

# Achieving GHG Reductions: The Smart Path

**Kevin Wylie**

General Manager, Public Works and Environmental  
Services

City of Ottawa





# City of Ottawa Energy Portfolio

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## Four Major Initiatives

- ① LED Streetlight Conversion
- ① Cogeneration Plants
- ① Building Engineering and Energy Management
- ① Energy Evolution Projects



# Renewable Energy as a Strategic Focus

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**VISION:** Transform Ottawa into a thriving city powered by clean, renewable energy

- Council has been focused on renewable energy strategies for over a decade
- Goal of being powered by clean, renewable energy by 2050
- Community Engagement and Stakeholder Partners



# Ottawa – Envari Partnership

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- Reduce energy consumption & GHG emissions
- Create financial benefit

Envari is the preferred partner for energy efficiency, conservation and demand management projects



**I'm pleased**

to see the City of Ottawa and Energy Ottawa working together to spend money, energy, and resources more efficiently

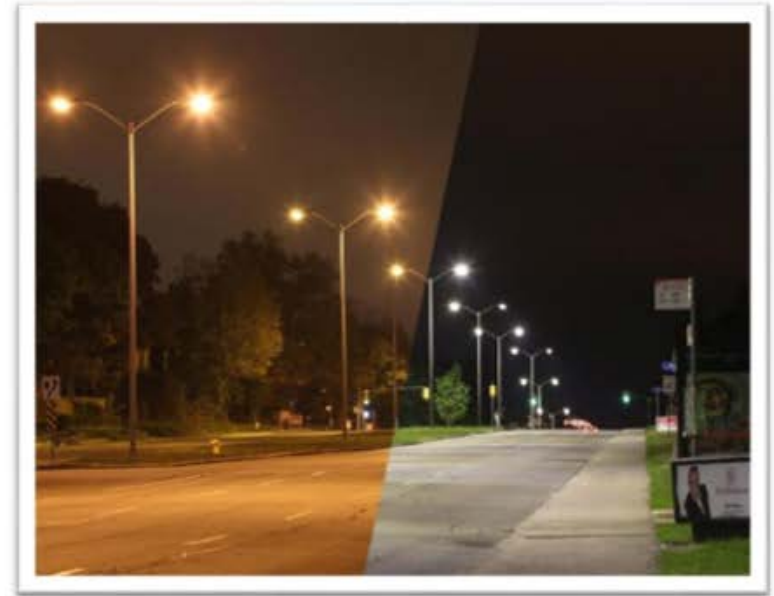
Mayor Jim Watson





# LED Streetlight Conversion

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- Partnership with Envari
- Reducing energy consumption by 60%
- Estimated savings of \$4M annually



# Cogeneration Plants

## Wastewater Treatment Plant

- Generates 2400KW electricity & 2700KW thermal energy
- Saves \$1.6M/ year



## Landfill

- Generates 5MW of renewable energy
- Saves \$200K/ year
- Royalty payment of \$1.5M

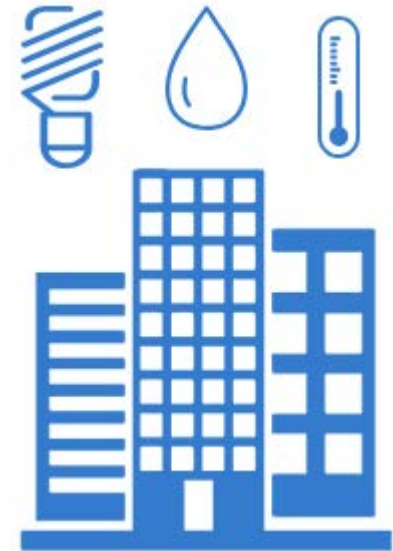


# Building Engineering and Energy Management (BEEM)

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- Energy Conservation and Demand Management Plan
- Building Automation System for HVAC
- Simple 5-year payback





# Energy Evolution Strategy

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## Phase 1:

- Baseline inventory of energy supply & demand
- Action of 30 short term (2020) initiatives



## Phase 2:

- Energy savings in transportation and buildings
- Modeling scenarios for 2050

**"Energy Evolution is not a final plan. It is a starting point. A springboard to bold and exciting things to come"**





# Going Forward

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- Upgrade Cogeneration Plant at Water Treatment Plant
- Explore opportunities at Landfill
- Explore innovative approaches
- Tackle deeper retrofit projects



The City of Ottawa is  
committed to  
energy management  
as a key component  
of its operations



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Public Works and Environmental Services  
City of Ottawa

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**613-580-2424 x 19013**



**Kevin.Wylie@ottawa.ca**