



UNIVERSITY OF
TORONTO
MISSISSAUGA

Campus Affairs Committee

September 15, 2026

Ahmed Azhari

Managing Director, Operations,
Sustainability & Asset
Management



Utilities Master Plan

- ✓ 2021 Campus Master Plan
- ✓ Deep energy retrofits and capacity expansion of existing CUP1
- ✓ Two new nodal plants (CUP2 & CUP3); interconnections with existing CUP1
- ✓ Centralized electrical infrastructure & district ground-source heat pump system with geo-exchange borefields



Central Utilities Plant 1 retrofits



Emergency power
expansion



Chiller plant
optimization



Heating system
decarbonization

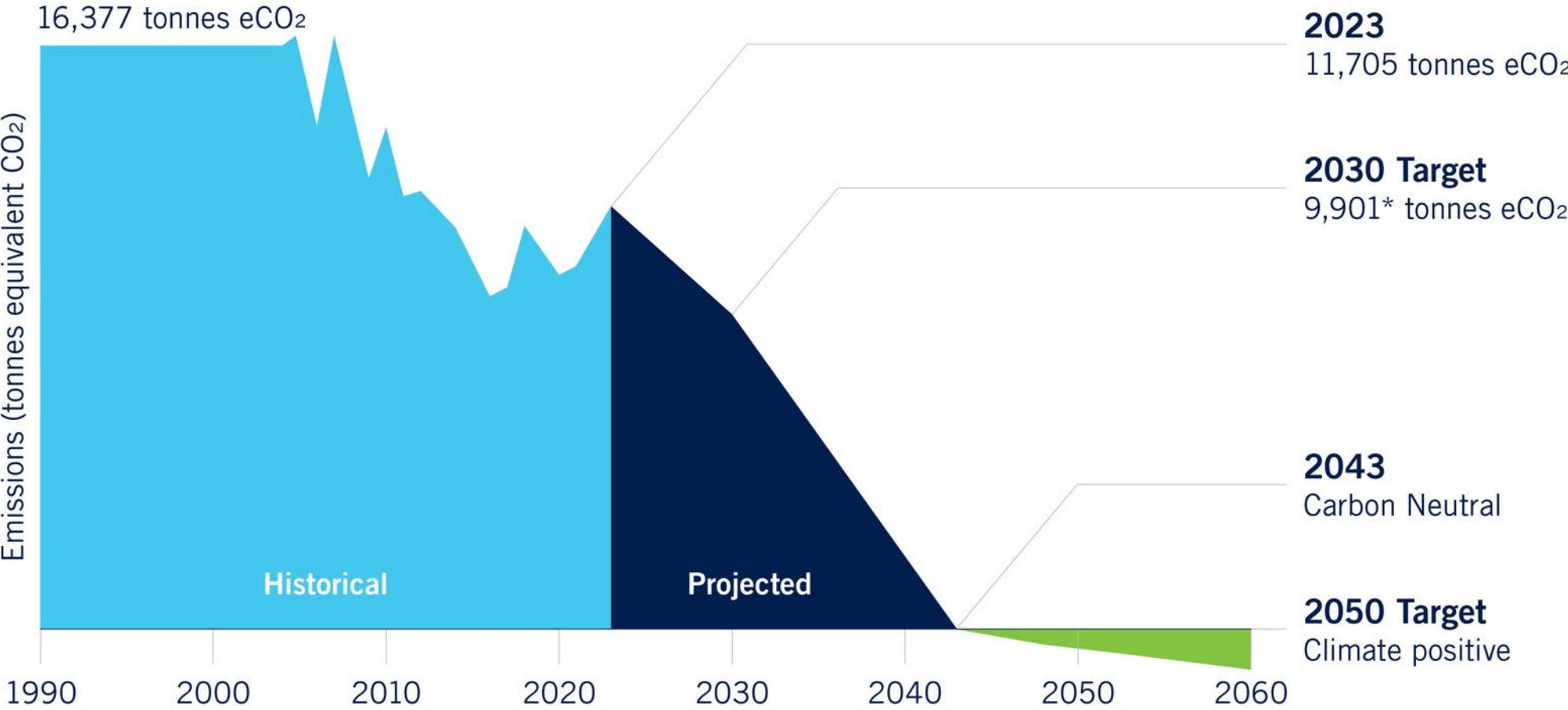


High voltage
expansion room



Climate Positive Plan

2050 Climate Positive Target, Mississauga Campus



*Please note that the 9,901 value has been updated from a previous version to precisely represent the 39% reduction target.

2030 39% GHG reduction

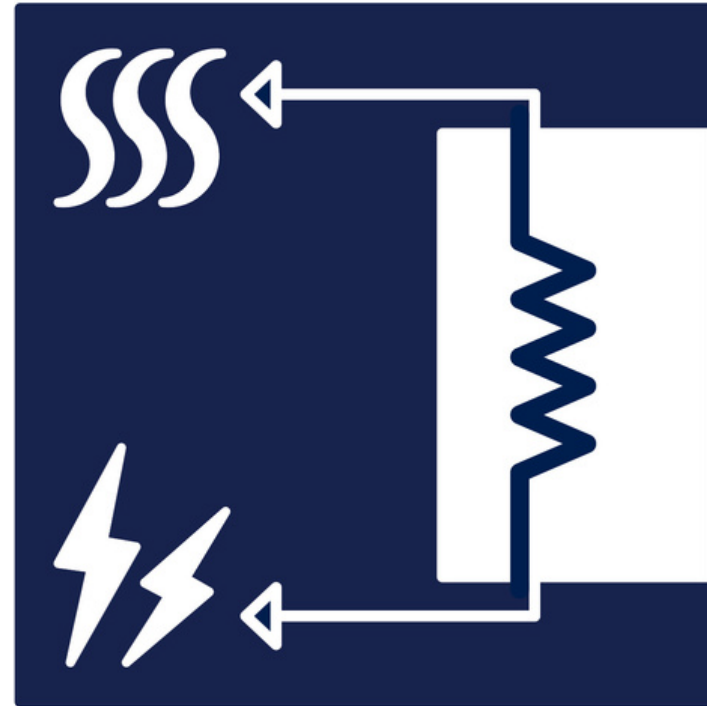
2043 Carbon neutral

2050 Climate positive

Climate positive commitments



Consume



Distribute



Produce



Achieving 2030 goals

Project SHIFT

Phase
1

Present-2030

- ✓ Deep energy retrofits of CUP1
- ✓ Electrification of hot water heating boilers
- ✓ Recommissioning of existing controls
- ✓ GHG reduction: 39%



Central Utilities Plant 2 next steps

AI-generated image

01

Proposal submissions
closed August 12

02

Interviews & presentations
currently underway

03

Evaluation & proponent selection
by October 2026



Achieving 2043 goals

Project SHIFT

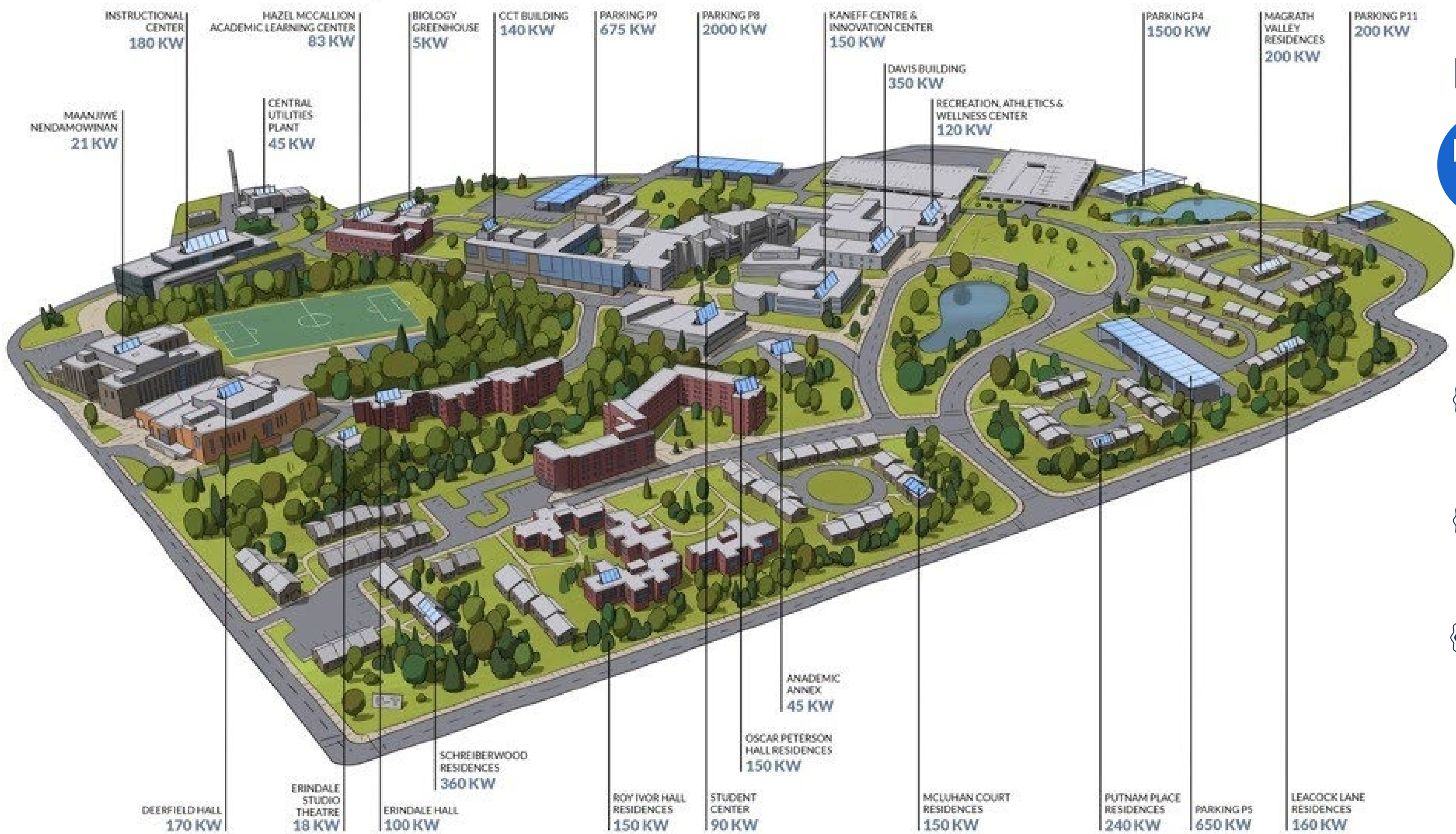
Phase
2

2031 –2043

- ✓ Low-temperature systems
- ✓ Steam to hot water conversion
- ✓ Electrification of steam boilers
- ✓ Nodal Central Plant network
- ✓ GHG reduction: carbon neutral



Achieving climate positive



Project SHIFT

Phase 3

2044 –beyond



Battery & thermal energy storage



Solar, wind & grey water heat recovery



GHG reduction: positive



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Facilities Management & Planning