Whereas, the City of Windsor has committed to enhancing the quality of Windsor's natural environment; and

Whereas, the property known as Ojibway Shores and owned by the Windsor Port Authority, has important natural heritage characteristics, including significant wetland, habitat of threatened and endangered species, significant woodlands, significant wildlife habitat, ecological function, diversity, significant species, significant communities, and condition; and

Whereas, the 2020 biodiversity goals and targets for Canada include by 2020 at least 17 percent of terrestrial areas are conserved; and

Whereas, the Government of Canada is the sole shareholder of the Windsor Port Authority;

THEREFORE BE IT RESOLVED that the City of Windsor request the Government of Canada conserve the significant natural condition, biodiversity and biological function of the Ojibway Shores property as an environmentally protected area

APPENDIX "A"

Good Choices, Bad Choices.

Environmental Rights and Environmental Protection in Ontario

EXECUTIVE SUMMARY

2017 Environmental Protection Report

Environmental Commissioner of Ontario

APPENDIX "B"

Executive Summary

The Environmental Commissioner of Ontario (ECO) is the guardian of the *Environmental Bill of Rights*. We report to the Ontario legislature and to the public on environmental protection, energy conservation, and climate change. The ECO's 2017 Environmental Protection Report, *Good Choices, Bad Choices: Environmental Rights and Environmental Protection in Ontario*, examines eight environmental issues this year. The report highlights examples of positive government action as well as cases of government inaction, or worse, misguided action.

Chapter 1: The *Environmental Bill of Rights*

Each year, the Environmental Commissioner of Ontario reports on whether ministries have fulfilled their responsibilities under the *Environmental Bill of Rights*, and whether their environmentally significant decisions were consistent with the purposes of the law. Last year we called on all ministries to show more respect for the public by improving their best practices and compliance with the law. In response to last year's report cards, as well as training and outreach by the ECO to ministries, we saw progress this year in three of the four areas that needed significant improvement:

1. **Content of notices posted on the Environmental Registry:** Ministries made modest progress by making the content of their notices for instruments (e.g., approvals, permits, and licences) more relevant to the public and easier to understand.

2. **Outdated proposals on the Environmental Registry:** Ministries reduced the total number of outdated proposal notices on the Environmental Registry by over 80%. Only four ministries still had outdated proposals on the Environmental Registry at the end of the reporting year.

3. **Overdue applications for review under the *Environmental Bill of Rights*:** Ministries concluded four of the seven overdue applications for review that we identified in 2015/2016. The Ministry of the Environment and Climate Change (MOECC) also began posting status updates of its applications for review on the Environmental Registry. However, the MOECC's review of the *Environmental Bill of Rights* itself remains incomplete, almost seven years after this application was submitted.

Ministries often still take a long time to post decision notices on the Environmental Registry. This delay deprives the public of the right to know both the government's ultimate decision on a proposal within a reasonable time, as well as how public comments affected it. Late posting can also affect the public's ability to appeal certain instrument decisions.

This year the MOECC – which makes the most environmentally significant decisions – generally discharged its duties well under the *Environmental Bill of Rights*. The Ministry of Natural Resources and Forestry (MNRF), which also makes many environmentally significant decisions, performed less well; for example, the MNRF did not document its consideration of its Statement of Environmental Values for all decisions. The Environmental Commissioner of Ontario expects all ministries to continuously improve how well they meet their obligations under the *Environmental Bill of Rights*.

Prescribed Ministry	Quality of notices for policies, acts and regulations posted on the Environmental Registry	Quality of notices for instruments posted on the Environmental Registry	Timeliness of posting decision notices on the Environmental Registry	Keeping notices on the Environmental Registry up to date	Handling of applications for review and investigation	Avoiding overdue applications for review	Considering Statements of Environmental Values (SEVs)	Co-operation with ECO requests
The Ministry of the Environment and Climate Change	→	→	→	↗	↗	↗	→	→
The Ministry of Natural Resources and Forestry	→	→	→	→	↗	↗	↘	↘

Summary of the Ministry of the Environment and Climate Change and the Ministry of Natural Resource and Forestry's performance in 2016/2017. Green means that a ministry met or exceeded the ECO's expectations and its legal obligations; yellow means that a ministry's performance needs improvement; red means that the ministry's performance is unacceptable. Arrows indicate annual trends.

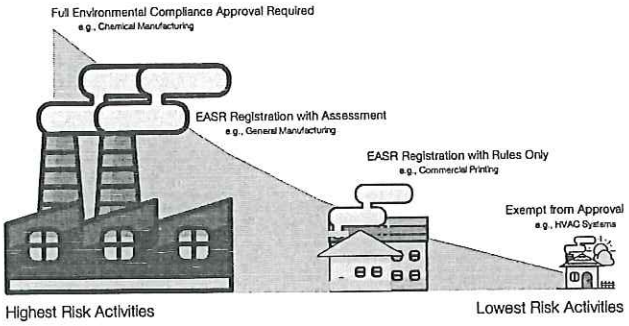
The ECO recommends that:

- **All ministries post documentation of how they considered their Statement of Environmental Values as part of posting decision notices on the Environmental Registry for all policies, acts, regulations, and instruments.**
- **The MOECC immediately complete its review of the *Environmental Bill of Rights*; all ministries improve their practices to address operational deficiencies in administering the act; and the MOECC amend the *Environmental Bill of Rights* itself to remedy legislative deficiencies.**
- **All ministries that have ongoing applications for review post information notices on the Environmental Registry to update the public on the status of the review.**

Chapter 2: Getting Approvals Right: the MOECC's Risk-Based Approach

In 2010, the Ministry of the Environment and Climate Change launched an online permit-by-rule system to regulate some low-risk environmental activities instead of requiring individual approvals for every single activity. Now, proponents undertaking certain low-risk activities must follow a standard set of operating requirements by registering the activity in an online database known as the Environmental Activity and Sector Registry (EASR).

This new approach has reduced the number of applications for individual environmental approvals, lightening the ministry's workload, and saving time and money for businesses. More importantly, the shift to the EASR has also brought many facilities that were previously operating outside environmental laws under regulatory oversight, and made EASR registrants subject to up-to-date environmental standards. It has also levelled the playing field for competitors, making all EASR registrants in a sector subject to the same rules. The Ministry of the Environment and Climate Change has developed a sound compliance and enforcement



Ontario's risk-based approach to environmental approvals.

Source: created by the ECO.

strategy for EASR registrants, which is already improving compliance. For example, the MOECC saw significant improvement in the automotive refinishing sector after taking compliance action.

A key purpose for introducing the EASR was to enable the ministry to focus more of its resources on higher-risk activities; now it needs to do just that. The Ministry of the Environment and Climate Change must strengthen its environmental approvals framework by: updating older environmental compliance approvals for higher-risk activities outside the EASR framework; accounting for the cumulative environmental effects of all regulated facilities (e.g., all air pollution within an airshed); and improving the Access Environment website where the public can find EASR registrations and other environmental approval documents.

The ECO recommends that:

- **The MOECC take a risk-based approach to prioritize updating older environmental compliance approvals (ECAs) for activities that will not be subject to EASR registration.**
- **The MOECC ensure that all forms of environmental approvals (including ECAs and EASR registrations) take into account the potential cumulative effects of multiple regulated entities on local air quality.**
- **The MOECC resolve ongoing technical issues with Access Environment, so that information about environmental approvals is more accessible to the public.**
- **The MOECC post all ECAs that are still in force on Access Environment.**

Chapter 3: Environmental Injustice: Pollution and Indigenous Communities

Photo credit: CBC/Jody Porter.

Governments and industry have long failed to remedy environmental issues that adversely affect the health, ecology and economies of Indigenous communities across Ontario.

In the Grassy Narrows and Wabaseemoong First Nation communities, northwest of Dryden, community members have suffered the devastating effects of pervasive mercury contamination in the Wabigoon-English River system for over 60 years. In one study, over 58% of the participating Grassy Narrows and Wabaseemoong community members were diagnosed with or suspected of having Minamata disease, a serious neurological syndrome caused by mercury poisoning. Minamata disease causes degraded neurological abilities including: tunnel vision; deafness; numbness in arms and legs; uncontrollable shaking; difficulty walking; and even death.

Across Ontario, numerous First Nation reserve communities are under boil water advisories that have lasted years. As of July 2017, 34 Ontario First Nation communities were affected by an advisory that had been in place for more than a year, and 17 communities were under an advisory more than a decade old. The federal government has the primary responsibility for water infrastructure and regulation on First Nation reserves, but the Government of Ontario also has a role to play in ensuring that every person living in Ontario has access to safe drinking water.

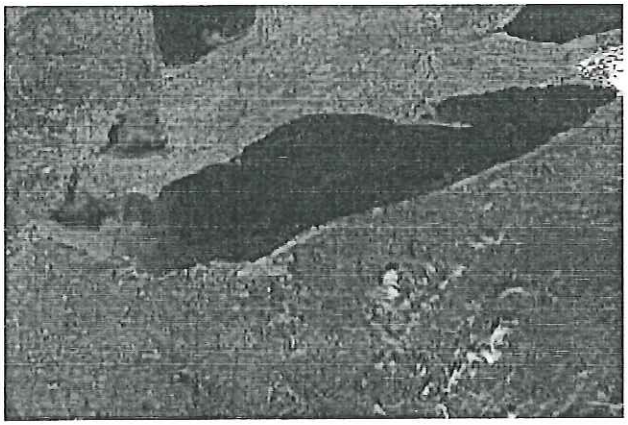
Surrounded by heavy industry, the Aamjiwnaang First Nation, located in Sarnia, suffers some of the worst air pollution in the country. Altogether, the industrial facilities of "Chemical Valley" release millions of kilograms of pollution into the Aamjiwnaang airshed each year, including some particularly toxic chemicals such as benzene and sulphur dioxide (SO_2). There is strong evidence that the pollution is causing adverse health effects, which neither the federal nor provincial government have properly investigated. Aamjiwnaang is known, sadly, for a 2005 study that confirmed a skewed sex ratio of babies in the community – two girls are born for every boy. A series of studies has found that Sarnia (including Aamjiwnaang) experiences high frequencies of many illnesses, higher-than-average hospital admissions for respiratory and cardiovascular illnesses, and higher-than-average incidences of certain cancers. In Aamjiwnaang, a "shelter-in-place" siren may go off at any time because of dangerous emissions, requiring residents to immediately go or stay inside, seal air exchanges and await further instructions.

After decades of inaction, the Ontario government is finally taking some steps to acknowledge and address these wrongs, but more is needed. In Grassy Narrows and Wabaseemoong, the provincial government must fulfil its commitment to ensure remediation takes place in a manner that includes the community and is respectful of their concerns and needs as partners. For the dozens of First Nation communities without safe drinking water, the province should provide more support, including technical expertise and training to operators of First Nation water treatment facilities. In Aamjiwnaang, the Ministry of the Environment and Climate Change must update its air standards and clarify the rules to ensure that all health-relevant industrial pollution is being properly regulated. The government and the ministry must invest in stronger monitoring and enforcement, as well as better communication with the Aamjiwnaang community.

The ECO recommends that:

- **The MOECC amend O. Reg. 419/05 to set up-to-date SO_2 air standards that protect human health.**
- **The MOECC clarify, by regulation, that acid gas flaring must be included in Emission Summary and Dispersion Modelling reports, even when associated with transitional operating conditions.**
- **The MOECC ensure the people of Aamjiwnaang have access to real time air monitoring information.**
- **The Government of Ontario and the MOECC increase technical capabilities and response capacity at the Sarnia district office by making more resources available.**
- **The MOECC work with Aamjiwnaang to improve transparency and trust between the ministry and the community.**
- **The Government of Ontario incorporate environmental justice as part of its commitment to reconciliation with Indigenous people and communities.**

Chapter 4: Algae Everywhere



A large algal bloom in western Lake Erie in September 2013.

Photo credit: NASA.

Algae blooms – thick, soupy scums of algae – are becoming much more frequent and wide-spread, and are imposing serious costs on Ontario communities. Harmful algal blooms can disrupt lake ecosystems, affect drinking water supplies, and make water unusable for recreation. Although the problem is most common in Lake Erie, algae also affect Lake Simcoe, parts of Lakes Huron and Ontario, and inland lakes, especially on the Canadian Shield.

Phosphorus is a key cause of algae growth. Regulations on phosphorus releases helped clean up algal blooms that plagued Lake Erie in the 1970s. Now more phosphorus controls are needed.

Today, run-off from rural, agricultural and urban lands is the dominant source of phosphorus. The Ontario government's preference so far for addressing these sources has been through voluntary and unevaluated programs, with questionable effectiveness. The Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and the MOECC must apply effective financial, regulatory and land use planning tools to curb these "non-point" sources of phosphorus run-off, such as:

- Expanding phosphorus trading to more watersheds (i.e., enabling phosphorus emitters, like sewage treatment plants, that can only reduce their emissions at great expense to pay other emitters, like farmers, to reduce their emissions more cheaply);
- Incenting agricultural practices that clearly reduce phosphorus run-off;
- Banning the spreading of phosphorus-containing materials on frozen or saturated ground;
- Reforming land use policy to reverse the continuing loss of wetlands in southern Ontario; and
- Addressing previously overlooked phosphorus sources, such as agricultural tile drains, construction sites and golf courses.

The ECO recommends that:

- **The MOECC and the OMAFRA link financial incentives to verified reductions in farm-based phosphorus run-off to water courses.**
- **The MOECC and the OMAFRA ban all spreading of phosphorus sources, such as manure, fertilizer and sewage sludge, on frozen or saturated ground.**
- **The MNRF reverse the continuing loss of wetlands in southern Ontario.**
- **The MOECC, the OMAFRA and the MNRF ensure that metrics-based and outcome-driven evaluations are built into all programs and strategies that the ministries lead, fund or partner on. Phosphorus control programs should, for example, require quantitative loadings targets, monitoring, quantitative evaluations and regular reporting as core elements.**

Chapter 5: Lightening the Environmental Footprint of Aggregates in Ontario

Photo credit: Hansueli Krapf / Wikimedia used under CC BY-SA 3.0.

Aggregates – sand, stone and gravel – are used to construct everything from highways to buildings. However, aggregates come with a significant environmental and social cost. They are often a source of conflict when aggregate extraction occurs close to communities.

The Ontario government began a review of the *Aggregate Resources Act* in 2012, finally amending the law in 2017. The amendments have addressed some of the concerns raised by the ECO and others over the years.

The amendments include enhanced protections for drinking water sources, improved compliance and enforcement capacity, and increased fees and royalties. However, the environmental footprint of aggregates should be lightened by: decreasing the need for new extraction sites; updating the operating conditions of existing sites where necessary to ensure environmental protection; and decreasing the environmental impact at end-of-use sites.

The ECO recommends that:

- **The government use the additional funds from the increased fees and royalties to grow the market for recycled aggregate.**
- **The government adopt procurement policies across all ministries, agencies and Crown corporations that prioritize the use of recycled aggregate.**
- **The government make recycled aggregate procurement policies a prerequisite for municipalities to receive infrastructure funding.**
- **The MNRF identify currently licenced aggregate sites that require studies and, if appropriate, update their operating conditions to ensure environmental protection.**
- **The MNRF include clear timelines for progressive and final rehabilitation in the *Aggregate Resources Act* policy framework.**

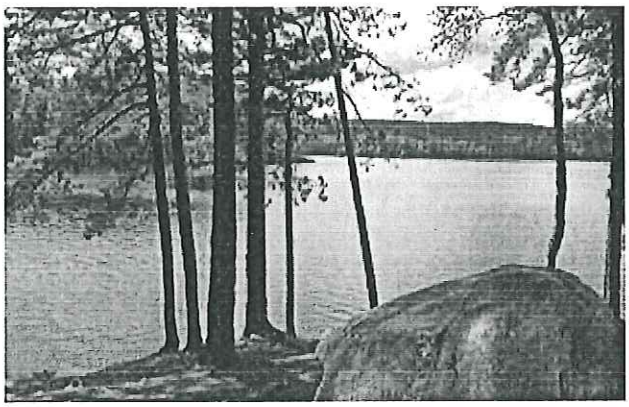
Chapter 6: The Missing 68,000 km²: Ontario's Protected Areas Shortfall

Protected areas, like provincial parks, are one of the most important tools for safeguarding nature. They conserve biodiversity, help us mitigate and adapt to climate change, provide ecosystem services that humans rely on, and offer social, economic and cultural benefits. Because of their critical role in combatting global biodiversity loss, almost all countries in the world, including Canada, have committed to protect 17% of lands and inland waters by 2020. Ontario still has a long way to go to reach this goal; protected areas currently cover only 10.7% of the province.

The Ministry of Natural Resources and Forestry does not have a plan for expanding the protected areas system to meet the 2020 international goal. The ministry must undertake a frank assessment of the current status of the protected areas system, identify key opportunities for expansion, and make a clear public commitment to achieving, and eventually exceeding, the 17% conservation target.

The ECO recommends that:

- **The MNRF fund the work required to inventory and assess Ontario's natural heritage areas as protected areas and other conservation lands.**
- **The MNRF develop a strategic plan for how it will achieve 17% conservation in the province, including:**
  - **Identifying priority lands for protection (e.g., biodiversity hotspots, improving ecoregional representation, enhancing connectivity, protecting important carbon stores, and protecting climate refugia);**
  - **Identifying priorities for ecological restoration in the protected areas system;**
  - **Identifying opportunities for co-management with Indigenous communities;**
  - **Providing financial and capacity-building support to increase protection of partially protected natural heritage areas; and**
  - **Restoring land acquisition funding programs.**



Algonquin Provincial Park.
Photo credit: Danny Zabbal.

Chapter 7: Getting Approvals Wrong: The MNRF's Risk-Based Approach to Protecting Species at Risk

In 2013, the Ministry of Natural Resources and Forestry "modernized" its system for issuing approvals under the *Endangered Species Act*. The law prohibits activities that harm species at risk or their habitat (there are 237 currently listed as at risk in Ontario), but it also gives the ministry the flexibility to authorize exceptions to these protections (e.g., through permits). Much like the MOECC's Environmental Activity and Sector Registry program (discussed in Chapter 2), instead of issuing individual permits that require the proponent to provide an "overall benefit" to a harmed species at risk, the Ministry of Natural Resources and Forestry now regulates most activities under a permit-by-rule system that is supposed to require proponents to follow a standard set of operating rules.

This approach is undermining the survival of Ontario's species at risk. The MNRF has never denied a permit to harm a threatened or endangered species. And, the permit-by-rule system only requires proponents to minimize (not eliminate or compensate for) harm to affected species at risk; the MNRF also turns a blind eye to whether proponents comply with these weakened rules. Making it worse, the ministry keeps the public in the dark about what activities it allows. The ministry must overhaul its approach to managing the *Endangered Species Act* approvals program, including enhancing monitoring and enforcement.

The endangered Barn Swallow.

Photo credit: Charles James Sharp .

The ECO recommends that:

- **The MNRF determine the effects of its authorizations on species at risk and publicly report on the results.**
- **The MNRF amend the *Endangered Species Act* to give enforcement officers the power to conduct inspections of registered activities to ensure compliance with permit-by-rule conditions.**
- **The MNRF post instrument proposals for all permits on the Environmental Registry for full public notice and comment.**
- **The MNRF make all species at risk authorizations, including registrations, publicly accessible on Access Environment.**
- **The MNRF amend the *Endangered Species Act* to create a right of appeal for permits.**

The threatened Algonquin wolf.

Photo credit: MNRF.

Chapter 8: Failing to Protect a Threatened Species: Ontario Allows Hunting and Trapping of the Algonquin Wolf

The Algonquin wolf is a distinct species native to Ontario, listed as "threatened" under the *Endangered Species Act*. There may be as few as 250 mature Algonquin wolves (also known as eastern wolves) remaining, with about two-thirds living within our province. Although the law prohibits killing or harming the Algonquin wolf, the Ministry of Natural Resources and Forestry allows hunting and trapping of this threatened species to continue throughout much of its range; the ministry decided to only protect Algonquin wolves from hunting and trapping in and around a few isolated provincial parks. The Algonquin wolf stands little chance of recovery unless it is better protected.

The ECO recommends that the Ministry of Natural Resources and Forestry prohibit hunting and trapping of wolves and coyotes throughout the Algonquin wolves' entire "extent of occurrence" (i.e., where they live).

Big Picture Collaborative: Fall Workshops 2017

Monday, November 13, 2017
Wednesday, November 15, 2017
Thursday, November 16, 2017
Hamilton
London
Essex
Carolinian Canada Coalition

The Big Picture Collaborative is bringing together leaders from diverse sectors to establish clear common goals, and to work closely with mutually reinforcing activities to re-establish healthy ecosystems and communities in the Carolinian Zone of Ontario.

We invite you to join the discussion to map out the next critical step towards restoring healthy landscapes in Canada's deep south by attending one of three regional one-day workshops:

- November 13th at Hamilton conservation Authority, 838 Mineral Springs Road, Ancaster
- November 15th at Upper Thames River Conservation Authority, 1424 Clarke Road, London
- November 16th at the Essex Region Conservation Authority, 360 Fairview Ave. W, Essex

Workshops run from 10am-3pm, with a break for lunch (included)

We are poised to reverse a centuries' old trend of habitat loss in southern Ontario.

Since 2000, when the visionary Big Picture "healthy ecosystems" strategy was developed by Carolinian Canada, there have been significant changes in land use, land planning and ecosystem health on the landscape. We also have a better understanding of the relationships between healthy environments (natural infrastructure), healthy economies and healthy people. So the time is ripe to update the Big Picture.

Workshop Goals:

1. Develop a consensus-based ecoregional vision for natural infrastructure, sustainability and prosperity in Ontario's "deep south".
    a. Identify high-level goals
    b. Discuss shared metrics to evaluate progress.
2. Achieve a shared understanding of different organizations' roles in the Collaborative, including that of Carolinian Canada.
3. Develop a clear "call to action" for collaborating organizations.

Registration is free but required - space is limited.

Travel stipends are available. Lunch and refreshments will be provided.

Register Today!

https://caroliniancanada.ca/events/fall-workshops-2017

APPENDIX "C"

Green Speaker Series

- Short Presentation about content.

October 26/2017

APPENDIX "D"

Objective:

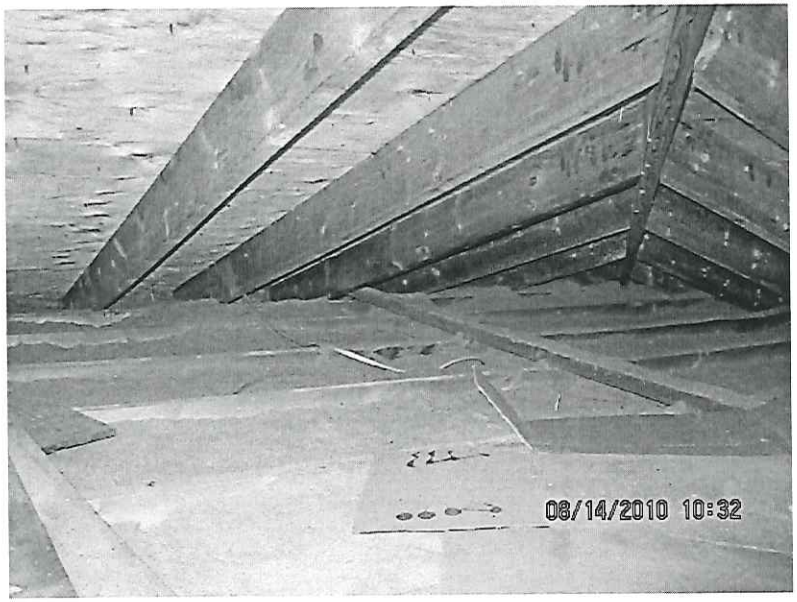
1. Reducing Domestic Energy Consumption

2. Becoming More Energy Efficient

- Initial Position: My own typical Canadian Ranch – Energuide Energy Efficiency: 64
- Typical Canadian house: 57
- My initial Goal: Improve my energy rating

What's happening?

Very likely this !



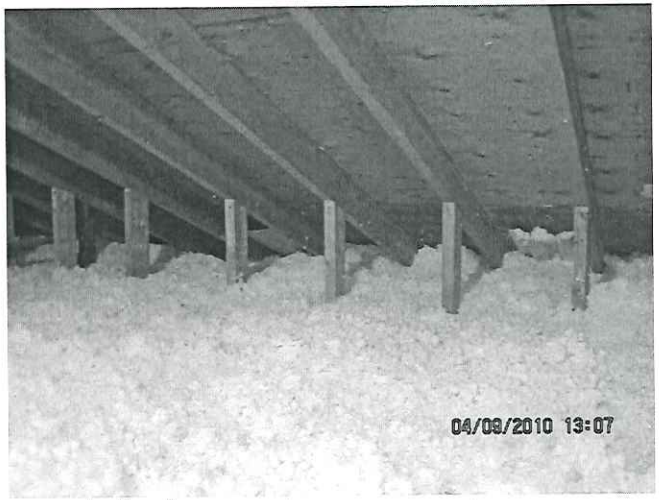
R10 is not enough

The Attic

This is a picture of the hallway in my house.

Here you can see the Infrared Image of the hallway. Because of poor insulation in the attic there is a lot of heat radiation to the inside of the house.

Here is a picture of the insulation before…

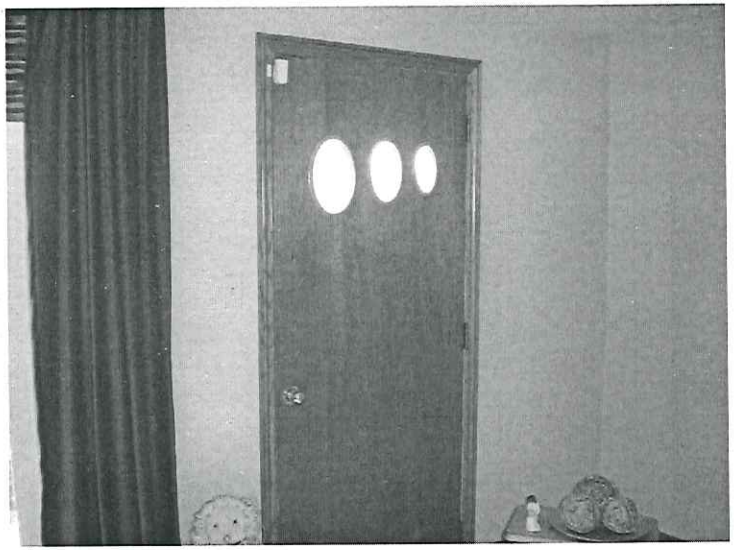


… and after the upgrades.

Properly Installing loose-fill insulation

Installing loose-fill insulation (note the markers indicating final depth of insulation.)

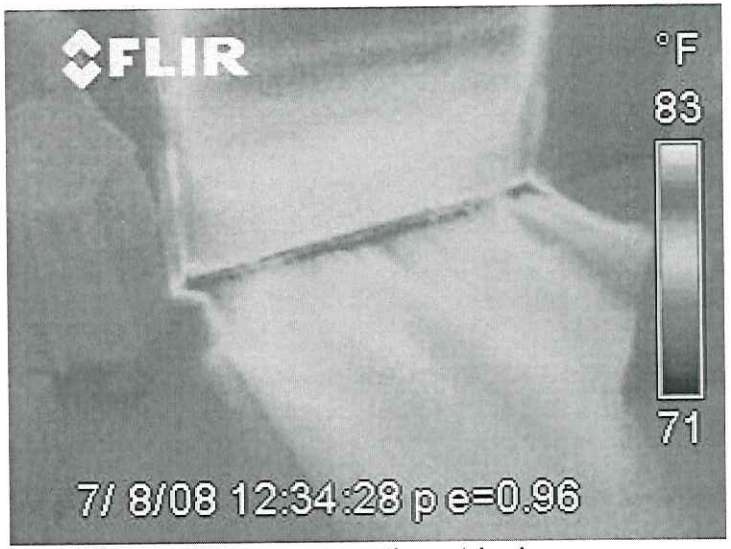
Doors



Picture of a perfectly good looking exterior door.

Infrared Picture reveals that it is indeed a hollow core door.

This door shows...



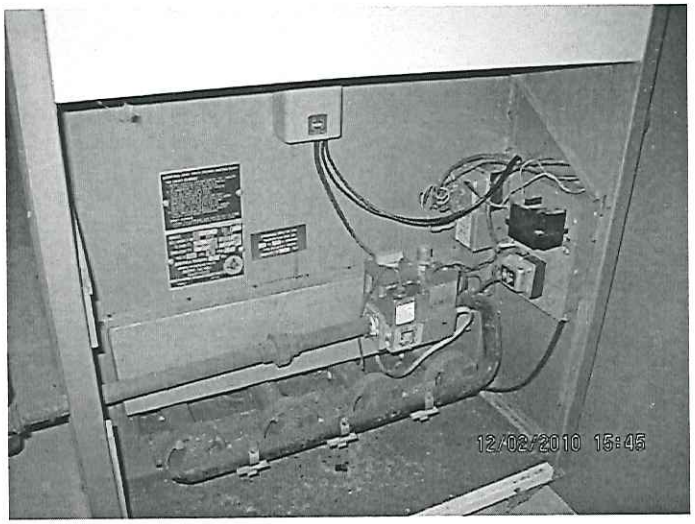
... air leaking at bottom weather stripping.

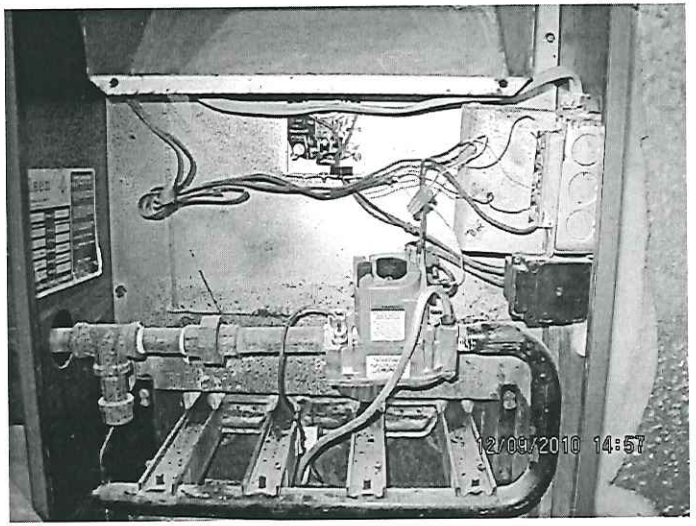
Doors

Solution to the problem:

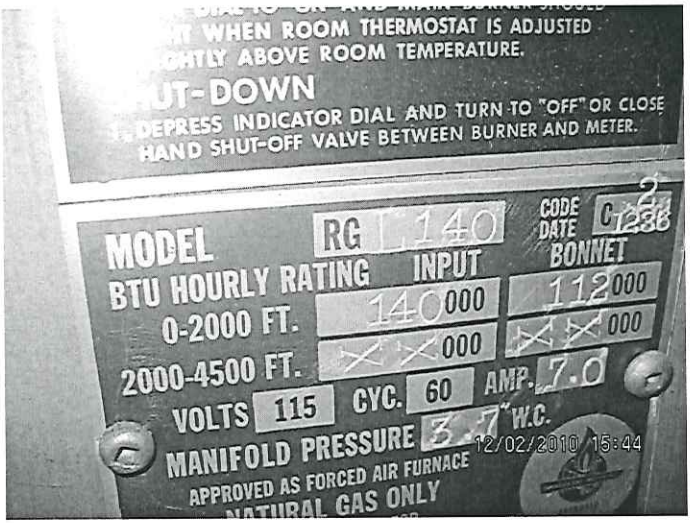
New energy star rated exterior door!

“Antique” Furnaces

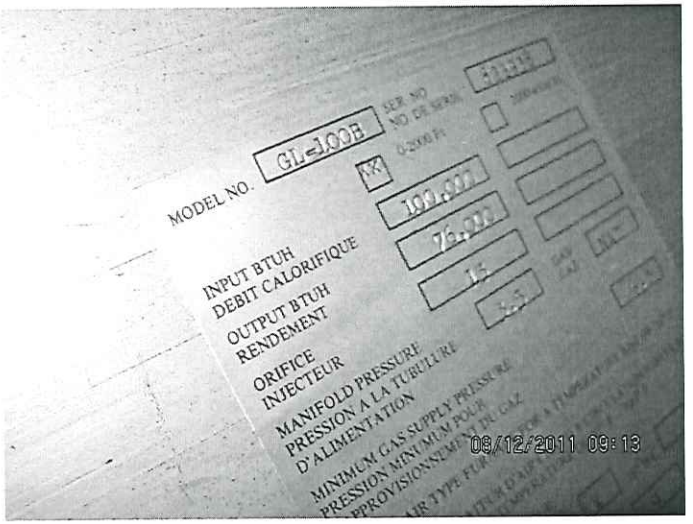




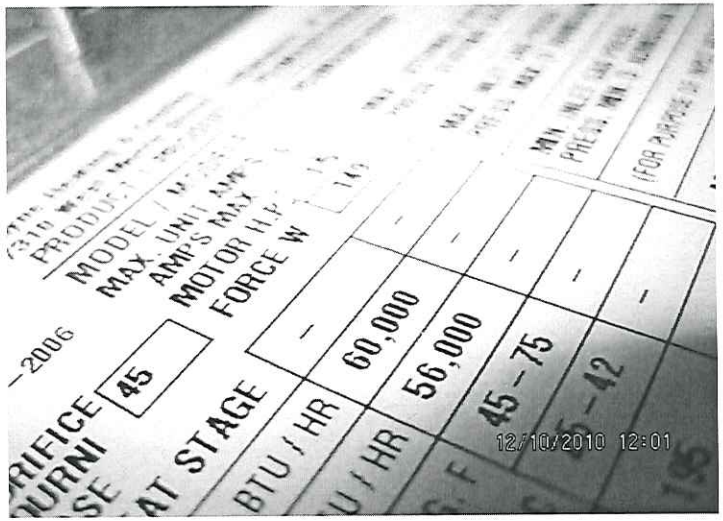
“Antique” Furnaces



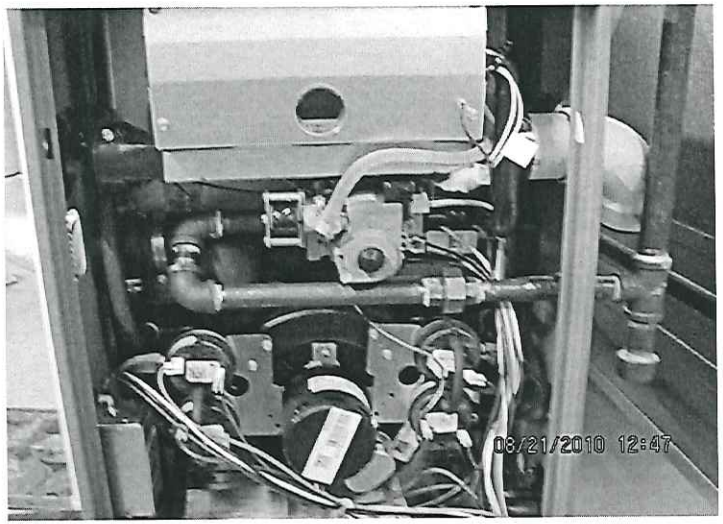
Anywhere between 55 and 80 percent AFUE (Annual Fuel Utilization Efficiency)

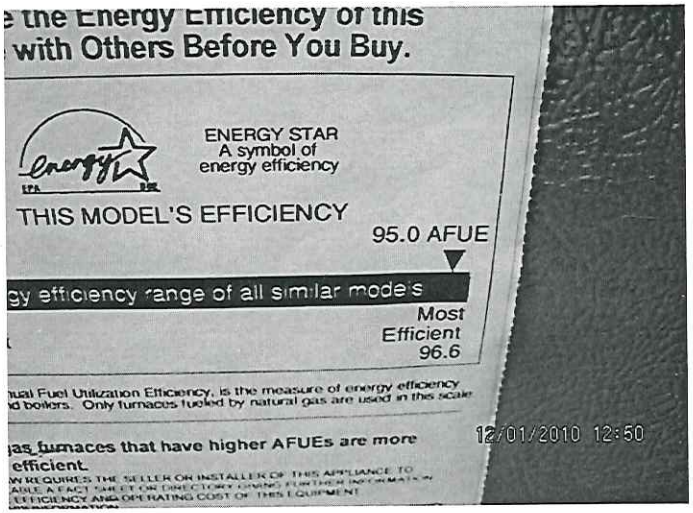


“Today’s” Furnaces

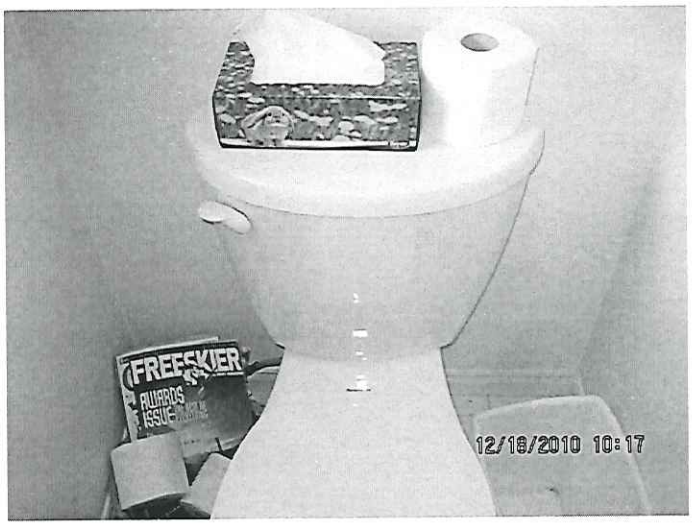


Efficiencies between 92 and 95 percent and variable speed DC motors



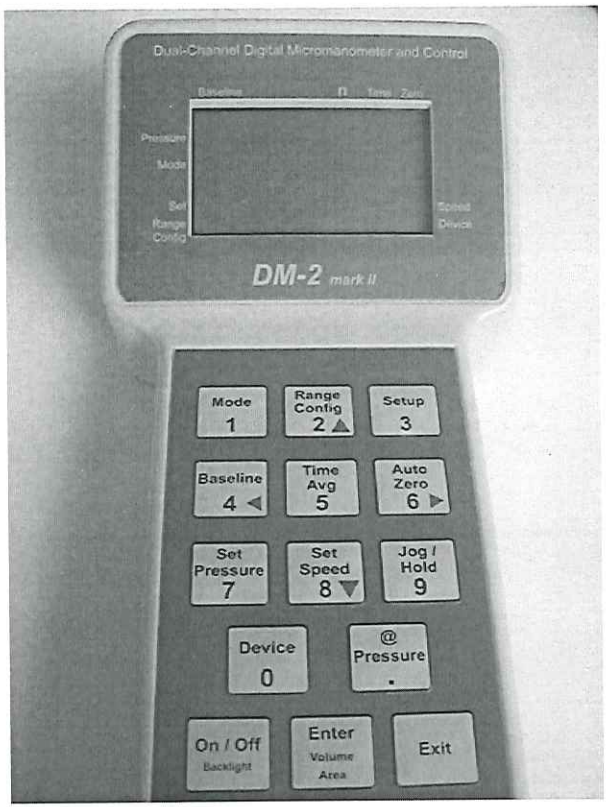


Replaced the old “John” with a new “Throne”

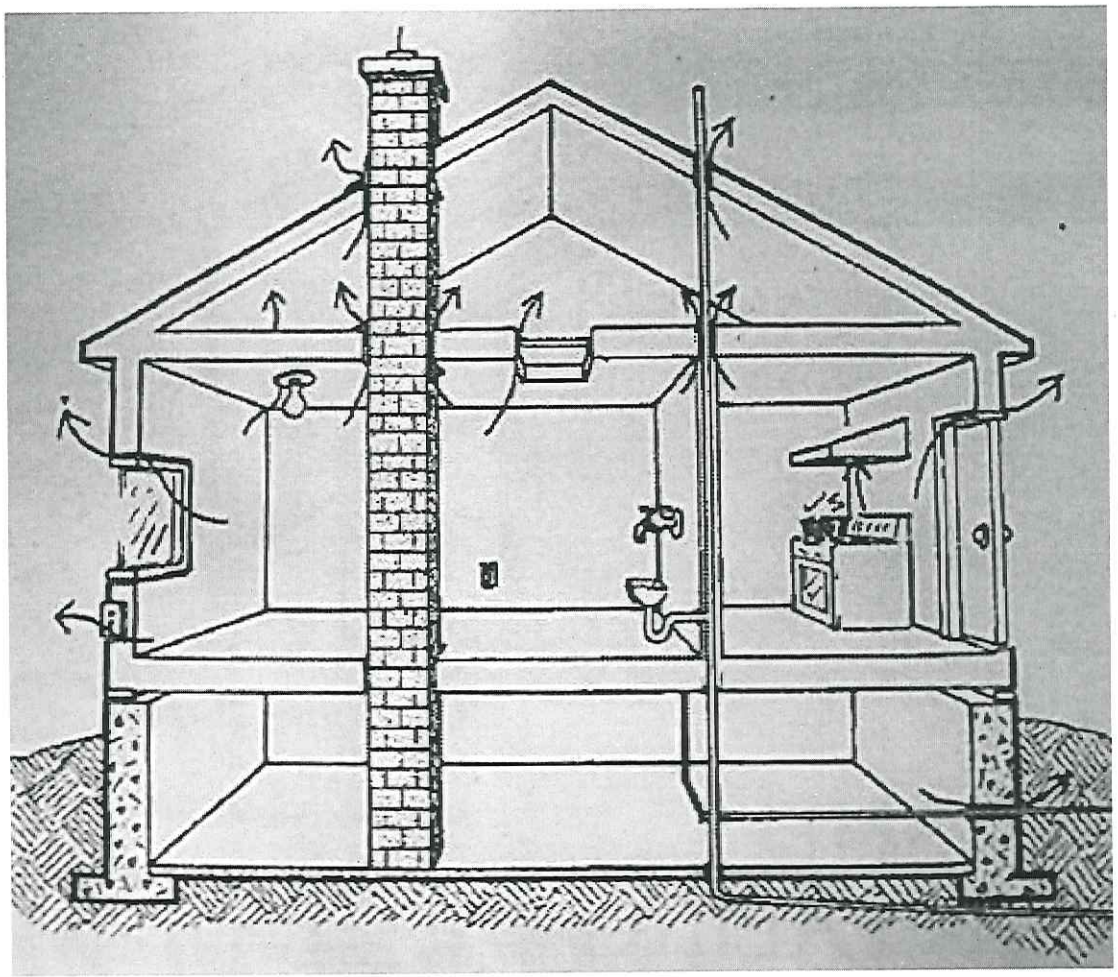


Cutting 2/3 of consumption per flush

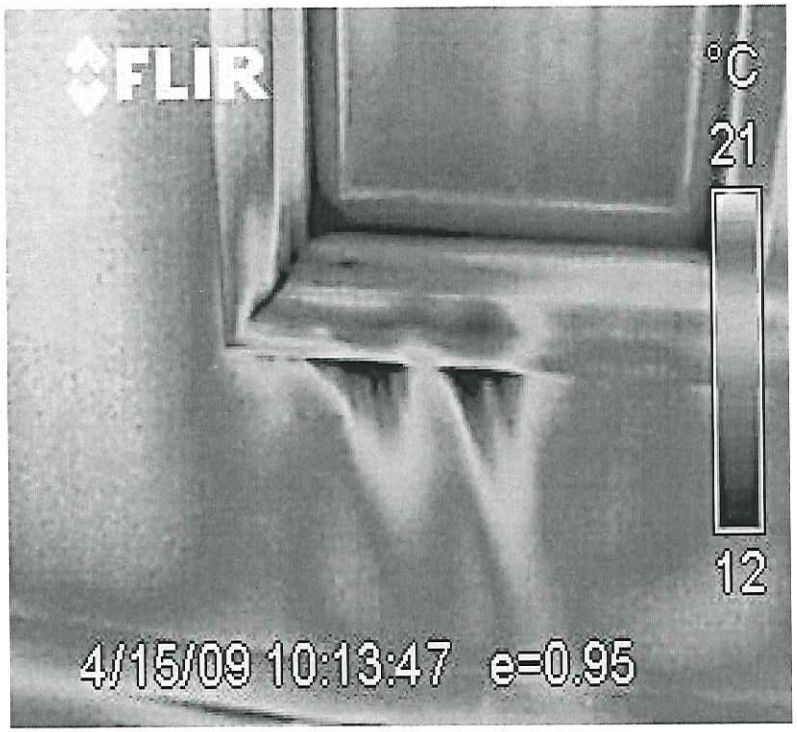
Drafts are a whole different animal. Here you see a "Blower Door" Helpful tool to lower pressure inside a building and enhance leakage points!

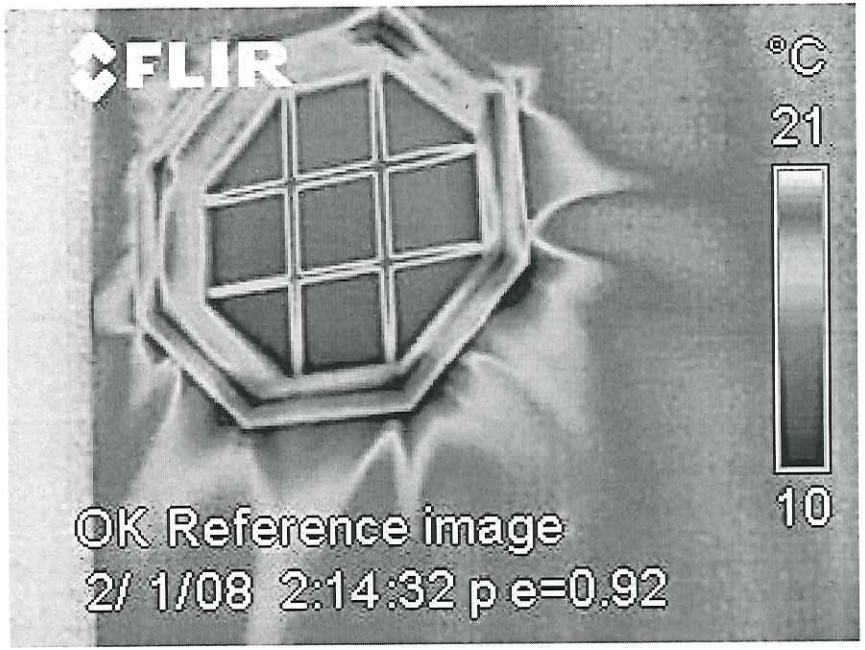


Sketch showing some of your typical leakage points in a home!

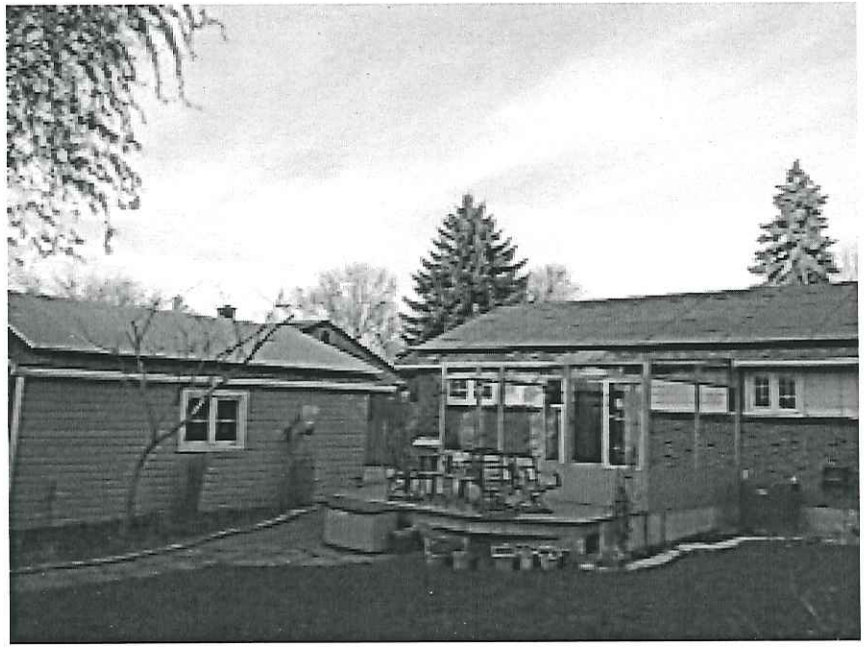


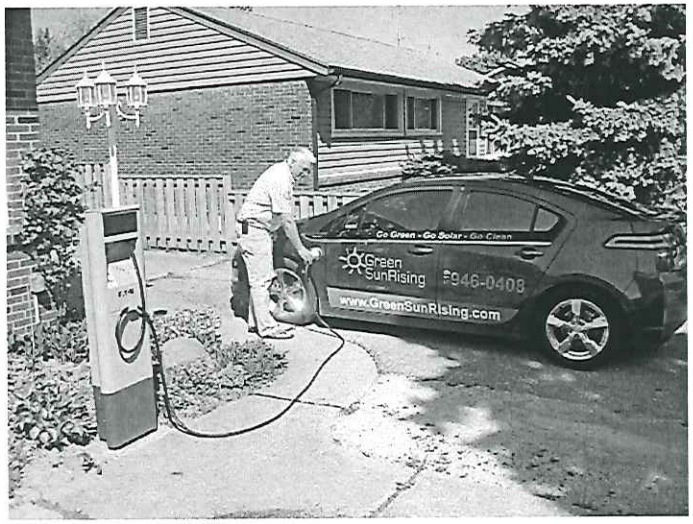
Windows are always a culprit!





3kW Load Displacement or Net Metering System





My very own “Gas Station” on top of the garage roof

Thank you for your time.

- Questions?