

Opportunity to participate in a household energy efficiency research project



Do you know if your home is rated 1 star or 5 stars for energy efficiency?

Participate in this important research project to receive a report at no cost that will tell you how energy efficient your house is, and how you can improve the energy performance and comfort of your home.

Improving the energy efficiency of existing houses is a key step in reducing Victoria's greenhouse gas emissions.

The Moreland Energy Foundation (MEFL), in partnership with Sustainability Victoria (an agency of the Victorian Government), is undertaking a research project to gather information about the energy efficiency of existing Victorian houses. The project will assess the potential benefits of a range of energy efficiency upgrades to the housing structure, lighting and key appliances.

The results of the research will be used to inform the design of more effective strategies and programs to help Victorians reduce their energy use, while making houses more comfortable and affordable to live in.

MEFL is currently seeking households across Victoria (both rental and owner-occupied houses) to participate in this research project. A range of houses built before 2005 will be selected for the project, to reflect the diversity of house types found in Victoria. Flats, units and apartments will not be included in this project.

Participating households will have an in-home energy efficiency assessment carried out in their homes and will also need to undertake two short phone surveys. Further details of the assessment are outlined in the next section. If you are selected to take part in this project you will receive:

- A free in-home energy efficiency assessment conducted by trained auditors (worth over \$1200);
- \$150 as an incentive payment for participating in the program;
- An Energy Efficiency Improvement Report containing an assessment of the current energy star rating of your house, and also identifying opportunities to reduce energy consumption, save money and improve the comfort of your home.

To register your interest in this project, complete this [online survey](#). Make sure you read the eligibility requirements below before registering.

What is an in-home energy efficiency assessment?

The energy efficiency assessment and interviews, conducted by MEFL and its representatives, will involve:

- An in-home assessment by four trained assessors which will take a **total of 2-3 hours**. It may be necessary to split the assessment across two appointments depending upon the availability of the different assessors. The assessors will collect data on major appliances, review the main structural characteristics of your home, draw a floor plan, and conduct an air leakage test. While we will require access to your home to undertake the assessment, nothing in your home will be moved, altered or unplugged.
- The assessors will also take photographs of house design features which may be reducing the energy efficiency of your home, as well as photographs of major appliances and any utility bills you can provide. The photographs will be used to help determine the energy efficiency of your house and appliances. Photographs that can identify you or your house will not be published in the final project report or made public.

- An analysis of electricity, gas and water bills. You will need to sign a consent form authorising your electricity, gas and water supplier to provide data from your bills for the last three years to MEFL. Historical billing data will assist MEFL to calibrate the models which will be used for the energy efficiency analysis.
- A 20 minute phone interview following the in-home assessment to gather information about household occupancy patterns and usage patterns of the main energy using appliances. This data will assist us accurately model your energy use and assess the most cost-effective energy efficiency upgrades.

At the conclusion of the project (expected to be early December 2010), each participating household will receive an individual Energy Efficiency Improvement Report containing an assessment of the current energy star rating of the house, the energy efficiency of the main appliances, and a list of opportunities that will reduce energy consumption, save you money and improve the comfort of your home.

[Click here](#) for a detailed explanation of the in-home energy efficiency assessment that will be conducted in your home.

Am I eligible?

A range of houses built before 2005 will be selected for this project. The houses selected will reflect the different housing types throughout Victoria. Flats, units and apartments will not be included.

MEFL is seeking expressions of interest from households that can meet the following requirements:

- Live in a detached (stand alone) or semi-detached house (one or two shared walls).
- Will ensure that all owners or tenants of my home will sign the [project consent form](#) authorising MEFL representatives to collect and report on information gathered about my house.
- Will ensure that all account holders for electricity, gas and water accounts will sign the [billing consent forms](#) authorising my electricity, gas and water suppliers to release billing data to MEFL.
- Will provide the in-home assessment team with access to all rooms in my home, the sub-floor space and the roof space (where access is possible).
- Will organise for someone to be at home for two to three hours, preferably on a weekday, while the assessment team is present.
- Will consent to photographs being taken of house construction features, appliances and bills.
- Will be available during late June, July and August 2010 when the recruitment, surveys, and in-home energy efficiency assessment will be conducted.
- Have NOT already participated in an existing environmental improvement program (such as the Energy Task Force, GreenHome, Zero Carbon Moreland, or another sustainable living program).

Register your interest

Participants will be recruited by MEFL throughout June and July. To register your interest, complete this [online survey](#). This will take approximately 5 minutes. The recruitment process will proceed as follows.

1. MEFL will review registrations and shortlist potentially suitable houses.
2. Shortlisted households will be interviewed over the phone to determine their suitability for the project. All households that are not shortlisted will be notified by email.
3. A convenient time during late June, July and August 2010 will be scheduled with selected households for the in-home assessment.
4. A follow-up phone interview will be conducted after the in-home assessment to gather information about the manner in which you heat the house and use your major appliances, and information about your occupancy patterns.

Further information

Govind Maksay, Moreland Energy Foundation
govind@mefl.com.au
(03) 9385 8585

You can also consult the [frequently asked questions](#).

In 2009 fifteen houses were assessed as part of a pilot study to test the approach that will be used for this larger project. View the final report from the [2009 pilot study](#). This will give you an idea about how the information gathered about your house will be used.

Project partners

Sustainability Victoria and MEFL are the two main project partners delivering this project.

Sustainability Victoria (an agency of the Victorian Government) implements Victorian Government policy by working with business, government and the community to achieve carbon pollution reduction and the smarter use of resources – specifically energy, materials and water.

Moreland Energy Foundation Limited (MEFL) is a non-profit organisation committed to facilitating community action on greenhouse gas emissions. MEFL has worked with the Moreland and Victorian communities for the last ten years to help people, business, schools and community groups make informed, energy-smart lifestyle choices.

A number of other organisations and businesses will be used to deliver specific parts of the project. [Click here](#) for more information about the other project partners.

Protecting your privacy and security

Your privacy and security is of upmost importance to MEFL, Sustainability Victoria and our other project partners. Stringent [privacy and security measures](#) are in place as part of this project. All project partners hold the necessary public liability and professional indemnity insurances to undertake the work.

Frequently asked questions

On-Ground Energy Efficiency Assessment Project



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1) Who is involved in delivering this project?

Sustainability Victoria

Sustainability Victoria, an agency of the Victorian government, is funding this project and has commissioned MEFL to deliver it. Sustainability Victoria implements Victorian Government policy by working together with business, government and the community to deliver tangible outcomes in the areas of carbon pollution reduction and the smarter use of resources – specifically energy, materials and water. The final report on the project will be published by Sustainability Victoria.

Find out more: www.sustainability.vic.gov.au

Moreland Energy Foundation Limited

Moreland Energy Foundation Limited (MEFL) has been appointed by Sustainability Victoria to manage this project.

MEFL is a non-profit organisation committed to facilitating community action on greenhouse gas emissions. We work with the community in Melbourne to help people, business, schools and community groups make informed, energy-smart lifestyle choices.

While MEFL works mostly in the City of Moreland, they also operate across Victoria where there is a tangible benefit to residents of the City of Moreland by doing so.

MEFL was appointed to manage this project because of its extensive experience with similar projects, including the pilot phase of this current project which was conducted in 2009. Other projects include:

- The Home Energy Star project which has provided a home energy audit, follow up report and bills analysis to more than 120 Moreland households since 2002
- The Zero Carbon Moreland campaign provides assistance to residents, businesses and community groups to measure their current carbon footprint and develop a plan to reduce it to zero.

Find out more: www.mefl.com.au

RMIT Centre for Design

RMIT Centre for Design, part of RMIT University, promotes sustainability through research, consulting, and capacity building. They are recognised internationally for their innovative design methods and tools to support sustainable design of products and services.

RMIT Centre for Design have been appointed by MEFL to analyse the data collected during the in-home assessment using house energy rating software.

Find out more at www.cfd.rmit.edu.au

Energy Makeovers

Energy Makeovers is a state and nationally-accredited home sustainability assessor and building thermal performance assessor with Sustainability Victoria and the Association of Building Sustainability Assessors (ABSA). Energy Makeovers is also a member of the Master Builders Association of Victoria (MBAV).

Energy Makeovers have been appointed by MEFL to conduct the in-home assessments.

Find out more: www.energymakeover.com.au

Air Barrier Technologies

Air Barrier Technologies is an Australian company specialising in building envelope integrity and indoor air quality issues. Air Barrier Technologies uses the best technologies from around the world for air leakage testing.

Air Barrier Technologies has been appointed by MEFL to undertake the air leakage testing, which will be used to assess the energy losses occurring in homes by warm air escaping from the home in winter and hot air entering the home in summer.

Find out more: www.airbarriertech.com.au/comabout.html

2) Why are these assessments being done?

The results from the assessments will assist MEFL and the Sustainability Victoria better understand how energy efficient existing Victorian houses are and how they use energy, and the potential impact of a range of residential energy efficiency upgrades. This information will assist in the future development of energy efficiency and greenhouse gas reduction programs in Victoria.

3) What do participants gain from the assessments?

Each participating household will receive:

- A free in-home energy efficiency assessment conducted by trained auditors (worth over \$1200)
- a report containing the current energy star rating of the house and ways to improve the star rating and comfort of the house
- a report listing opportunities to improve the energy efficiency of the main energy consuming appliances
- \$150 as incentive payment for participating in the program

New houses in Victoria are now being built to a 5 Star energy efficiency standard, however existing homes are commonly only 2 stars or less. A low energy efficiency standard typically means high energy bills for heating and cooling, and poor comfort levels. The Energy Efficiency Improvement report will provide participants with the information they need to improve the energy efficiency of their home, saving them money, improving comfort levels and reducing greenhouse gas emissions.

4) What kind of houses will be selected?

A wide range of houses will be selected that represent all the different types of housing in Victoria. We will need to assess old and new houses, big and small houses, different construction types, and houses located in metropolitan and regional areas.

Only detached and semi-detached houses are being assessed through this project. Flats, units and apartments will not be included.

Households that have already implemented significant energy efficiency upgrades (e.g. large scale sustainability focused renovations) or have participated in a sustainable living program are not being sought to participate in this project. This is because one of the key outcomes of the project is to identify the potential for energy efficiency improvements. Assessing houses that are already highly energy efficient will not achieve the desired outcome.

5) Does it matter if I am living in the rental property?

You can still register if you are renting your house as this does not matter. The critical factor is to recruit a representative sample of house and whether you own or rent your house is not an important consideration.

6) Who will conduct the in-home assessments?

Energy Makeovers has been appointed by MEFL to conduct the in-home assessments.

Energy Makeovers is a state and nationally-accredited home sustainability assessor and building thermal performance assessor with Sustainability Victoria and the Association of Building Sustainability Assessors (ABSA).

7) What is an air leakage test and who will conduct the test?

An air leakage test determines the rate at which a house leaks air and determines major draught sources.

This test is non-intrusive and will not disturb anything in the house. A false door with a fan is fitted to the front door and this is used to pressurise the house. The front door is not removed and the air flow through the house during the test will hardly be noticeable, being equivalent to a light breeze. The test takes approximately 2 hours to complete.

This method is called the fan pressurisation method and it is an internationally used method to determine how air tight a building is.

Air Barrier Technologies has been appointed by MEFL to undertake the air leakage testing, and also undertook this role for the pilot project.

8) Why do photos need to be taken?

The assessors will need to take photographs of house design features which may be reducing the energy efficiency of your home, as well as photographs of major energy using appliances.

The photographs will be provided to the analysis team, along with the data collected during the in-home assessment. The analysis team will not be present at the in-home assessments, so photographs will ensure that they are able to fully understand the house and its features.

The photographs may also be used in the Energy Efficiency Improvements report or the overall project report to demonstrate findings. Photographs that can identify the household or its residents will not be published in the final report or made public.

9) Can you guarantee my privacy and security?

We understand that people are putting a lot of trust in us by inviting us into their homes and allowing us to take photographs. MEFL and Sustainability Victoria are serious about protecting your privacy and security.

Privacy

MEFL, Energy Makeovers and Air Barrier Technologies will have access to information that identifies you and your household in order to conduct the in-home assessments. The information collected during the in-home assessment and billing information provided by electricity, gas and water retailers will be stored centrally by MEFL on a secure database.

MEFL will share information collected about your household with our project partners, RMIT Centre for Design and Sustainability Victoria, in order to complete the analysis and reporting for this project. MEFL will only provide generic (de-identified, non personal) information to these parties, so it will not be possible for them to identify you or your household.

The information collected from all households participating in this study will be analysed and these results will be publicly reported. Any public reporting will provide only generic (de-identified, non personal) information about the participating households, so it will not be possible to identify you or your household.

The information gathered during this project may be used by the project partners in the future for other energy efficiency research, such as for the purposes of large-scale modelling, determining ways to improve the efficiency of Victoria's housing, or to inform policy, research and community education programs in Victoria. All project partners, except for MEFL, will only have de-identified, non-personal information so it will not be possible for their work to identify you or your household. The information will be used by MEFL in such a manner that it will not be possible to identify you or your house.

Sustainability Victoria's privacy statement can be viewed at www.sustainability.vic.gov.au/www/html/1607-privacy.asp. MEFL's privacy statement can be viewed at www.morelandsolarcity.org.au/privacy. MEFL's contract with Energy Makeovers and Air Barrier Technologies stipulates that they must adhere to the MEFL privacy policy during this project. RMIT University's privacy policy can be viewed at www.rmit.edu.au/browse;ID=eisllwhc1mb.

Security

MEFL has appointed Energy Makeovers and Air Barrier Technologies to conduct the in-home assessments. All assessors have extensive experience with home assessment and they will be briefed and trained by MEFL before undertaking the assessments.

10) What if something goes wrong while the in-home assessment is being done?

Conducting the in-home assessments is a very low risk activity, however MEFL has measures in place to minimise the risk and consequences of incidents.

The Energy Makeovers and Air Barrier Technologies assessment team are trained, experienced professionals who have conducted assessments of a similar nature before. They are trained in Workplace Safety and at least one member of the team will be trained in First Aid.

The assessment will not involve any manual handling or moving of electrical equipment. The auditors will simply be observing and taking notes and photographs.

All project partners hold the necessary public liability and professional indemnity insurances to undertake the work.

11) Who do I contact to discuss the project or the assessment?

For further information about the program, please feel free to contact Govind Maksay at MEFL on (03) 9385 8585 or govind@mefl.com.au.

The report from the [2009 Pilot Project](#) can also provide you with more information about the energy efficiency assessment, how the information collected will be used, and the Energy Efficiency Improvement report that each household will receive.