

## 15 March 2021



Thank you for your email of 15 February 2021 requesting the following information under the Official Information Act 1982 (the OIA):

- What research has Kainga Ora carried out, or can point to, that proves Dr Megan Woods claim of \$570 in energy savings per year in Homestar 6 homes
- What is the financial difference, on average between the construction of a home that is built to Homestar 6 standards and one which is built to the base building standards
- How much did the Kainga Ora Homes and Communities complex, in Richmond Christchurch cost to construct

Kāinga Ora staff work with, and rely on the expertise of the New Zealand Green Building Council (NZGBC), who own the Homestar tool, in applying its use to our housing stock.

I can confirm that the figure of \$570 in energy savings per year in 6 Homestar homes was taken from links to the official website for the NZGBC. The figure of \$570 was used as an estimated cost savings, initially for an internal presentation to Kāinga Ora staff in early June 2019. The internal presentation was not intended for public disclosure, but the estimated cost savings notes were subsequently included in an event brief for Hon Dr Megan Woods, Minister of Housing. That event brief was for a scheduled visit to the Alexander Street development in Richmond, Christchurch in early June 2020. The Minister's media statement from that event highlighted the delivery of new state homes on Alexander Street, and the merits of using 6 Homestar design principals, including estimated cost savings to the homeowner of around \$570 per annum.

At the time a search by Kāinga Ora staff provided the following information:

**Homestar** helps reduce the **cost** of running a home, especially in terms of energy and water **savings**. Over seven years (the expected home ownership period), homes rated 5 and 6 **Homestar** enjoy annual **savings** on energy and water bills of \$573-\$729 per year.

www.nzgbc.org.nz > Category

Homestar - New Zealand Green Building Council



However, we note that details on the NZGBC website have been subsequently changed.

www.nzgbc.org.nz/Category?Action=View&Category\_id=387, provides commentary that noted annual savings of 'approximately \$450 - \$500' for the homes Case Study: Cost Benefit Analysis'. The report is based Auckland City Council, to identify the costs and benefits design principals. The study was conducted by eCubed shed their report in March 2013. The report includes

three estimated levels of cost savings for 6 Homestar property owners, depending on which main city the home was located in (Auckland \$465 p/a, Wellington \$471 p/a, and Christchurch \$468 p/a). The information at the link is as follows:

## The Value Case

It makes sense to invest in building a high-quality home to save money over its lifetime through reduced running-costs. The energy and water savings can significantly reduce household bills. ANZ have recently launched a Healthy Home Loan with reduced mortgage rates for Homestar homes.

Getting a good rating doesn't have to be costly or complicated. It's about getting the basics right first - making sure you've got good orientation for sunlight, high levels of insulation, and moisture control.

Getting a Homestar rating requires planning and good design, but it shouldn't make a house unaffordable. Have a read of these reports below on the value case for Homestar then find out more about the certification fees and process.

## Homestar Value Case Study: Cost Benefit Analysis

This 2018 report completed by eCubed Building Workshop Ltd investigated the cost benefits of achieving 6, 7 and 8 Homestar. They found that for 6 Homestar, the annual savings were broadly similar in all locations at approximately \$450-500 per annum for the particular homes they examined.

For 7 and 8 Homestar, the annual savings were approximately \$2000-2100 in Auckland, \$2300-2500 in Wellington, and \$1600-1800 in Christchurch. Note, savings are based on achieving an indoor temperature of 20°C all year. Actual savings will vary depending on the particular design of each home and the way it is operated. These figures do not take into account the potential for added value to the property.

## Cost of Homestar report for New Zealand Green Building Council

This 2018 report completed by quantity surveyors Rawlinsons examined the potential cost and specification implications associated with building 6, 7 and 8 Homestar homes. For the homes examined, they found the added cost to reach a 6 Homestar rating ranged from \$5,552 - \$6,780, depending on the location across Aotearoa.

With regards to your second question we would note a report on the NZGBC website that can be found on the following webpage:

www.nzgbc.org.nz/Attachment?Action=Download&Attachment id=1636

The report, written in 2018 by Dr Rochelle Ade for the Building Research Association of New Zealand (BRANZ), and titled "The cost of Homestar: A case study on how to achieve a 6-10 Homestar rating for stand-alone and terraced housing in Hobsonville Point" states:

'The results show that Homestar version 4 (v4) has greatly reduced the capital cost of achieving the different levels of Homestar ratings compared to previous Homestar assessment (Homestar v2 and v3), with a 6-Homestar dwelling costing approximately 4% more to construct than basic Building Code-compliant dwelling.



In response to your final question, the Kāinga Ora development on Alexander Street, Richmond. Christchurch had a total development cost of \$2,092,038.00.

www.ombudsman.parliament.nz r Freephone 0800 802 602.

28(3) to seek an investigation by the Ombudsman about w to make a complaint is available at either r Freephone 0800 802 602.

Yours sincerely

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Rachel Kelly

Manager Government Relations