

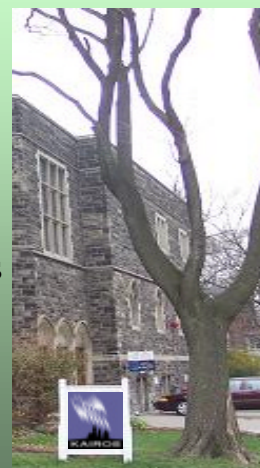
Energy Efficiency for Religious Buildings

*A new initiative from
KAIROS – Canadian Ecumenical Justice
Initiatives*



Why should Faith Communities be involved?

- Demonstrating solidarity with those most affected by climate change
- Doing our share to reduce Canada's Greenhouse Gas emissions
- Helping Canada implement Kyoto
- Modelling respect & care for Creation



Faith communities own and/or manage buildings and properties

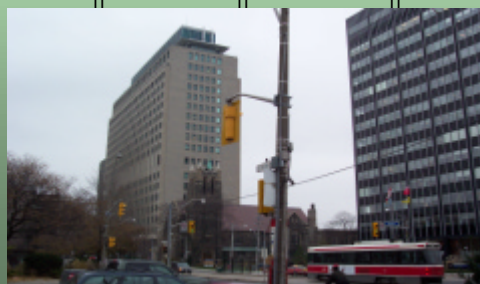


- We face challenges
- We have opportunities
- Buildings can be motivators or inhibitors to doing the right thing

How are we positioned?

Situated somewhere between government, private sector, and civil society, we are in every community – and in every country and culture.

Imperial Oil Ltd. KAIROS Ministry of Environment



Faith Communities have Resources

All kinds of people with vision, ideas, skills, assets, networks and opportunities for:

- Education
- Advocacy
- Management
- Modelling
- Transforming lifestyles
- Transforming community



Energy Efficiency for Religious Buildings

KAIROS Initiative

- KAIROS has a Partnership Agreement with the Office of Energy Efficiency (OEE) of NRCan (Natural Resources Canada)
- As an Energy Innovator Initiative (EII), we are creating:
 - a dedicated webpage
 - a customized workshop
 - case studies

Programs from NRCCanada offer Assistance and Training



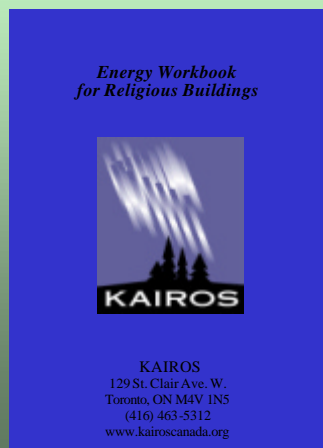
Linking with Professionals, Consultants, ESCOs, Green Communities who have expertise



*Financial Assistance for Energy Audits
and Retrofits - from OEE – NRCan
EnerGuide for Existing Buildings*



*KAIROS is developing Resources for the
Religious Institutions Sector (RIS)*



- Energy Workbook
- Stories and best practices
- *Dollars to \$ense* workshops for RIS

Moving Faithfully Towards Energy Efficiency: St. Thomas the Apostle Church, Ottawa; A Case Study



Project	Implementation Date	Project Cost (\$)	Energy Consumption Savings (GJ)/yr	Cost Savings (\$)/yr
1. Upgrade lighting to efficient fluorescents and metal halide elements	2004-2005	2500	62	1361
2. Upgrade building envelope by replacing windows with EE units, installing insulation, and new weather stripping	2004	85,000	466	4385
3. Replace 2 inefficient existing boilers with 1 mid-efficiency gas boiler, install vent damper and setback thermostats when space unoccupied	2005	20,000	244	2290

Figure 1: Summary of practical energy efficiency measures conducted as part of ERA (3) project by St. Thomas the Apostle.

Building Envelope - Windows



Heating System Out with the Old Inefficient – In with the New Highly Efficient



	Baseline	Current	Target
Year			
<u>Summary – Totals</u>			
Area (m ²)	1860	1860	1860
Total annual energy cost (\$)	19,142	19142	11,106
Total annual energy consumption (GJ)	1720	1720	948
Electricity			
Annual electricity costs (\$)	5,236	5,236	3,875
Annual electricity consumption (GJ)	239	239	177
<u>Natural Gas</u>			
Annual natural gas costs (\$)	13,906	13,906	7,231
Annual gas consumption (GJ)	1481	1481	771

Figure 2: Current and projected energy consumption for St. Thomas the Apostle, Ottawa, ON.

Awareness and Education Create a Climate for Change

... "To encourage and promote good stewardship of God's creation at St Thomas and by our parishioners, we have now established a Stewardship of the Environment group, and have a busy program underway. In addition to continuing the retrofit program, we have joined other faith communities in the Ottawa area and embarked on the One Tonne Challenge program. 25 St Thomas families have signed up to take the challenge. We held an Earth Day service in October and plan to introduce more creation focused prayers and sermons in worship services. Our church group leaders are becoming increasingly environmentally conscious and are doing their best to promote earth friendly practices at the church and in the wider community."

"We made the right decision -to build an energy-conscious faith community!"



*Join Us
Together We will Make a Difference!*

As we honour the Creator and all of Creation
and we take responsibility for our lives on
this fragile Planet Earth – our island home.



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