

# Climate Risk and Resiliency Intern

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## Purpose of Internship

The purpose of this project was to continue to improve Epic's corporate sustainability through the development of a climate resiliency and fuel transition plan for Epic's properties in Canada.

## Things You Should Know

**Opportunities to transition** from the usage of natural gas and fossil fuel include the use of: district energy, solar panels, geothermal energy, retrofitting HVAC and lighting, and green roofing.

**Flood and climate adaptation** measures include flood sensors, sump pumps, permeable pavement and green roofing. Taking these opportunities can increase the long-term value of the property by **returning on the investment** as well as **protecting tenant safety and the environment**.

**Epic Investment Services** is a fully integrated property management and investment company responsible for managing **35 million square feet** of real estate assets worth over **\$16 billion**. Epic manages **214 properties** across Canada and the United States, in the commercial, retail, industrial and residential sectors.

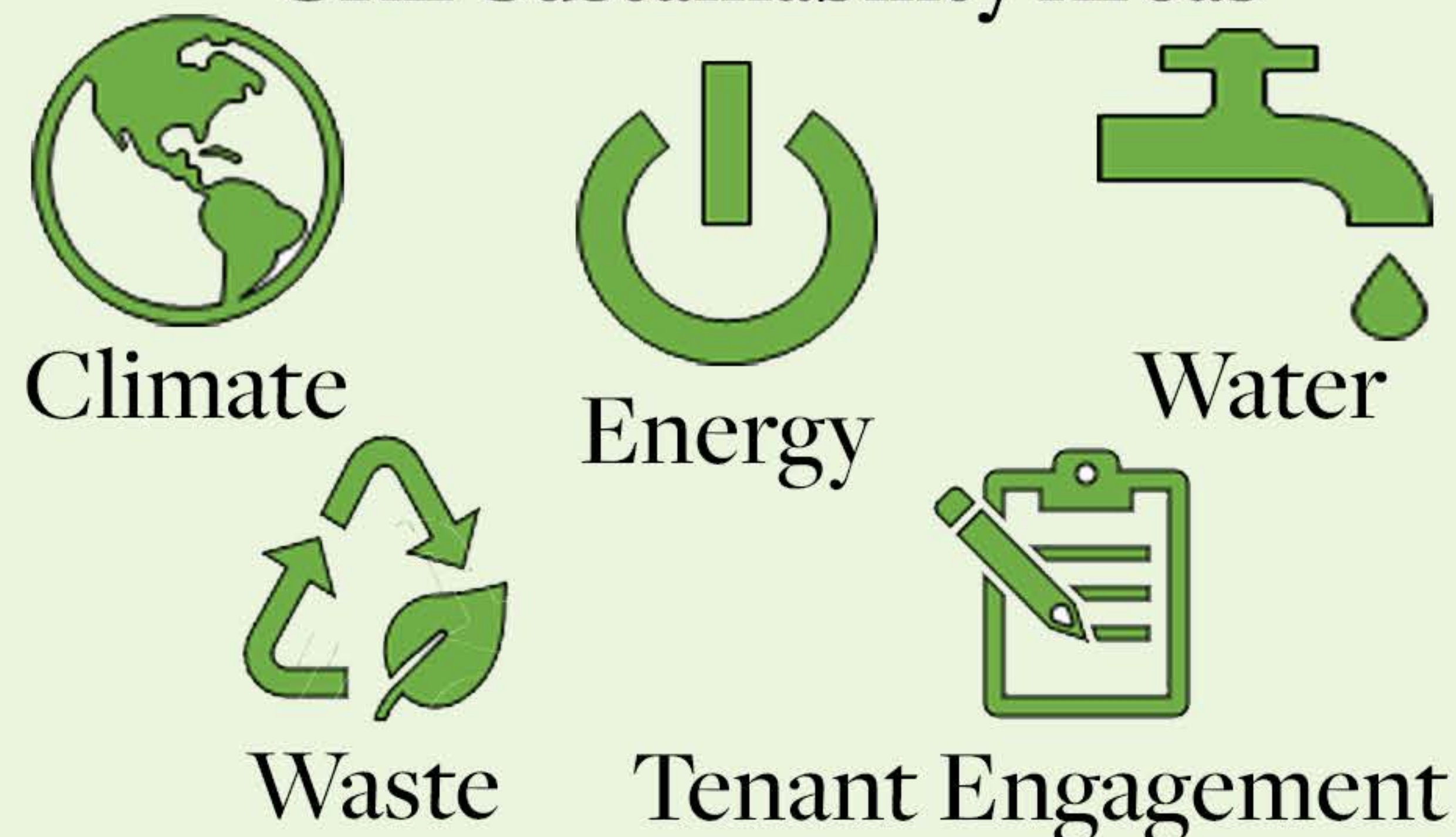
## Facts at a Glance

- 558** Amount of energy reduced by plan in equivalent number of average homes per year
- Amount of emissions reduced by plan in equivalent number of average cars per year **444**
- 18** Number of properties examined in the Canadian portfolio
- Amount of average losses per year due to flooding-related disasters from 2009 to 2018 **\$1.8 bn**

## Sustainability Challenges in CRE

- The commercial real estate (CRE) industry in Canada is heavily dependent on the use of GHG-emitting **natural gas** to heat buildings in the winter. Cooling buildings during the summer requires more electricity in order to power HVAC cooling systems.
- **Flooding, storms, rising sea levels, heat waves and fires** all pose very large risks to the long-term value of real estate holdings and to tenant safety. These trends have **intensified** as the climate warms.
- Increased **exposure to liability** and increasing disaster **insurance costs** are requiring a re-examination of CRE management, acquisition and disposition practices.

## CRE Sustainability Areas



## Accomplishments

- Researched and benchmarked industry **competitor sustainability performance** in the Commercial Real Estate (CRE) sector
- Summarized current and future climate impacts and energy usage of **18 properties** in the Epic portfolio
- Analyzed energy reduction measures, climate resiliency methods and fuel transition methods and created long-term plans for properties to follow
- Analyzed **financial and emissions data** to determine how to best minimize energy usage and maximize financial returns and emissions reduction; presented findings to senior management via a 25-page report and presentation