back to the 1970s, no central cooling, and no mechanical ventilation.

Dream's Technical Services team and in-house engineers dove straight in. They explored what this project would involve, benchmarked costs for all of the different measures, assessed what was feasible, scoped the market and proposed technologies that could be implemented, and participated in an integrated design process workshop as part of the City of Toronto's DRC support.

"It was an opportunity for Dream to see that we could do projects at these scales, reduce our carbon footprint by several hundred tonnes across our portfolio, provide that climate impact, and lead others in the industry to do the same," Nick told us.



In the design and planning phase, Dream zeroed in on the final measures to be implemented, and for their team, those decisions were driven by overall cost and tenant satisfaction.

At 723 Bloor, energy modelling showed that the central gas-fired heating system was dominating total energy use at 88%. The burning of fossil gas for space heating and domestic hot water was also contributing to a staggering 98% of the building's total GHG emissions. Armed with the knowledge from their prior planning stages, Dream decided to implement **air-source heat pumps** for space heating and domestic hot water, allowing them to slash these numbers considerably.

As the project comes to a close, it's a success for the Dream team — with 723 Bloor projected to reduce energy consumption by 55% and GHG emissions by 77%.

Measures Implemented:

- Decentralized air-source heat pumps for space conditioning in each suite
- Centralized electric heat pumps for domestic hot water
- Electric baseboard radiators in suite kitchens and bathrooms
- LED lighting retrofit in all suites and common areas
- Low-flow showerheads and faucets
- Electrical service upgrade



Project Budget*
\$1,861,111



Estimated Payback*
29 years

* Projected values

Lessons Learned

When you are undertaking a retrofit of this magnitude, Nick noted, it will never go as smoothly as you need it to. There are access issues, disruptions to residents, aesthetics concerns, public utility limitations, equipment delivery delays, cold weather climate considerations — all constraints to maneuver the budget and timeline around. But for Dream, it was a case of taking the challenges one-by-one and working through the kinks.

“Frontiering deep energy retrofits at this scale is extremely challenging,” Nick told us. “But it was worth the effort from day one. Even taking a micro step to reduce the impact of carbon and energy expenditure, that’s a step in the right direction.”

Beyond that, Nick can feel the immediate impact on residents. “The heating in their unit is much more comfortable, much more adaptable,” Nick says. “We were able to electrify the radiators in their bathrooms — so in January, when they’re going into their washroom in the middle of the night, it’s now warm. Come summer, on a 30 degree day, they can cool their space.”

With two deep energy retrofits under his belt, Nick is looking forward to tackling more sustainability projects across Dream’s portfolio in the years to come.



“Don’t lose sight of the end goal. Proving better service to our residents, providing better service to our climate – that’s the motivating factor.”

Nick Gaudio

Associate Vice President of Technical Services for Dream Unlimited



Learn more about the participating buildings’ proposed emissions reductions and deep retrofit measures [here](#)



For more information on the Deep Retrofit Challenge, please contact drc@toronto.ca