

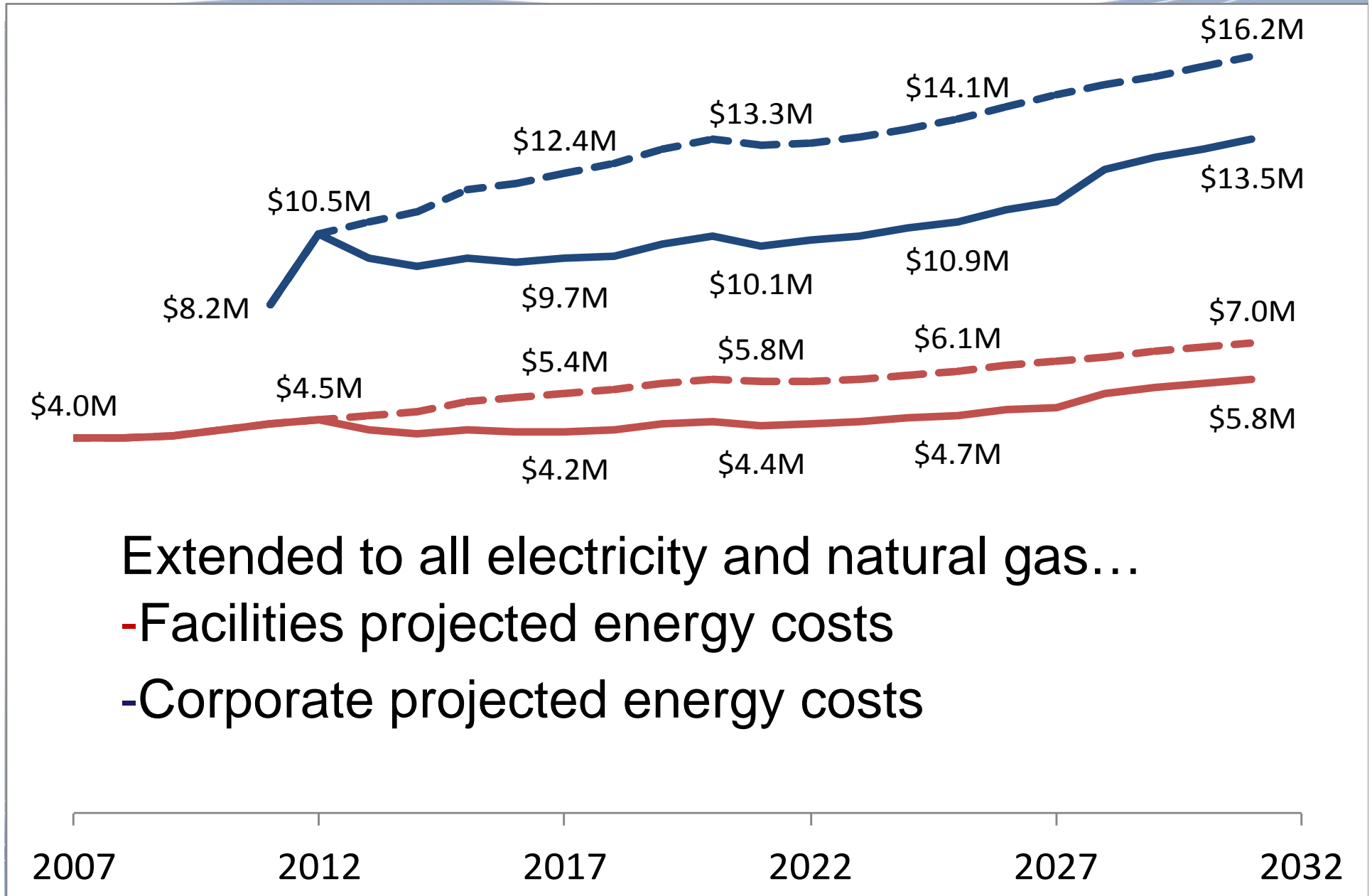
Towards Energy Sustainability City of Barrie Energy Management Plan



**Barry Thompson, Engineering
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Strategic importance of the EMP

- ✓ **Ontario government focus on energy**
 - ***Green Energy Act* regulation 397/11**
 - **Incentives for energy efficiency**
- ✓ **Opportunity to reduce energy spend**
 - **10.5 million dollar budget in 2012**
- ✓ **Reduce electrical cost exposure**
 - **Province announced in 2009 electrical costs expected to increase 45% in five year**
- ✓ **Barrie Council priorities**
 - **Protect the environment**
 - **Strengthen Barrie's financial condition**



EMP PROCESS

Identify preferred state

- Strategic planning
- Best practices
- Regulatory requirement

Explore present state

- Audits
- Interviews
- Research

Develop action plan to achieve preferred state of energy management

Scope of the EMP

Corporate energy use

Existing facilities

Fleet and
transportation

Water & wastewater
processes

New facilities

IT equipment & plug
load

Street lights

Implement an energy management system to:

- Better analyze energy use and costs
- You can't manage what you can't measure
- Verify energy project savings and enable reinvestment
- Reduce energy bills by 2-5% (\$80,000-\$200,000 /a)

Capital costs vs. savings

Over 6 years, bill savings exceed retrofit capital required

\$ thousands	2013	2014	2015*	2016	2017	2018	Total
Capital costs	\$923	\$778	\$726	\$702	\$676	\$670	\$4,5 M
Incentives	\$276	\$129	\$65	\$51	\$24	\$27	\$0.6 M
Capital required	\$647	\$649	\$661	\$651	\$652	\$643	\$3.9 M
IRR	80%	49%	28%	20%	12%	8%	54%
Bill savings	\$0	\$494	\$752	\$923	\$1,088	\$1,184	\$4.4 M

*The City can update the plan in 2015 to identify new cost-effective opportunities

Table prepared by INDECO

Key elements of success



Next steps

- ✓ **Demonstrate commitment to energy efficiency**
- ✓ **Communicate that energy efficiency is a good investment**
- ✓ **Devote resources to energy efficiency project planning and implementation**
- ✓ **Champion the EMP to Council and staff**