Building Portfolio & Energy/GHGs

~800,000 GJ total energy demand

45% Natural gas      55% Electricity

Owned: 55% of total portfolio
Leased: 75% office space

Office Paper 1,481 tCO₂e 2%
Business Travel 7,704 tCO₂e 13%
Vehicles 20,462 tCO₂e 34%

GHG Emissions by Source
Total Emissions: 60,708 tCO₂e

Office 68%
Warehouses, Trailers 12%
Courthouses 6%
Health 5%
Correction Centres 5%
Other 5%
Sustainability Mandate
Environmental Management

- ISO 14001 registered Environmental Management System informed by *The Natural Step*
- Four significant aspects, including *Energy and GHG emissions*
GHG Emission Reduction Trend*

Total and Weather Normalized GHG Emissions (tCO$_2$e)
2010 - 2016

Reduction of more than 20,000 tonnes of GHG emissions since 2010
*Core government owned and leased
Energy Management & Targets

- Provincial reduction target is 80% by 2050
- CITZ’ short, medium and long term targets developed to align with Provincial target

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Medium Term</th>
<th>Long Term</th>
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<tbody>
<tr>
<td>3% year over year</td>
<td>4% year over year</td>
<td>5% year over year</td>
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<tr>
<td>First decade</td>
<td>Second decade</td>
<td>Third decade</td>
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CO₂
Current to Future State

Accumulated operational cost reduction, job creation, client satisfaction

Energy Retrofits
Leading Workplace Strategies
Smarter Building Strategies

Reduced energy use and greenhouse gas emissions

850,000 GJ

700,000 GJ

Where – Energy Smart Buildings & CITZ

Where LWS, Energy Retrofits and IM/IT intersect...

![Diagram showing the intersection of LWS, Energy Retrofits, IM/IT, and Building Asset Investments]

- LWS
- Energy Retrofits
- IM/IT
- Building Asset Investments
Why – Energy Smart Buildings & CITZ

Improve Services
• Places where government does business that are productive and secure

Affordability
• Government that requires less money to operate and access

Employment
• Invest in local jobs

Environmental Stewardship
• Preservation and restoration of BC’s natural heritage
SMARTer Buildings

- Pro-active
- Adapt-able
- Long-term
- Human & Automation
- Energy Efficiency
- Savings
- Longevity
- Comfort
What – Energy Smart Buildings & CITZ
How – Energy Smart Buildings & CITZ

- Investigate
- Strategize
- Partner
- Retrofit
“We shape our buildings; thereafter they shape us.”

Winston Churchill

“Rome wasn't built in a day, but they were laying bricks every hour.”

John Heywood