

UWindsor Roadmap to Carbon Neutrality

Senate: November 10th, 2023



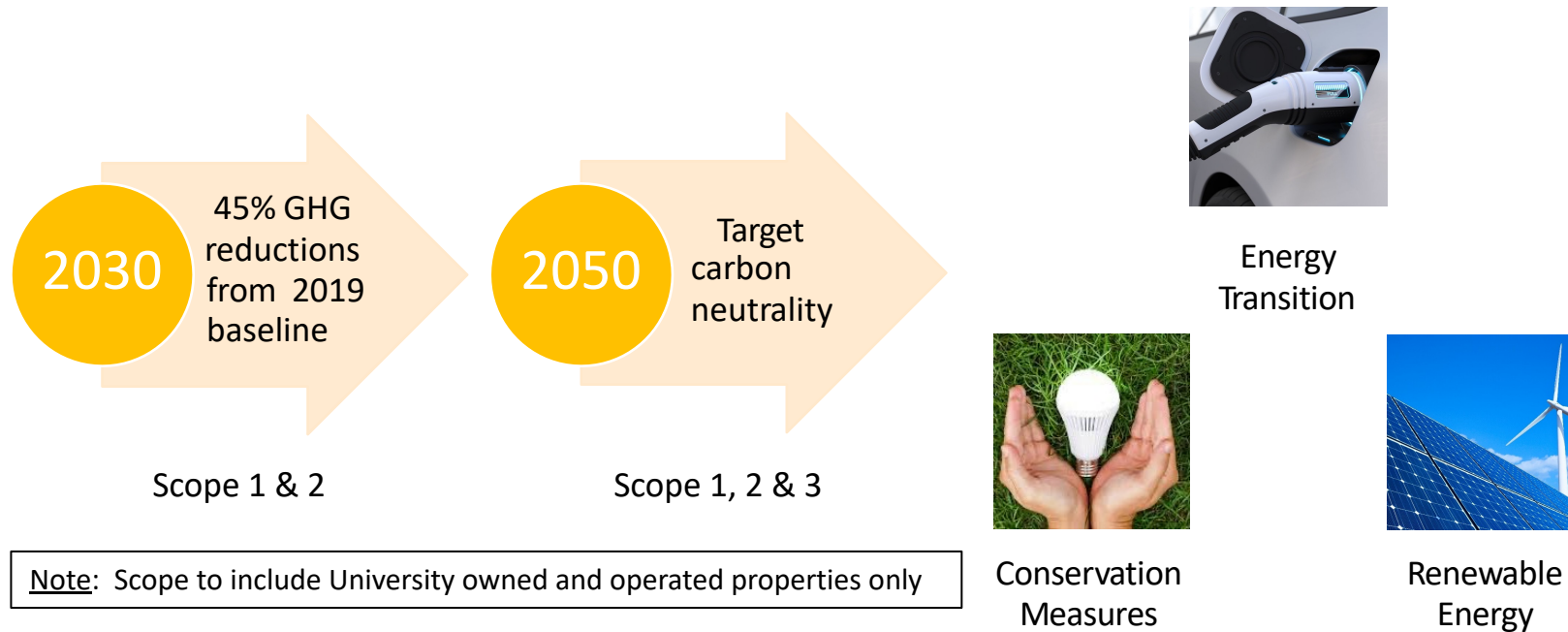
Background

- Process to establish a Carbon Neutrality Plan began in September 2022 with Stantec, a consultant partner
- Consultation used to develop Plan has included a variety of staff, faculty and students
 - Through meetings and discussions, interactive workshops, exchange of informational material and reports, feedback requests
 - In depth analysis of campus operations (with site visits)
- Formalized Carbon Neutrality Plan to be presented in Fall 2023



Roadmap to Carbon Neutrality

- UWindsor in process of finalizing a comprehensive a study to identify a path to achieve net zero carbon objectives for 2030 and 2050



Strategies to Achieve Targets



Conservation

Renewing and improving aging infrastructure through expanding BAS & metering infrastructure, recommissioning, improving building envelopes, upgrading HVAC systems, and optimizing controls.



Low Carbon Energy Transition

Transitioning to a low carbon district energy system with a renewable energy supply such as ground source heat pumps.



Renewable Generation

On-site renewables could include solar PV, solar thermal, and biodigesters for renewable natural gas generation.



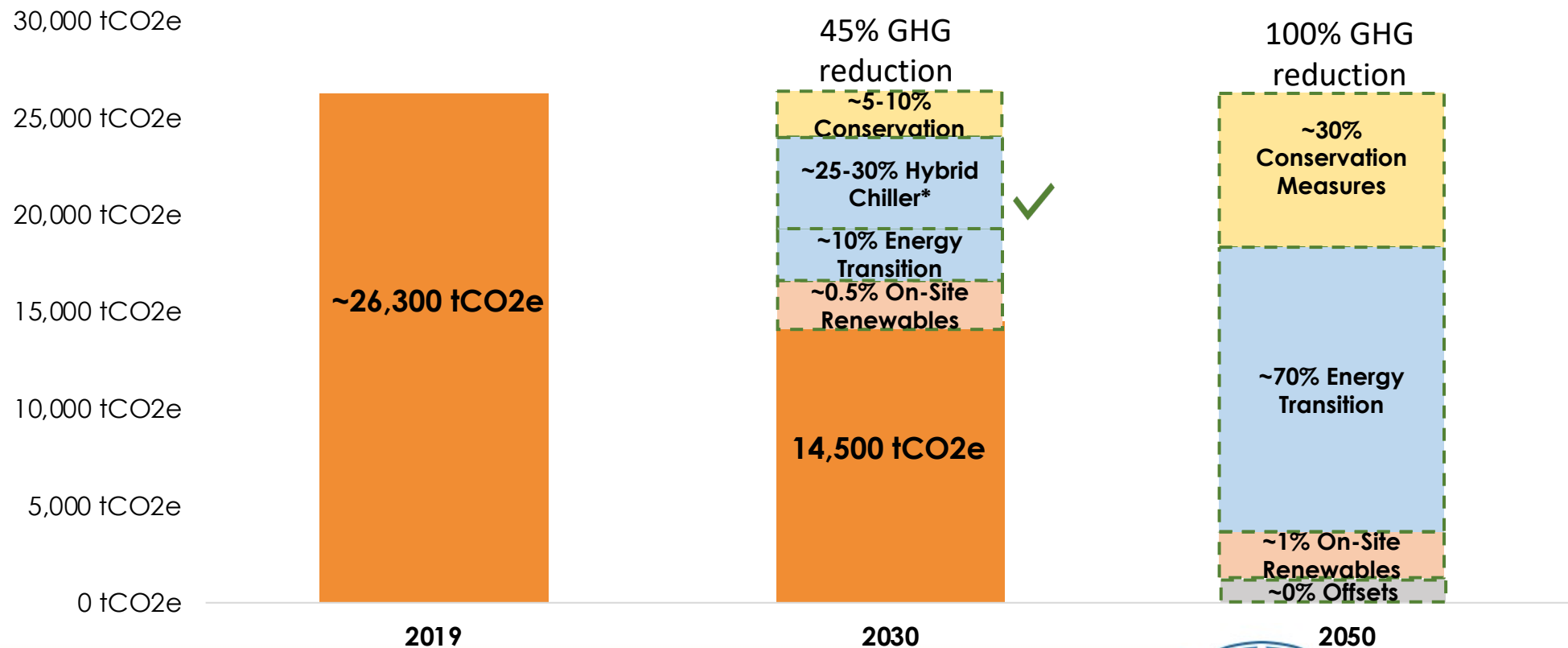
Carbon Offsets

Offsets are needed to account for carbon emissions associated with purchased energy sources such as grid electricity.



Pathways to Achieve Carbon Neutrality

- In completing Plan, UWindsor investigating a variety of potential pathways to achieve targets



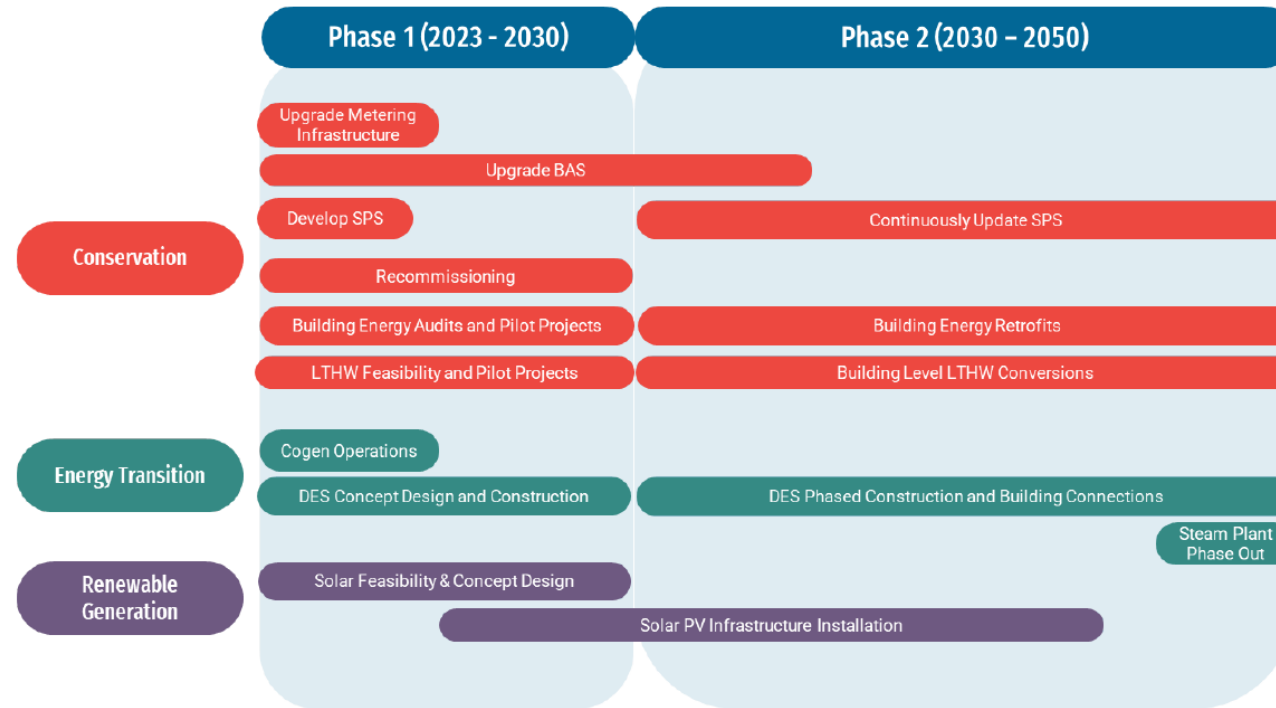
*Sustainable Hybrid Chiller installed Fall 2023



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Carbon Neutrality – A Phased Approach

- To achieve targets, UWindsor planning will consider a series of strategic projects and initiatives



Initiatives to Achieve 2030 Target



Energy Transition

Sustainable Hybrid Chiller



Energy Transition

Op changes and plan for DES



Conservation

Upgrades to HVAC, lighting



Conservation

Optimize space utilization



Renewables

Solar PV & Solar thermal

Align with capital planning, review external funding & partnerships along with sustainable procurement standards



Timeline and Next Steps

- Approval of Carbon Neutrality Plan will be obtained through series of consultations and reviews

Meeting	Date
Executive Leadership Team	October 26, 2023 ✓
Sustainability Committee	October 27, 2023 ✓
Senate	November 10, 2023
Resource Allocation Committee	November 20, 2023
Board of Governors	November 28, 2023



Thank you



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