

# Energy Management

---

- Decreasing GHG
- Conservation
- Reducing Energy Waste
- Generation (Solar, Wind...)
  
- Natural Gas, Electricity,  
Water, Fuel, Paper



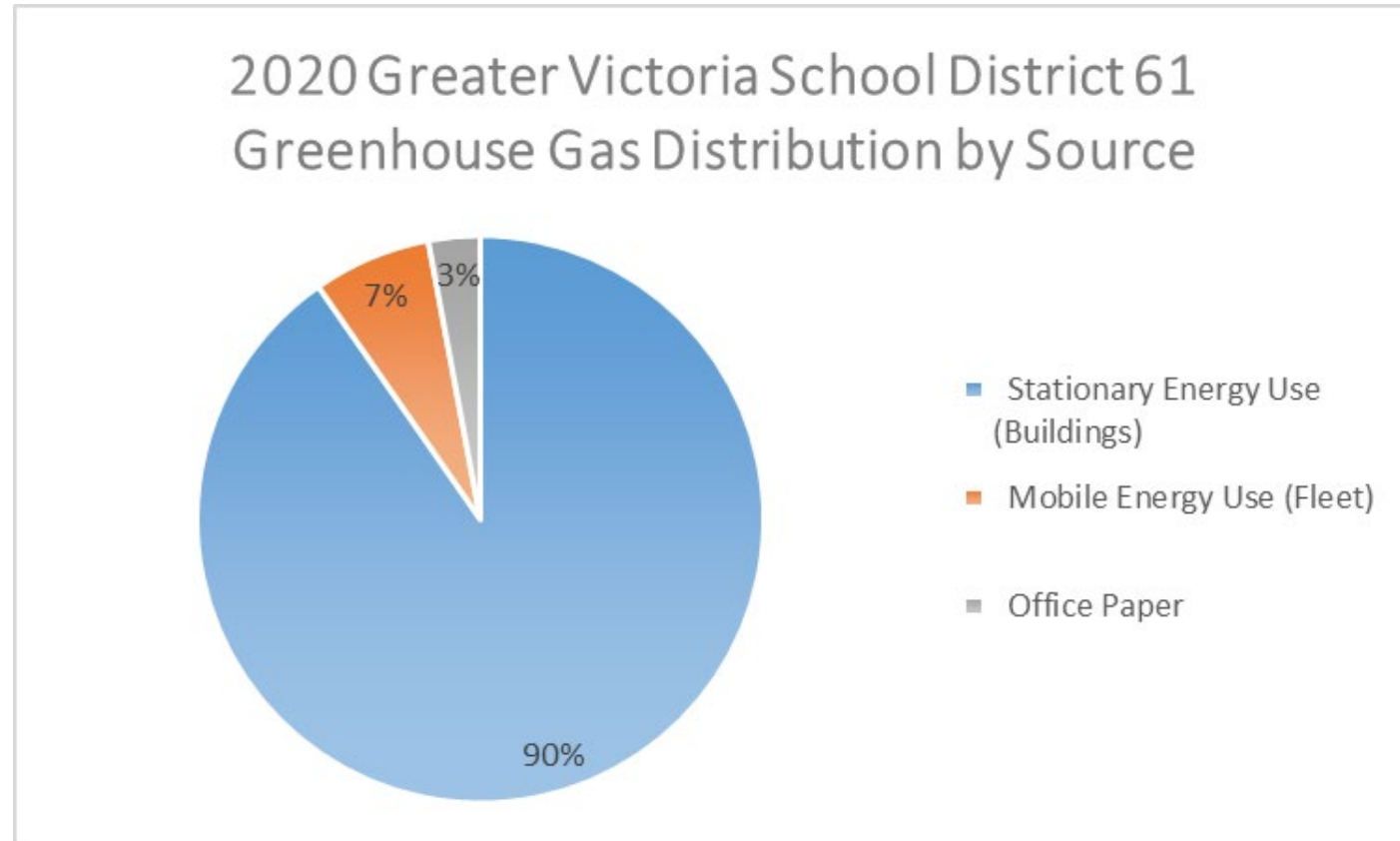
# Energy Management SD61

---

- Decreasing GHG
- Conservation
- Reducing Energy Waste
- Generation (Solar, Wind...)
- **Natural Gas, Electricity, Water, Fuel, Paper**

# Greenhouse Gas (GHG) Sources

- **Largest opportunities are in buildings**
- **Within buildings heating dominates GHG production**

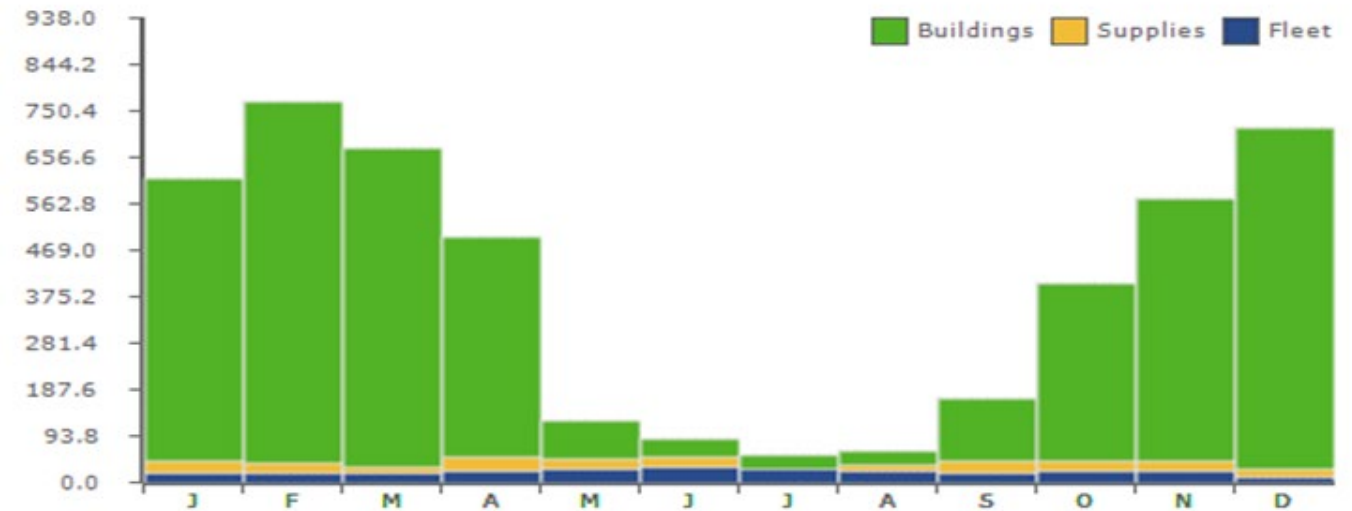


# Greenhouse Gas (GHG) Monthly

- Largest opportunities are in buildings
- Within buildings heating dominates GHG production

**Total Emissions  
Calendar Year 2018  
School District 61 - Greater Victoria**

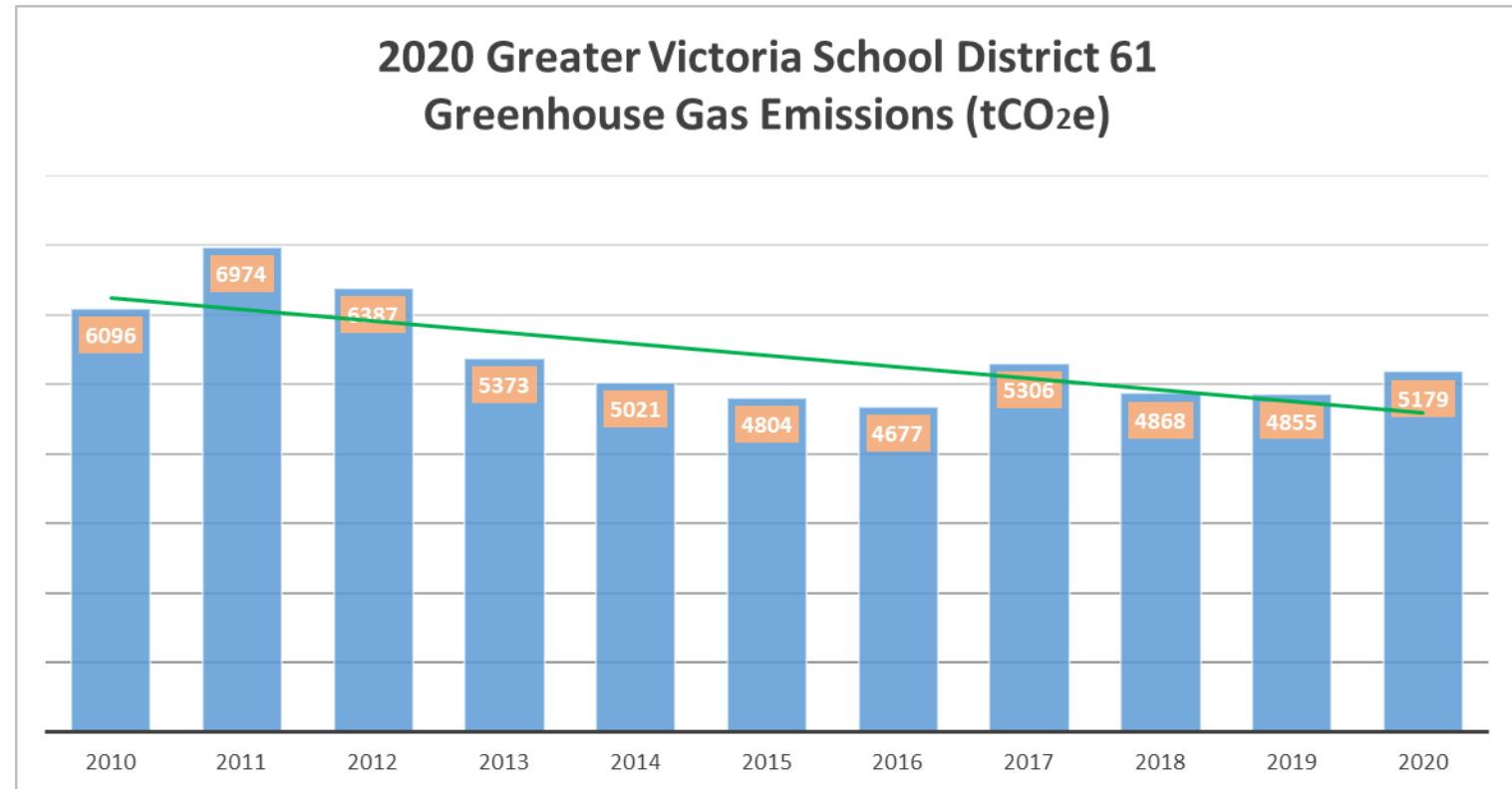
Metric tonnes  
CO2 equivalent (tCO2e)



Click on the bars to view data for each month

# Climate Action Progress

- Boiler Upgrades
- Building Envelope Improvements

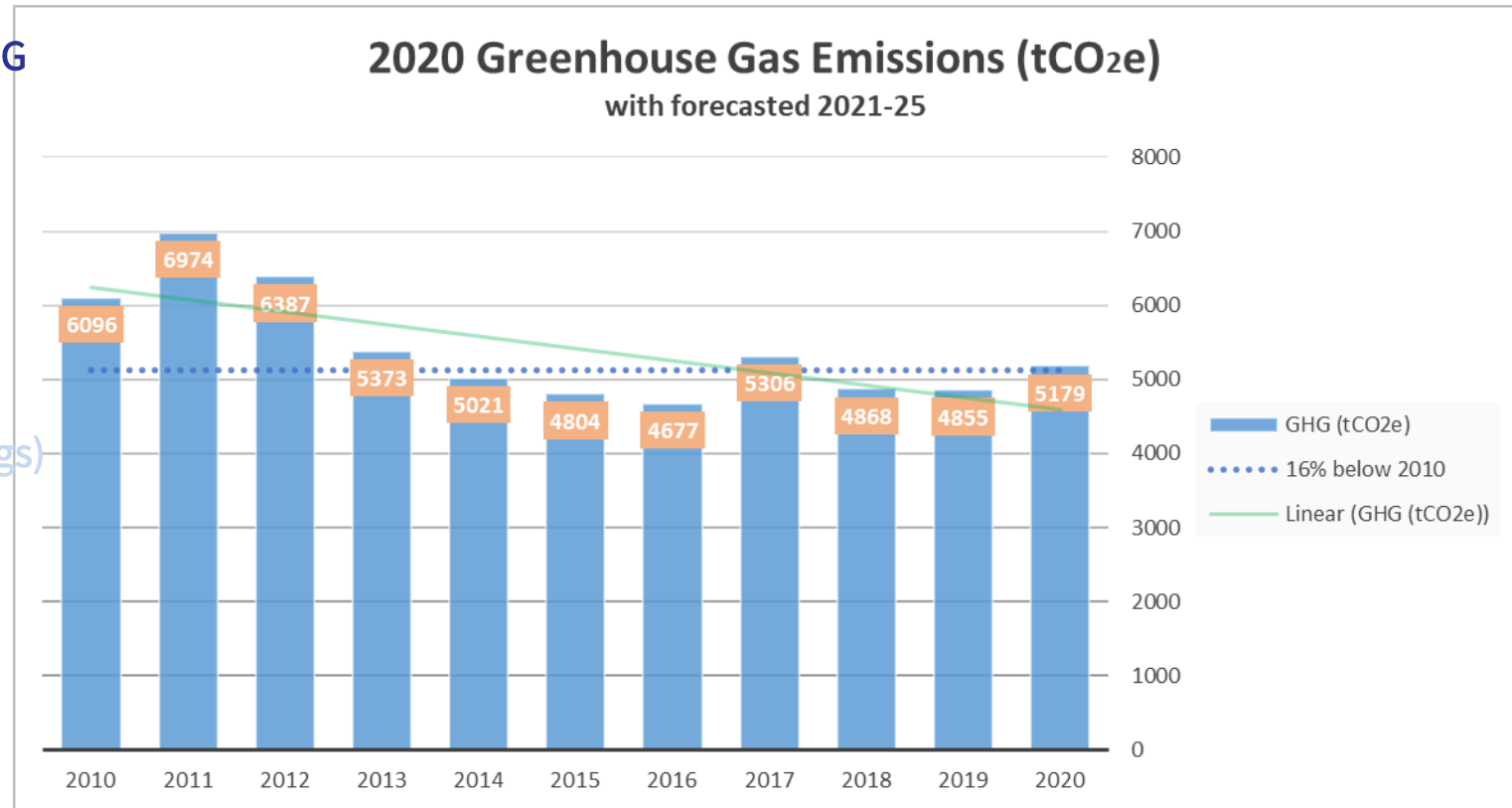


# GHG Goals

- 16% (30%) reduction of GHG emissions by 2025
- 40% reduction of GHG emissions by 2030 (fleet)
- 50% reduction of GHG emissions by 2030 (buildings)
- 60% Reduction of GHG emission by 2050

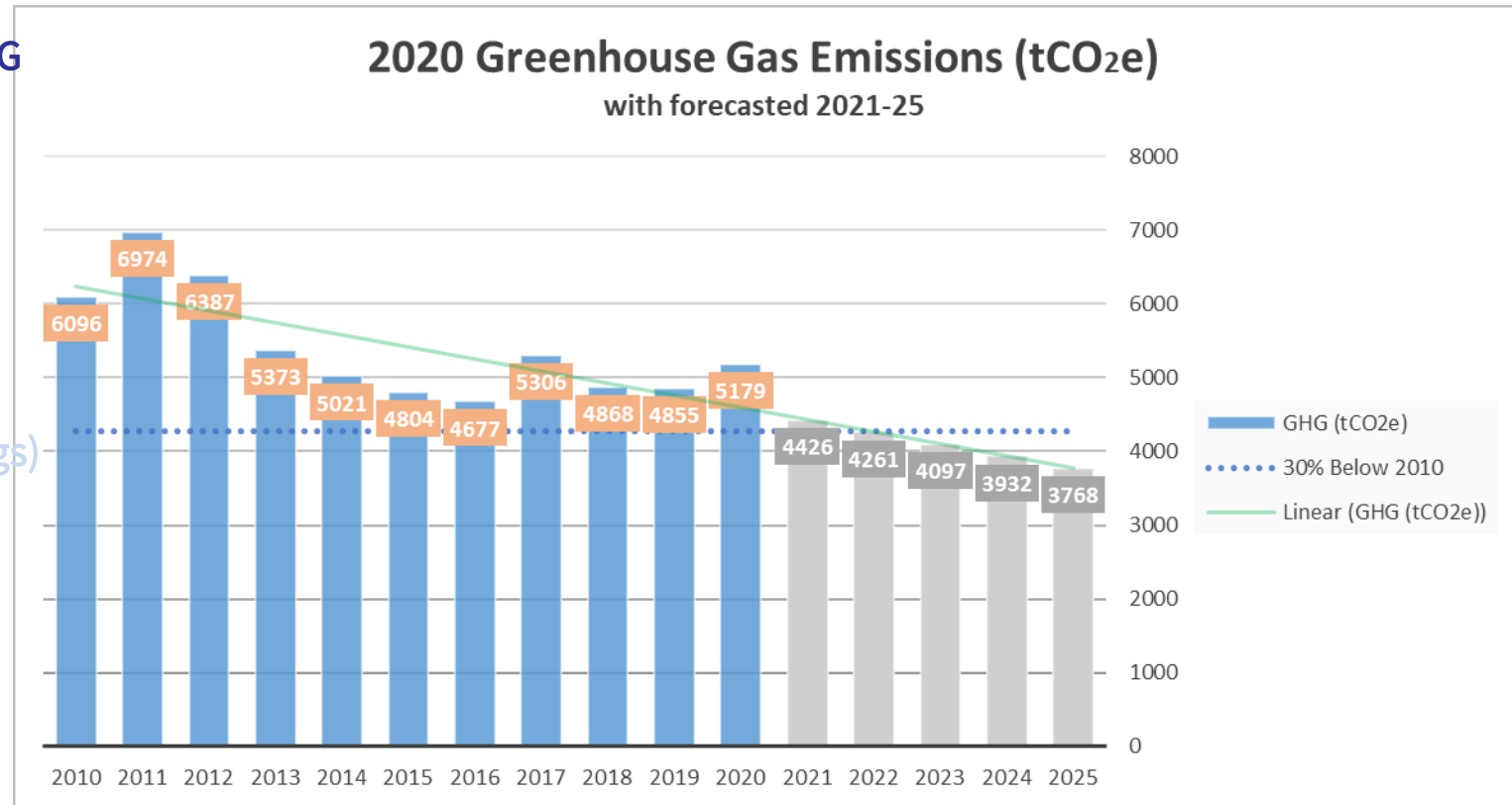
# Current GHG Reduction

- 16% (30%) reduction of GHG emissions by 2025
- 40% reduction of GHG emissions by 2030 (fleet)
- 50% reduction of GHG emissions by 2030 (buildings)
- 60% Reduction of GHG emission by 2050



# 2025 Projection

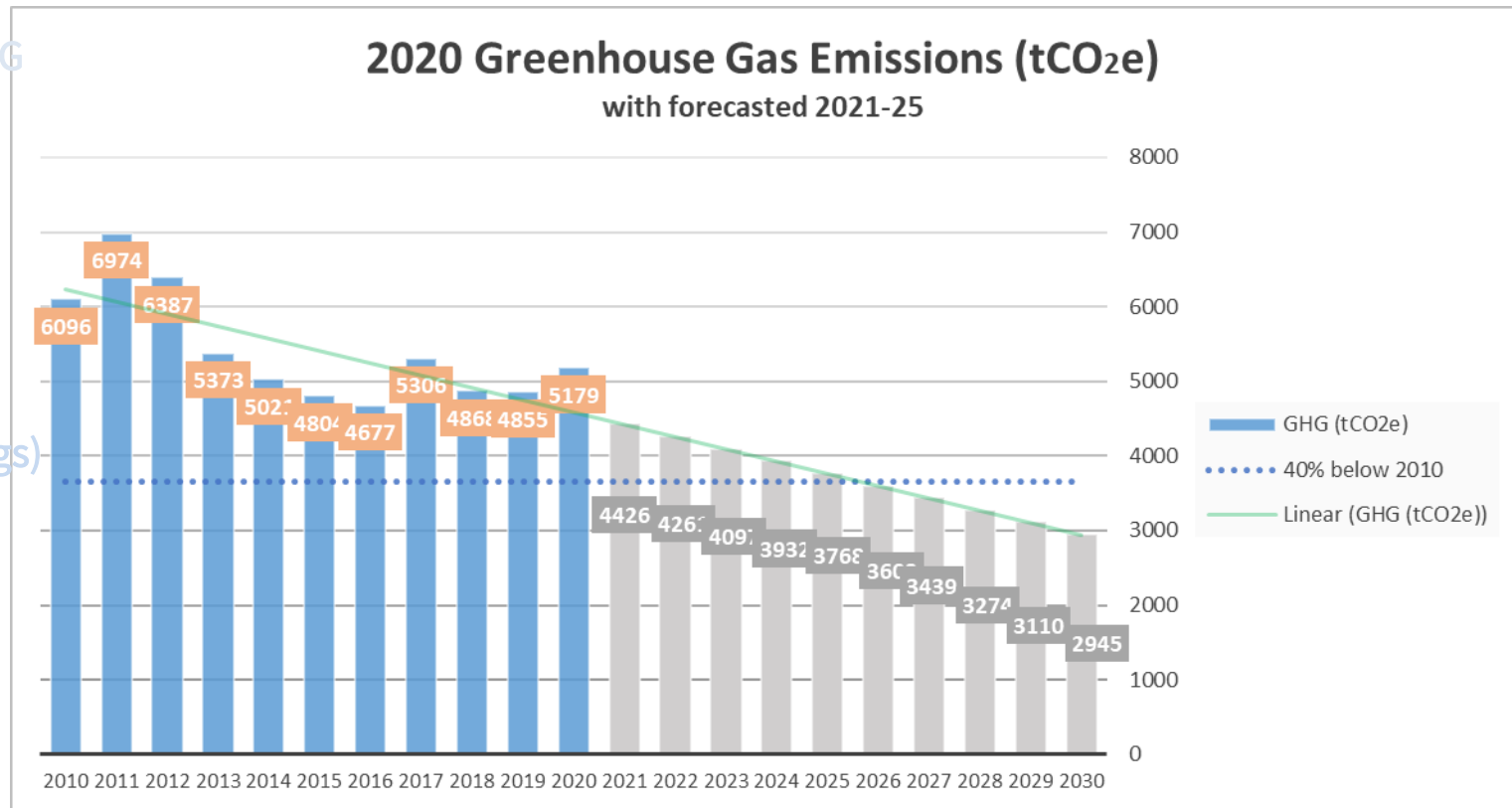
- 16% (30%) reduction of GHG emissions by 2025
- 40% reduction of GHG emissions by 2030 (fleet)
- 50% reduction of GHG emissions by 2030 (buildings)
- 60% Reduction of GHG emission by 2050





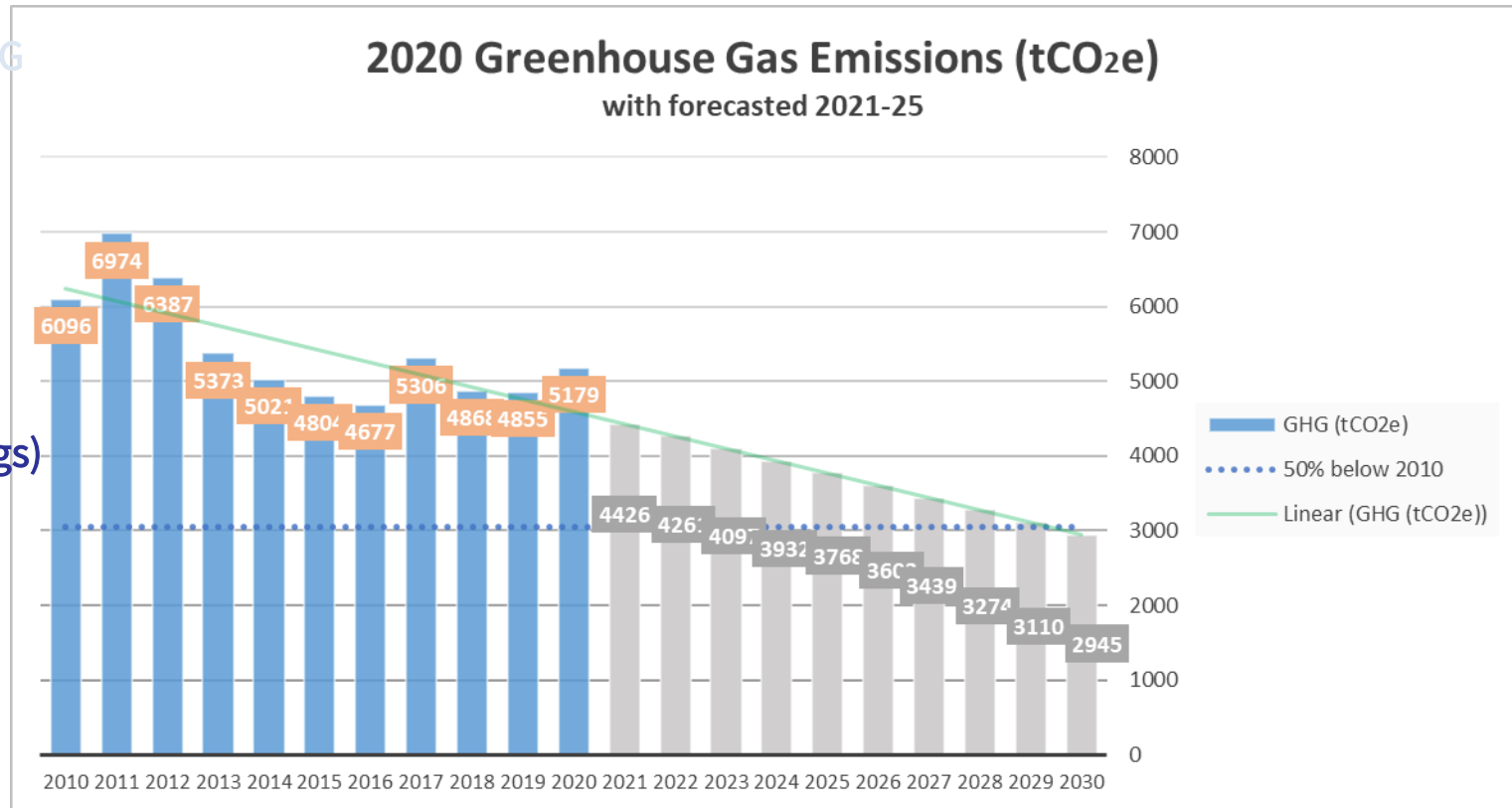
# 2030 Projection

- 16% (30%) reduction of GHG emissions by 2025
- 40% reduction of GHG emissions by 2030 (fleet)
- 50% reduction of GHG emissions by 2030 (buildings)
- 60% Reduction of GHG emission by 2050



# 2030 Projection

- 16% (30%) reduction of GHG emissions by 2025
- 40% reduction of GHG emissions by 2030 (fleet)
- 50% reduction of GHG emissions by 2030 (buildings)
- 60% Reduction of GHG emission by 2050



# LED Lighting Upgrades

- Started May 2019
- Completed first school in September 2019 (Lansdowne south)
- Now completed 21 buildings



# LED Lighting Upgrades

- Just reached 1,850,000 kWh per year savings!!!!
- Approximately \$208,000 per year
- Return on investment 3.1 years
- This is like getting 25.1% per year interest on your investment!!!!
- Value added goes beyond savings



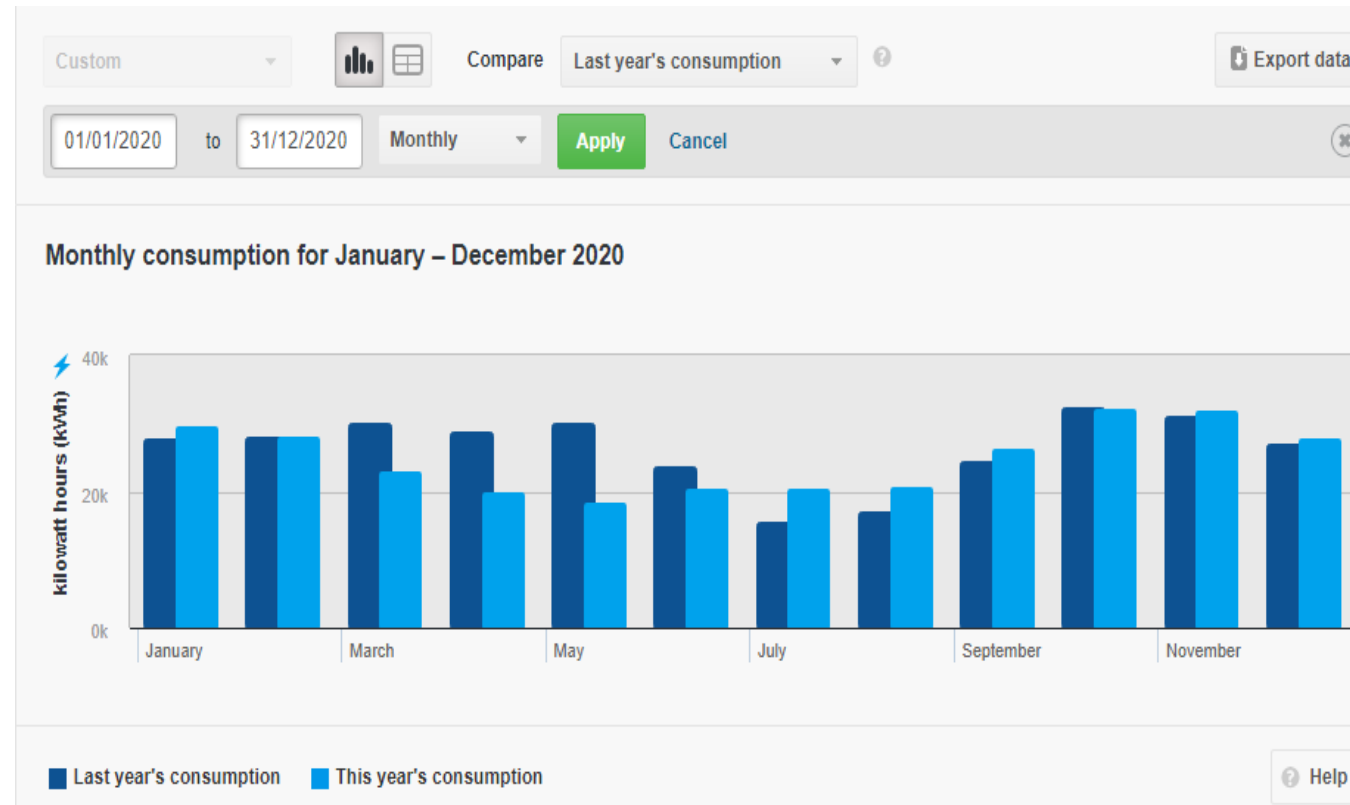
# LED Lighting Upgrades

- Value added goes beyond savings



# Colquitz Middle School – 2020 (BC Hydro Data)

- Has not yet undergone LED upgrades
- Will be upgraded this summer



# Gordon Head Middle School – 2020 (BC Hydro Data)

- Underwent LED upgrades Jan. 2020
- Calculated results predicted 3.8 year return on investment.
- Measured results are consistent at 3.5 year return on investment.

