

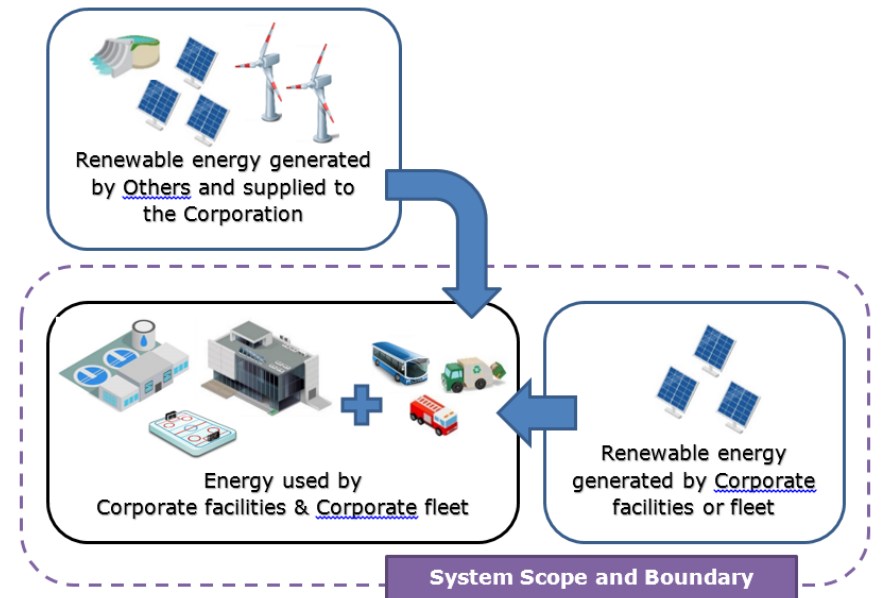
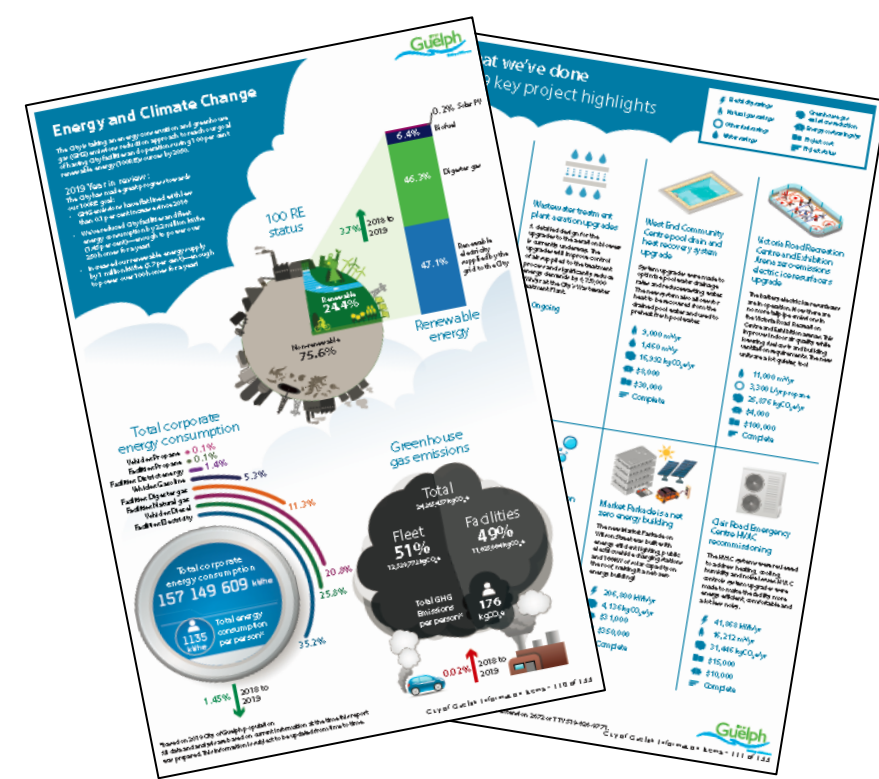
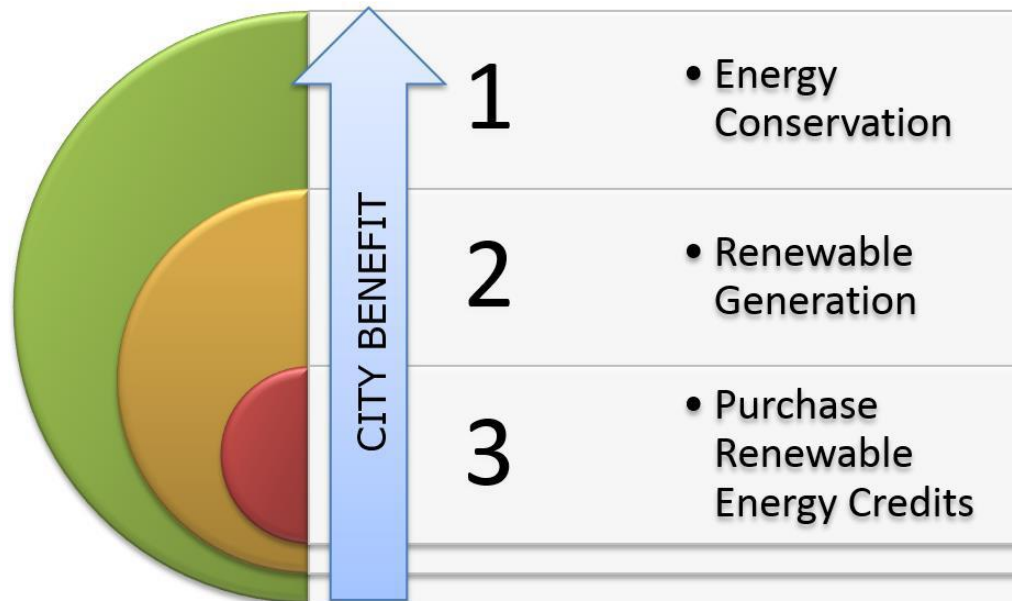
# Advancing Net-Zero Municipal Buildings

March 31, 2021

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City of Guelph

# Climate Change Targets

- Conservation first approach
- Corporate 100RE
- Community Net Zero Carbon



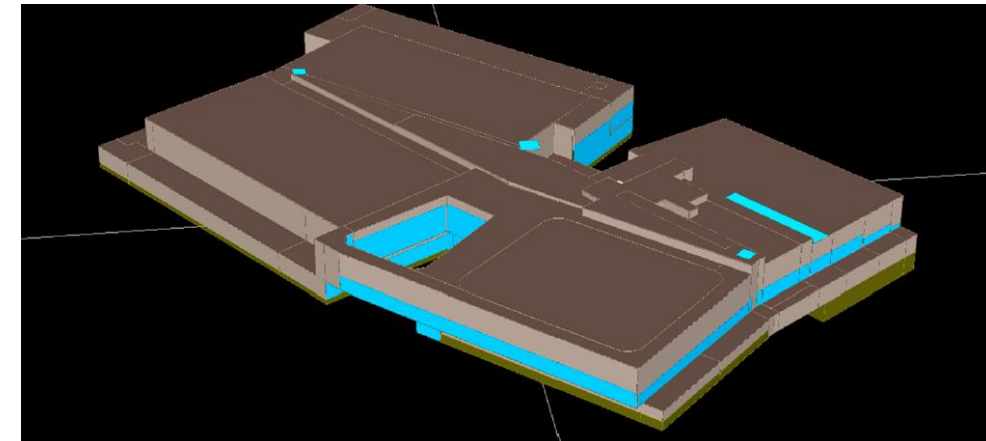
# Projects on the go

- Market Parkade
- Snow Disposal Facility
- Hanlon Creek Park Splash Pad
- South End Community Centre
- Solid Waste Collections Facility
- FM Woods Water Treatment Plant
- Waste Resource Innovation Centre



# Approach

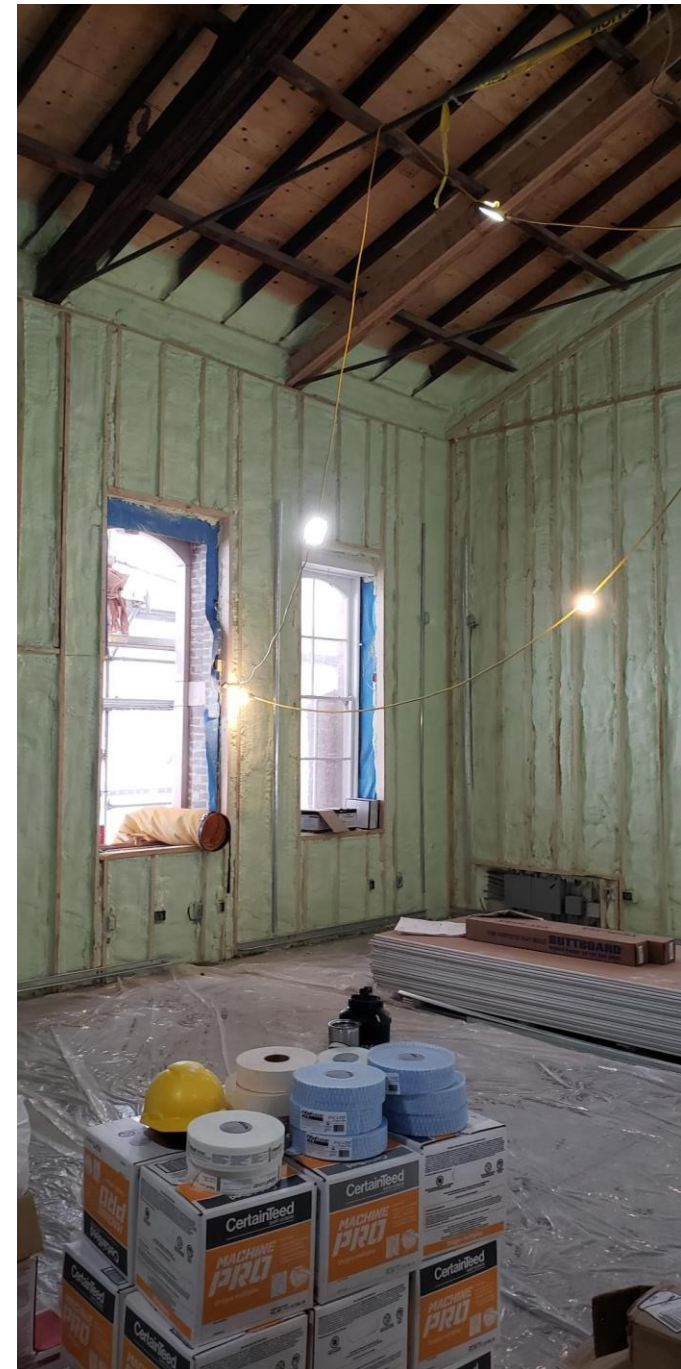
- Strategic Plan alignment
- Formal capital ask
- Partnering with teams
  - Clients/departments
  - Project managers
- Energy modelling
- Design reviews
- To certify or not to certify?





# Challenges

- Budget gap
- Consultants not savvy enough
- Technical constraint
  - Ground water
  - Electrical demand
- Energy modeling is not created equal
- Linear design process
- Contractor specifications not detailed enough
- Commissioning not done properly



# Next steps

- Address the target/budget gap
- Normalize energy projects
- Envelope commissioning and HVAC commissioning specification
- Construction specification to include performance targets
- Go beyond new construction and look at existing facilities

Thanks