Understanding the EER Rating of a House

What is an EER and why is it important?

An Energy Efficiency Rating, or EER, is a rating used to identify the energy efficiency of houses in the ACT. Houses can achieve 0 to 6 stars in the rating scheme. Houses with a higher EER are more cost and energy-efficient, use less energy for heating and cooling, generate lower greenhouse gas emissions, and are more comfortable.

Making the most of an EER when selling your house

Before putting your house on the market, look for simple, cost-effective ways to improve its EER. For many Canberra homes, it is possible to improve the star-rating by spending a little over $2,000.

Minor renovations such as adding insulation, good curtains, blinds and pelmets, not only provide considerable increase in re-sale value, but also save on running costs. The best options for improvement will be identified in the EER statement.

Be sure to have your EER statement updated by your assessor once the improvements to the house are made.

Why consider the EER when buying a house?

A house with a higher EER will provide greater comfort, reduce greenhouse gas emissions and reduce your home running costs.

Star-rating	Estimated 10-year running cost	Estimated annual running cost for 2005
0	$19 000 or more	$1 900 or more
1	$15 000	$1 500
2	$11 000	$1 100
3	$9 000	$900
4	$7 100	$710
5	$5 600	$560
6	$4 400 or less	$440 or less

Energy supply/connection costs are not included

The cost estimates are based on the following assumptions from the FirstRate Manual:

- Winter: gas central heating to 21°C from 7am to 12 midnight;
- Summer: air conditioning to 25°C throughout the house;
- Occupants will adjust their blinds and curtains to minimise energy use;
- Windows and doors are shut during heating and cooling; and
- The heater and cooler have the same energy star-rating as the house.

As well as looking at the existing EER of a house, ensure that you have access to the full EER Statement, which can be obtained from the vendor or real estate agent. For an existing dwelling, this Statement may be several pages long.

Read the list of recommendations on the page entitled ‘Improving Your Rating’.

Assess the impact of the recommendations on the overall EER of the house and the ease and cost of implementing the recommendations.

After purchasing your house consider having your home audited by the Home Energy Advice Team to identify other potential energy-saving measures. This ACT Energy Wise program costs $30 and participants who spend at least $2,000 on energy efficiency improvements identified during the audit will be eligible to receive a $500 rebate from the ACT Government, plus a refund of the $30 audit fee.

The Legal Requirements

Since 1995 it has been a Government requirement that all designs for new dwellings (subject to requirements to fulfill design rules for Development Application approval) achieve an EER of at least four stars.
Since 31 March 1999, there has been the added requirement of mandatory disclosure of the actual energy performance of all existing residential properties that have been occupied and are offered for sale. The EER statement can range from 0 to 6 stars and must comply with the EER Statement Definition, which is available on the Internet at http://www.actpla.act.gov.au/design-guide/acthers/eer_sell.htm. This energy rating must be disclosed in all advertisements for sale and the EER Statement forms part of the contract for sale. Accredited ACT House Energy Rating Scheme Assessors (see next section) will be able to advise on the requirements of your particular situation.

If any existing dwelling is being extended, then the extension design will require one of the following:

1) If the property was built prior to the start of ACTHERS and does not have an energy rating, then the extension will be built in accordance with the Building Code of Australia. At any time in the future if the dwelling is sold, it will require a mandatory disclosure energy rating to be undertaken in accordance with the EER Statement Definition.
2) If the property has an energy rating, then the existing dwelling complete with fitout, plus the design of the extension need to be energy rated, and the rating should not fall below the equivalent of the original rating. This ensures that the extension does not diminish the original energy performance of the building.

How is a house rated?

An EER must be done by an accredited ACT House Energy Rating Scheme (ACTHERS) assessor and may be organised by you or your real estate agent for a cost of approximately $150-$200.A list of accredited assessors can be found at http://www.actpla.act.gov.au/design-guide/acthers/asslst_1.htm.

An example EER statement with an explanation of the meaning of each of its elements is provided in the following pages.

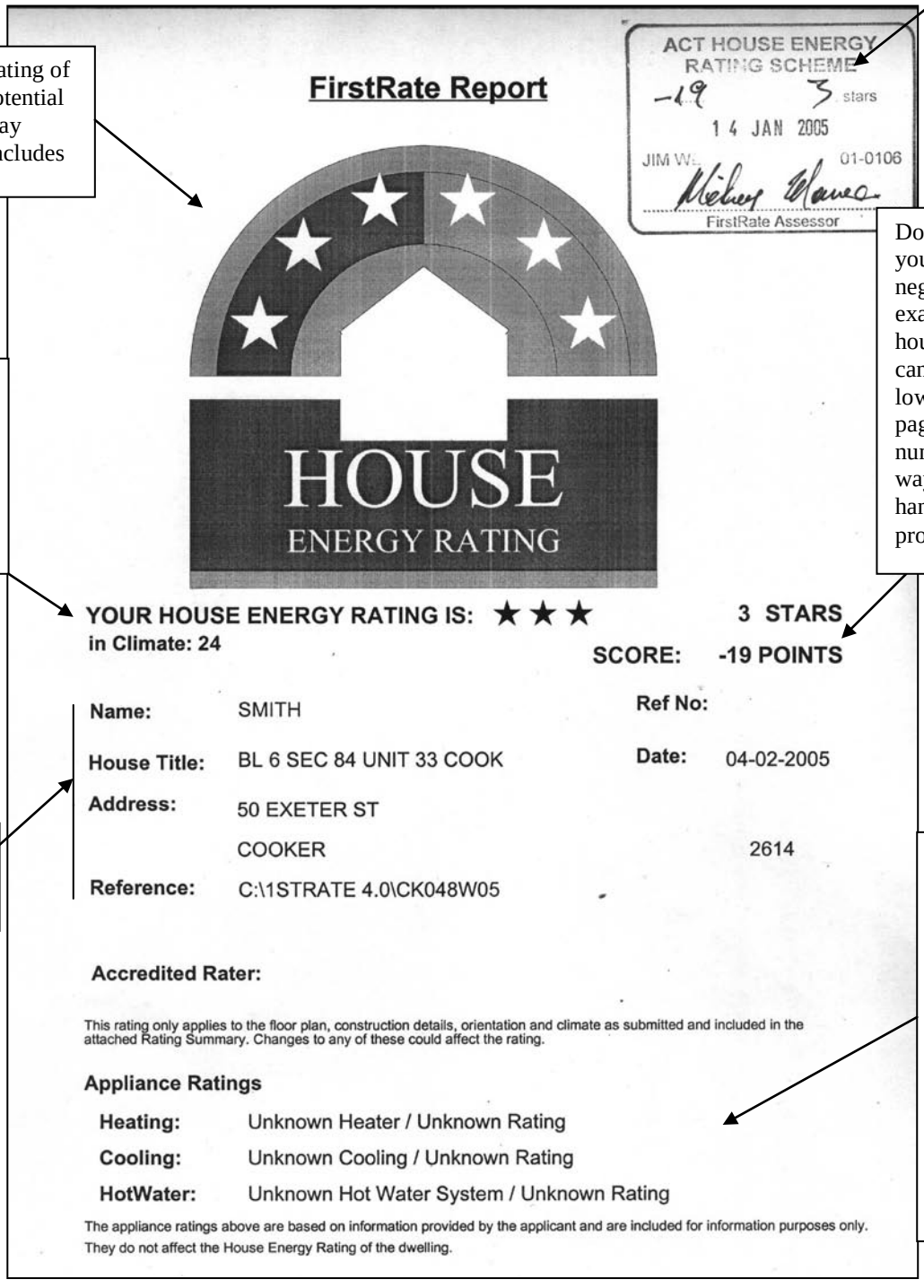
The EER of a dwelling is usually determined using the FirstRate computer program. Specific attributes of the house are interpreted and entered into the program, which generates a point score for that set of attributes. For example, insulated walls and double-glazed windows increase the score, while windows without curtains and an absence of ceiling insulation reduce the score. The total score determines the star-rating of a house.

One point score approximates to a 1 per cent increase or decrease in energy efficiency for a house with reasonable energy efficiency, and twenty points increases the rating by one star. If a house is not energy-efficient, improving 10 or 20 points will have a negligible effect on its overall efficiency. This information is valuable when considering possible energy efficiency investments for re-sale or reducing energy bills. For new dwelling designs, the assessor will generate a report using the FirstRate software. The report will give a detailed description of aspects of the house used in assessing its EER. For existing dwellings that have been occupied, the report will also

include options to improve the EER of the dwelling. This can be used to assess the costs involved with such options, and can be acted upon by either the vendor or the purchaser. If you are selling your house and decide to implement the options suggested by the assessor, ask him/her to hold the EER Statement until you have made the alterations, and then have the changes incorporated into the final EER Statement to be lodged with the ACT Government.

This stamp, when signed, validates the report and identifies it has been conducted by an accredited assessor.

Indicates the energy rating of your house out of a potential 6 stars. Your house may receive a rating that includes a half a star.



ACT HOUSE ENERGY RATING SCHEME
-19 3 stars
14 JAN 2005
JIM WE 01-0106
FirstRate Assessor

FirstRate Report

HOUSE ENERGY RATING

YOUR HOUSE ENERGY RATING IS: ★★★ 3 STARS
in Climate: 24
SCORE: -19 POINTS

Name: SMITH **Ref No:**
House Title: BL 6 SEC 84 UNIT 33 COOK **Date:** 04-02-2005
Address: 50 EXETER ST
COOKER 2614
Reference: C:\1STRATE 4.0\CK048W05

Accredited Rater:

This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached Rating Summary. Changes to any of these could affect the rating.

Appliance Ratings

Heating: Unknown Heater / Unknown Rating
Cooling: Unknown Cooling / Unknown Rating
HotWater: Unknown Hot Water System / Unknown Rating

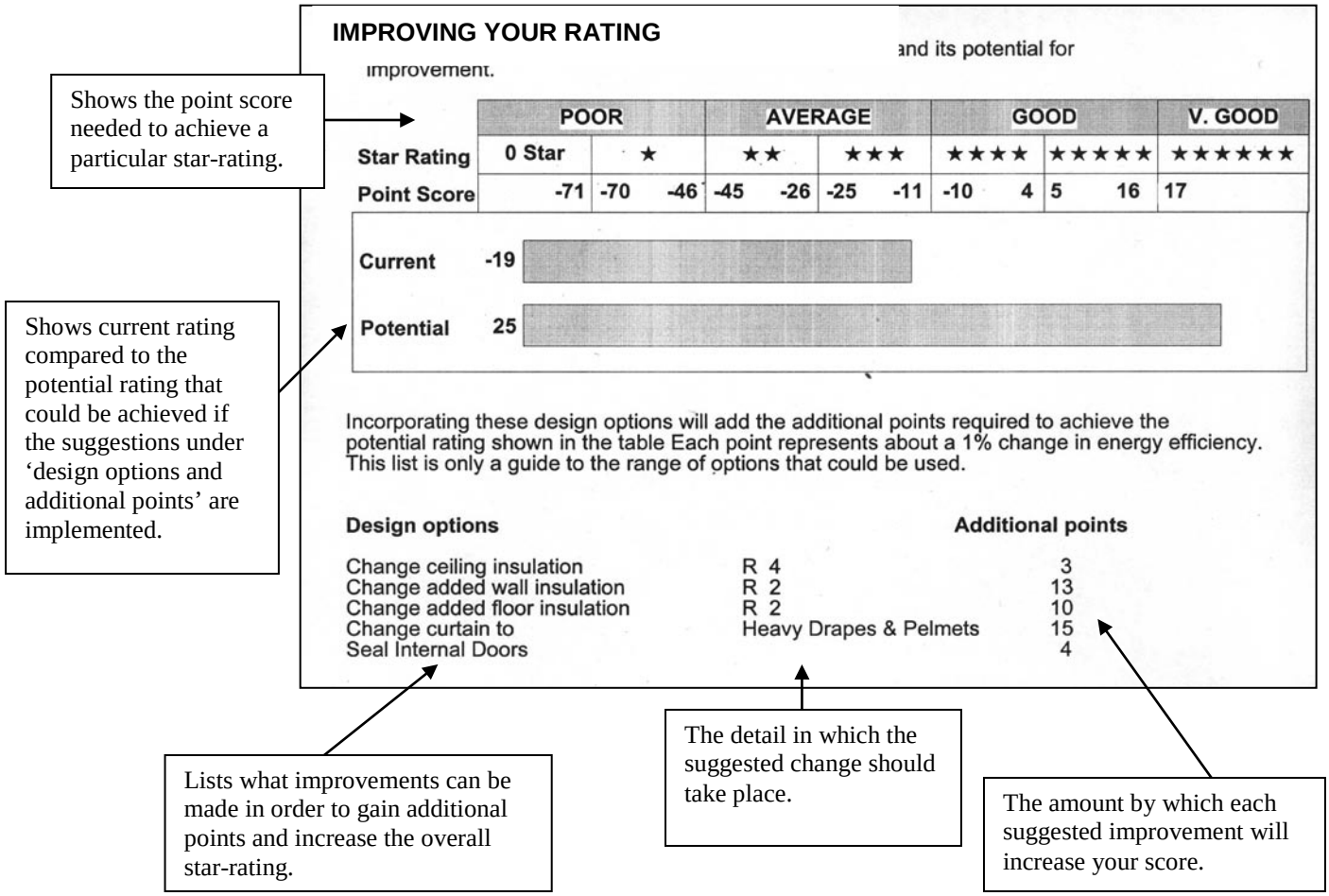
The appliance ratings above are based on information provided by the applicant and are included for information purposes only. They do not affect the House Energy Rating of the dwelling.

Different climates require different energy efficient designs. All Canberra houses are rated under climate 24.

Do not be concerned if your house receives a negative score. For example, even a good house, rated at four stars can receive a score as low as -10 (see next page). The negative number comes from the way in which data is handled within the program.

These details provide reference to the house audited.

Often FirstRate reports issued in the ACT will have 'Unknown' against the 'Heating', 'Cooling' and 'Hot Water' headings. The assessor will insert the rating if the information is available. If not, it will be shown as 'Unknown'. This does not affect the EER.



Shows the point score needed to achieve a particular star-rating.

Shows current rating compared to the potential rating that could be achieved if the suggestions under 'design options and additional points' are implemented.

Lists what improvements can be made in order to gain additional points and increase the overall star-rating.

The detail in which the suggested change should take place.

The amount by which each suggested improvement will increase your score.

What the EER does not cover

While the EER covers a range of energy efficiency measures, it is important to understand what a FirstRate assessment does not cover.

As was noted on the sample front page of the EER report, the heating, cooling and hot water systems are not rated and do not affect the EER. Lighting systems and other appliances are not considered in the EER either. The website http://www.energyrating.gov.au/ provides information on the energy efficiency ratings of the most energy-hungry appliances and can be a useful tool when equipping your new home or looking to replace existing appliances. The website deals only with gas and electric water heaters. For a rating of solar water heaters, go to

HOME ENERGY ADVICE TEAM