# Analysis of financial benefits of Homestar

## for New Zealand Green Building Council

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Infometrics

Economics put simply

With special thanks to the sponsors of this report

## Authorship

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# Executive summary

## Introduction

The New Zealand Green Building Council (NZGBC) commissioned Infometrics to analyse the financial benefits of Homestar for homeowners, taking into account upfront costs as well as interest payments and energy savings over a 30-year horizon. Our report focuses on ANZ's *Healthy Home Loan* offer for Homestar homes in New Zealand, which is one example of a broader green mortgage market which is developing around the world.

## Kiwis concerned about cost, care about climate

A survey of attitudes to sustainability by Kantar found that 75% of New Zealanders were concerned about the cost of living, and 52% were concerned about the impact of climate change on New Zealand. This result indicates that reducing the impact of climate change is a key concern, but for is trumped by cost, especially in the current challenging economic environment

## Homestar sets a higher bar

Homestar is a certification standard developed by the NZGBC with building sector members which aims to achieve homes with a lower environmental impact, as well as being healthier, warmer, drier and more comfortable. Homestar standards include different levels of performance, with 6 Homestar pitched as an achievable option with slightly higher standards than New Zealand's Building Code minimum. Our analysis compares 6 Homestar to the Building Code and considers lending options that require a minimum 6 Homestar rating.

## Lower lending costs for Homestar homeowners

ANZ bank offers a *Healthy Home Loan* package with discounted mortgage rates for homes with a 6 Homestar or higher rating. These discounts amount to a 0.25% discount off widely available mortgage rates.

## Minimal difference in build costs

Building and certifying to 6 Homestar standard house costs 0.8% more than the Building Code minimum for standalone dwellings, and 0.7% for terraced dwellings, based on the average of building costs in Auckland, Wellington and Christchurch.

## Households save at least $300 per year on electricity

Dwellings built to 6 Homestar standard are estimated to use at least 1,100 fewer kWh of electricity per year than a Building Code minimum dwelling, which is a saving of at least $296 in electricity per year. By 2050, forecast electricity price rises mean that savings could increase to at least $580 per year.

## Households save at least $6,800 on interest in first 5 years

Owners of a 6 Homestar dwelling save at least $6,800 on interest payments in the first five years of their mortgage, with the effect of lower interest rates across their whole mortgage outweighing the slightly higher construction cost upfront. Mortgage interest savings range from $6,800 for a terraced house in Wellington or Christchurch to $13,700 for a standalone house in Auckland.

## Over $9,000 savings on interest and electricity in first 5 years

Putting together savings on electricity and interest costs, households buying a Homestar house would save at least $9,800 in their first five years. Electricity and interest savings combined range from $9,800 for a terraced house in Auckland up to $15,400 for a standalone house in Auckland.

## Over $62,000 savings on interest and electricity over 30 years

Over a 30-year period, households buying a Homestar house would save at least $62,000 on electricity and interest payments. Electricity and interest savings combined range from $62,800 for a terraced house in Auckland up to $98,800 for a standalone house in Wellington.

## Better off with Homestar in 2-3 years

Households would be better off within 2-3 years, despite a slightly higher upfront cost for 6 Homestar. Savings stemming from lower interest rates and lower electricity usage outweigh the cost of 6 Homestar in 3 years for a standalone house, or two years for a terraced house.

## Households could be mortgage free two years earlier

More diligent households could choose to put their interest and electricity savings towards their mortgage in order to become mortgage free earlier. Following this strategy, households would pay the same as they would have without Homestar, becoming mortgage free at least two years earlier, or one year earlier for a terraced house. Households choosing to reinvest their interest and electricity savings into their mortgage would make additional interest savings of at least $79,700 over their mortgage term.

## Homestar dwellings healthier, more comfortable

Beyond financial benefits, households in Homestar homes benefit from a healthier and more comfortable indoor environment. Homestar also reduces overheating, a growing problem in New Zealand.

## Adoption limited to date

Adoption of the Homestar scheme remains limited in New Zealand. Nearly 5,000 dwellings were certified Homestar in 2020, amounting to 13% of all dwellings consented that year. That is despite ANZ's *Healthy Home Loan* package being first introduced in 2019. Homestar has become more affordable since revisions to the New Zealand Building Code and the Homestar scheme were made in 2022. As awareness of Homestar and its financial benefits increases, uptake might improve.

With only ANZ offering an interest rate discount for Homestar dwellings at present, this will also limit uptake of Homestar because the most compelling financial benefits come about through lower interest rates. Having more banks offer discounts for Homestar would likely enhance uptake.

## Benefits for developers and landlords too

Beyond benefits for owner-occupiers, the Homestar scheme can be advantageous for developers and landlords. BNZ, Westpac, ASB and Kiwibank offer discounted development finance for certified Homestar developments, which serves as an incentive to increase the supply of Homestar houses. Landlords are eligible for ANZ's *Healthy Home Loan* scheme too and would benefit from the discounted interest rate. The attributes of reduced electricity consumption and better indoor air quality might help to attract tenants, and potentially even earn higher rents, as general awareness of Homestar increases.

# Our analysis

## Introduction

The New Zealand Green Building Council (NZGBC) commissioned Infometrics to analyse the financial benefits of Homestar for homeowners, taking into account upfront costs as well as interest and energy savings over a 30-year horizon. Our report focuses on ANZ's *Healthy Home Loan* offer for Homestar homes in New Zealand, which is one example of a broader green mortgage market which is developing around the world.

Our analysis relies on reports provided by the NZGBC and others (sources cited where used). We have not independently verified this data, however we believe the information provided to be credible for this purpose.

## Context for Homestar

### Kiwis concerned about cost, care about climate

A survey of attitudes to sustainability by Kantar (2025) found that 75% of New Zealanders were concerned about the cost of living, and 52% were concerned about the impact of climate change on New Zealand. This result indicates that reducing the impact of climate change is a key concern, but for is trumped by cost, especially in the current challenging economic environment. Kantar (2025) found that 55% of New Zealanders thought that improving the cost versus benefits of their purchases would make the greatest difference to encouraging more sustainable or ethical choices. This finding indicates that for broad-market appeal, sustainable choices also need to be financially viable.

### Homes have a significant impact on climate

The construction and operation of homes is estimated to account for 10% of New Zealand's total carbon footprint (Bullen et al. 2021). This means that reducing the carbon footprint of homes could make a meaningful difference to New Zealand's emissions and contribution to climate change.

### NZ banks working towards decarbonisation

New Zealand banks are working towards decarbonisation, and several major banks are members of the Net Zero Banking Alliance (NZBA), working towards climate change mitigation. A key aspect of the banks' efforts is enabling their customers to reduce their emissions. A number of banks offer house mortgage top-ups with favourable rates for sustainability upgrades such as insulation and efficient heating.

Globally, the market for green mortgages is developing (BERL, 2019). However, ANZ is currently the only bank offering a green mortgage in New Zealand, with their *Healthy Home Loan* offer – the focus of this report.

## Homestar sets a higher bar

Homestar is a certification standard developed by the NZGBC with building sector members which aims to achieve homes with a lower environmental impact, as well as being healthier, warmer, drier and more comfortable. Homestar standards include different levels of performance, with 6 Homestar pitched as an achievable option with slightly higher standards and performance than New Zealand's Building Code minimum. Our analysis compares 6 Homestar to the Building Code. All of the Homestar levels use less energy and require the use of electricity instead of fossil fuels.

The Homestar standard was first launched in New Zealand in 2010, and has been revised several times since then to take into account technological and market developments. We have based our analysis on the latest version, Homestar version five.

# Lower lending costs for Homestar

## ANZ bank offers 0.7-1% mortgage discount

ANZ bank offers a *Healthy Home Loan* package with discounted mortgage rates for homes with a 6 Homestar or higher rating. These discounts apply to standard mortgage rates. The discount for fixed rate mortgages is 0.7%pa[1], and for floating or flexible mortgages is 1.0%pa.

Taking into account that fixed mortgages accounted for 78% of new lending in the past four years, the ANZ offer amounts to an average discount of 0.77%pa overall.

## ANZ offer amounts to a 0.25% effective discount

The ANZ *Healthy Home Loan* discounts apply to standard mortgage rates. But RBNZ data indicates that a significant portion of mortgages are issued at below-standard rates, with special rates widely available. Our analysis of Reserve Bank data found that special rates typically amount to a 0.52% discount to standard mortgage interest rates, taking into account the average discount over the past four years and average mix of mortgage terms. This means that the ANZ *Healthy Home Loan* package offers an effective discount of 0.25%pa, which is the difference between a typical special rate discount of 0.52% and the 0.77% *Healthy Home Loan* discount.

# Minimal difference in build costs

## Building Code upgrades raised minimum standard…

A key consideration in assessing the costs and benefits of Homestar is the difference between Building Code minimum and Homestar. Of note, the Government increased Building Code performance requirements under the standard *H1 Energy Efficiency* progressively over 2022 and 2023 (MBIE, 2022). The Government effectively raised the bar for a Building Code minimum home, which means that less additional effort is now required to achieve 6 Homestar.

[1] Technically, this is 70 basis point discount, but we refer to this as 0.7%pa throughout the report for simplicity and consistency with ANZ's own description.

## ...which reduced the cost for Homestar

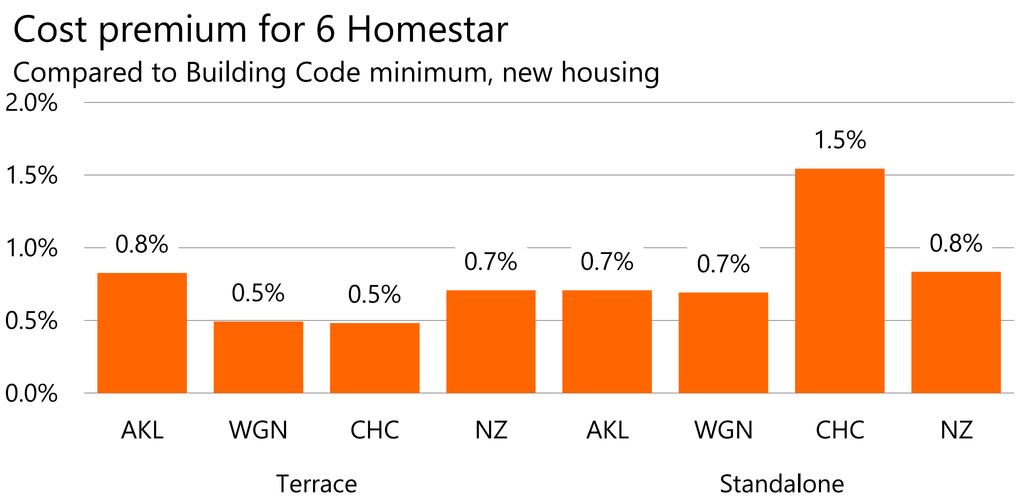
The cost premium for building 6 Homestar reduced as a result of the higher Building Code minimum, as well as changes to the Homestar standard. Ade (2018) estimated that achieving 6 Homestar certification in Auckland cost 4% more, under the previous Building Code and Homestar standard (version 3). Under the 2023 Building Code and Homestar version 5, the cost of building to 6 Homestar standard in Auckland costs 0.7-0.8% more, based on Aurecon (2023) with an allowance for the cost of assessment and certification.

NZGBC advises that assessment and certification cost an average of $1,260 per dwelling, and can be higher for unique designs, or lower for repeated designs (such as terraced housing). We have added in the cost of assessment and certification as ANZ requires this for their *Healthy Home Loan*.

## Homestar now adds 0.5%-1.5% to build costs

The cost of achieving 6 Homestar varies depending on region and dwelling type. Based on Aurecon (2023) with an allowance for the cost of assessment and certification, building of a typical house to 6 Homestar costs between 0.5% and 1.5% more than Building Code minimum. Chart 1 shows that terraced houses in Wellington and Christchurch face the lowest premium of 0.5%. Standalone houses in Christchurch face the highest premium of 1.5%.

**Chart 1**




**Source: Infometrics analysis of Aurecon (2023)**

For New Zealand overall, 6 Homestar costs 0.8% more than Building Code minimum for standalone dwellings, and 0.7% for terraced dwellings, based on the population weighted-average of Auckland, Wellington and Christchurch.

# Households better off with Homestar

Even though a Homestar house costs more upfront, households are better off from the start because they benefit from lower electricity bills and lower mortgage interest rates.

## Households use less electricity with Homestar

Dwellings built to 6 Homestar standard are estimated to use between 1,100 and 3,000 fewer kWh hours of electricity per year compared with a Building Code minimum dwelling, based on our analysis of NZGBC (2023) and Aurecon (2023). The range of energy savings reflect different housing typologies and locations, with larger dwellings and those in the colder South Island climate typically using more energy and therefore saving more with a more efficient design.

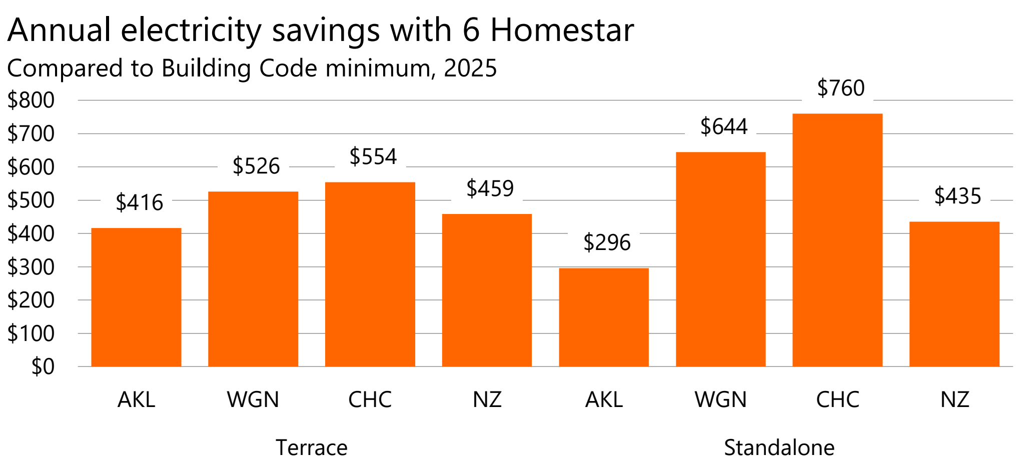
## Electricity prices forecast to keep rising

Estimated energy savings with 6 Homestar are even greater once we consider the potential for electricity prices to rise in future. Research published by the Climate Change Commission (2021) forecast that residential per-unit electricity prices could rise 1.1%pa on average over the next 30 years.

## Households save at least $296 per year on electricity

Chart 2 shows that households in a 6 Homestar terraced house could save $459 on electricity in 2025 compared to Building Code minimum, or $435 for a standalone house. Savings range more widely depending on the type of house and where in the country it is, from $296 (for a standalone house in Auckland) to $760 (for a standalone house in Christchurch) in their first year.

**Chart 2**



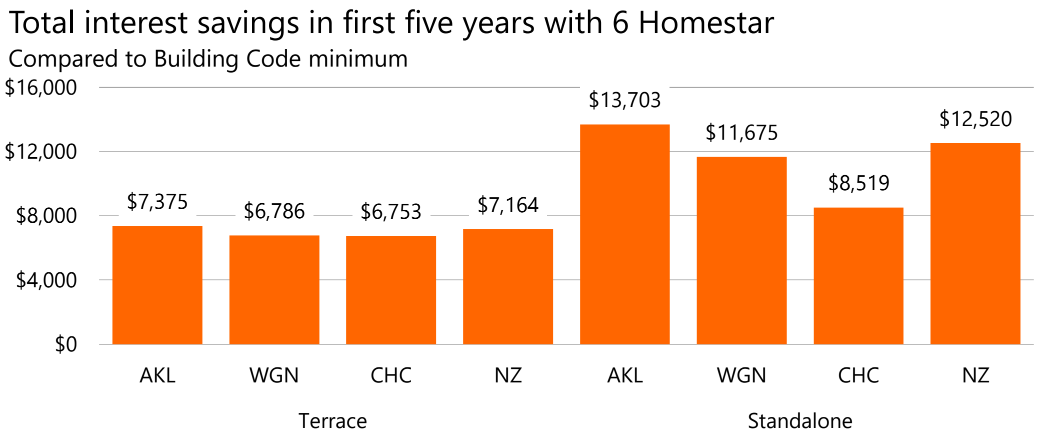

**Source: NZGBC (2023) and Infometrics**

By 2030, electricity savings are forecast to rise to between $350 and $900 per year. By the end of a 30-year mortgage in 2050, electricity savings are forecast to rise to between $580 and $1,500 per year.

## Households save at least $6,800 on interest in first five years

Owners of a 6 Homestar dwelling save at least $6,800 on interest payments in the first five years of their mortgage, with the effect of lower interest rates across their whole mortgage outweighing the slightly higher construction cost upfront. **Chart 3** shows that mortgage interest savings range from $6,800 for a terraced house in Wellington or Christchurch to $13,700 for a standalone house in Auckland.

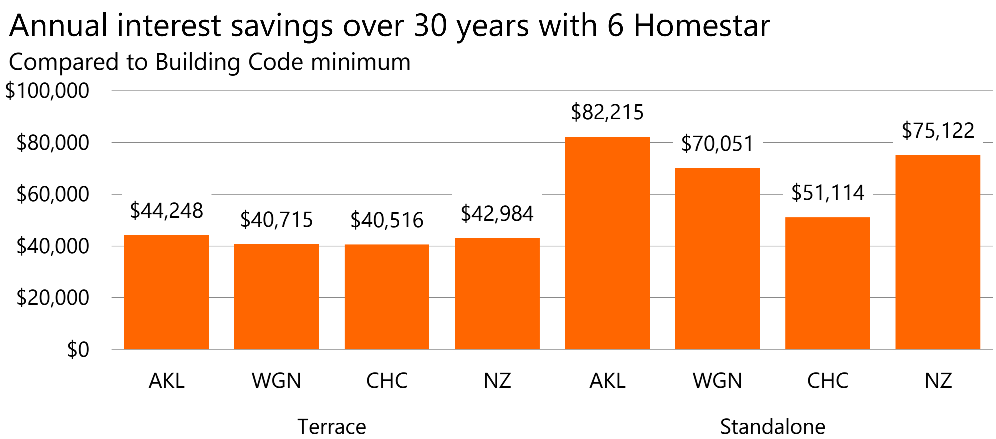
**Chart 3**




## Households save $40,000+ on interest over 30 years

Owners of a 6 Homestar dwelling save at least $40,500 on interest payments across the whole 30-year term of their mortgage. **Chart 4** shows that mortgage interest savings range from $40,500 for a terraced house in Christchurch to $82,200 for a standalone house in Auckland.

**Chart 4**

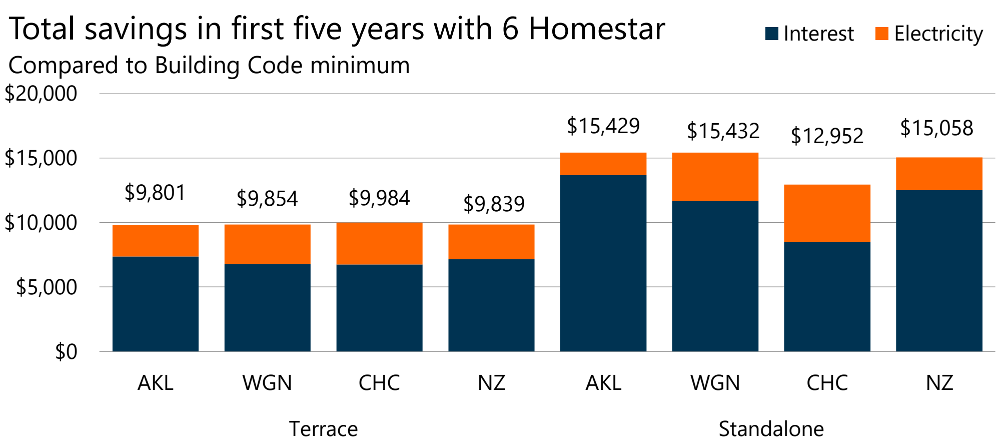



Our analysis assumes that ANZ's Healthy Homes offer continues to be made available throughout the life of the loan. There is currently no stated expiry for the offer.

## Over $9,000 savings on interest and electricity in 5 years

Putting together savings on electricity and interest payments, households buying a Homestar house would save at least $9,800 in their first five years. **Chart 5** shows that electricity and interest savings combined range from $9,800 for a terraced house in Auckland up to $15,400 for a standalone house in Auckland or Wellington.

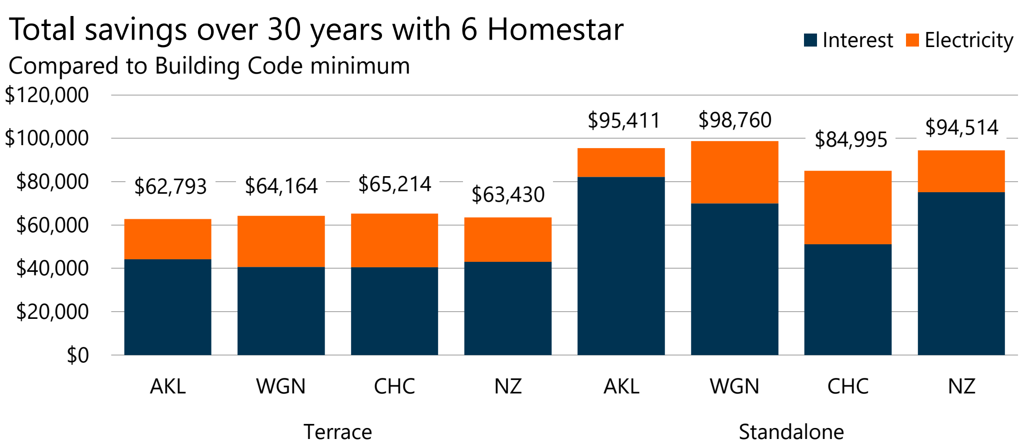
### Chart 5




## Over $62,000 savings on interest and electricity in 30 years

Over a 30-year period, households buying a Homestar house would save at least $62,000 on electricity and interest costs. **Chart 6** shows that electricity and interest savings combined range from $62,800 for a terraced house in Auckland up to $98,800 for a standalone house in Wellington.

### Chart 6

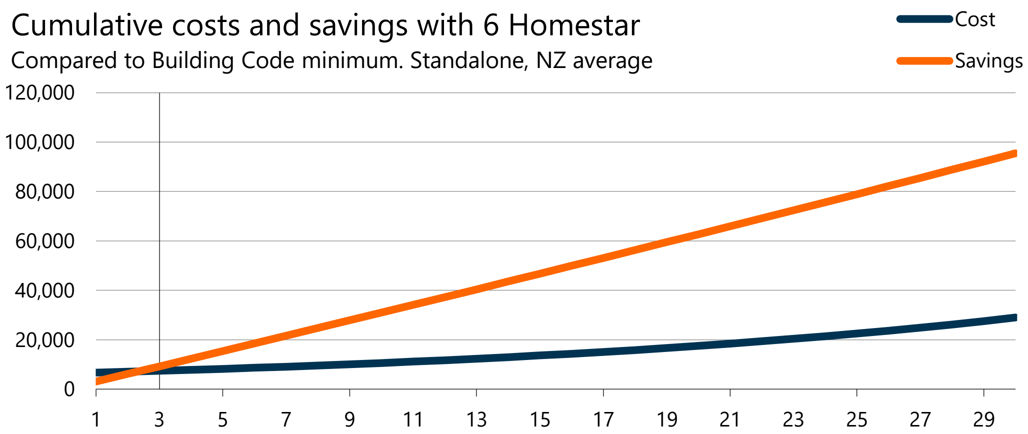



## Better off with Homestar in 2-3 years

Households would be better off within 2-3 years, despite a slightly higher upfront cost for 6 Homestar. Savings stemming from lower interest rates and lower electricity usage outweigh the cost of 6 Homestar, including the cost of borrowing to fund 6 Homestar.

Chart 7 shows that the cumulative savings from a 6 Homestar house would exceed the cost in year 3. By year 30, the savings of $95,400 would dwarf costs of $28,900, meaning that households would be better off by $66,500. Households would have to borrow to fund the upfront cost of Homestar, so the costs stated here include annual interest on the upfront cost.

**Chart 7**



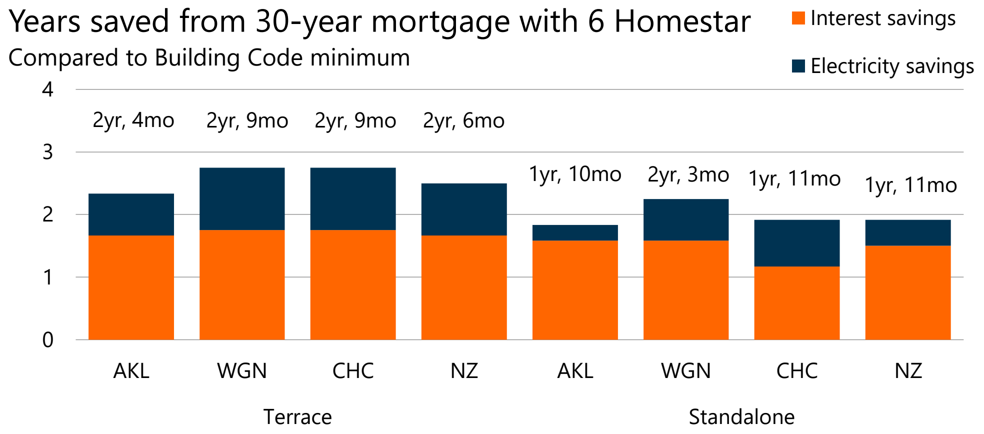

Homestar pays off even earlier for households buying a terraced house, with savings expected to outweigh the cost of construction by year 2. By year 30, the household would be better off by $50,100.

## Households could be mortgage free two years earlier

Up to this point, we have assumed that households buying a Homestar house continue paying off their mortgage over 30 years. However, more diligent households could choose to put their interest and electricity savings towards their mortgage in order to become mortgage free earlier. Following this strategy, households would pay the same as they would have without Homestar and become mortgage free earlier.

Chart 8 shows that households buying a Homestar standalone house could be mortgage free at least two years earlier, or one year earlier for a terraced house.  A household buying a standalone house in Wellington or Christchurch could be mortgage free 2 years and 9 months earlier. Interest and electricity savings are estimated by comparison with a non-Homestar home, with a lower upfront cost and no interest rate discount.

**Chart 8**




Households choosing to reinvest their interest and electricity savings into their mortgage would make an additional saving of at least $79,700 in interest payments over their mortgage term, on top of the interest and electricity savings in Chart 6.

## Homestar dwellings healthier, more comfortable

Beyond financial benefits, households in Homestar homes benefit from a healthier and more comfortable indoor environment. 6 Homestar requires mechanical ventilation and higher thermal performance than Building Code minimum. This results in improved indoor air quality, significantly reducing the chance for moisture or mould build up, and reduces overheating. Overheating homes has been identified as a growing problem in New Zealand over the past 20 years, as a result of climate change and changes in building design and construction (BRANZ, 2022).

## Intangible benefit from Homestar too

Households may also benefit from the intangible benefit of a more environmentally friendly lifestyle, as Homestar dwellings use only use electricity for their energy needs, without any fossil fuels. Kantar (2025) found that 52% of New Zealanders were concerned about the impact of climate change, and would likely value this intangible benefit.

## Similar conclusion for Green Homes in Australia

Our conclusion that New Zealanders could be better off with a 6 Homestar dwelling is not unexpected, with KPMG (2023) reaching a similar conclusion in assessing the Green Star Homes Standard in Australia.

Key differences with the Australian scheme are that it places a greater emphasis on solar electricity generation and financial rebates for certain features. These differences made the Australian scheme even more compelling. KPMG's analysis assumed that homeowners would reinvest their energy savings into their mortgage (as per Chart 8), shortening their mortgage by 6.5-8.5 years.

## Homestar adoption still limited in New Zealand

Adoption of the Homestar scheme remains limited in New Zealand. Nearly 5,000 dwellings were certified Homestar in 2020 (NZGBC, 2021), amounting to 13% of all dwellings consented that year. That is despite ANZ's *Healthy Home Loan* package being first introduced in 2019 (ANZ, 2019). Changes to the New Zealand Building Code and the Homestar scheme have reduced the build cost premium for 6 Homestar houses since 2022. As awareness of Homestar and its financial benefits increases, uptake may improve.

With only ANZ offering an interest rate discount for Homestar dwellings at present, this will also limit uptake of Homestar because the most compelling financial benefits come about through lower interest rates. Alongside ANZ, other banks in New Zealand are members of the Net Zero Banking Alliance and offer favourable lending for house energy efficiency upgrades. So at some point, these banks might consider favourable lending for Homestar homes as a pathway to net-zero emissions.

## Homestar benefits for developers

We have not quantified the benefits of Homestar for residential property developers. However, it is worth noting that BNZ, Westpac, ASB and Kiwibank all offer discounted borrowing rates for developers on 6 Homestar certified developments, which could be significant as developers typically face higher interest rates than homeowners. Unlike the ANZ *Healthy Home Loan* package, developer discounts are determined on a case-by-case basis. These discounts wouldn't necessarily be shared with house buyers. But they serve as a strong incentive for both parties – developers and buyers – to choose 6 Homestar certification, meaning that more 6 Homestar options should become available to buyers over time.

## Homestar benefits landlords too

ANZ's *Healthy Home Loan* scheme is available to residential property investors, which makes the Homestar scheme attractive to landlords as well as owner occupiers. With the greatest financial benefits from Homestar coming from reduced interest charges, this effectively incentivises landlords to build or buy Homestar certified dwellings. The attributes of reduced electricity consumption and better indoor air quality might help to attract tenants, and potentially even earn higher rents, as general awareness of Homestar increases.

# Appendix: Our assumptions in detail

## Higher borrowing doesn't affect mortgage costs

Our analysis assumes that homeowners aren't affected by higher borrowing costs as a result of Homestar. In other words, we are assuming homeowners can afford to borrow 0.5% more upfront without being classified as a high-LVR (loan to value ratio) borrower and being charged a low equity premium.

A low equity premium typically applies to homeowners with less than a 20% deposit and can start at around 0.3% per year. A homeowner facing a low-equity premium as a result of buying a Homestar rated property would find no net benefit from Homestar while subject to the low-equity premium. However, as they build equity over time, the low-equity margin would cease, and they would benefit from lower interest and electricity costs. It would take situation-specific analysis to establish whether a homeowner would be financially better off over the life of the mortgage with Homestar and a low-equity premium.

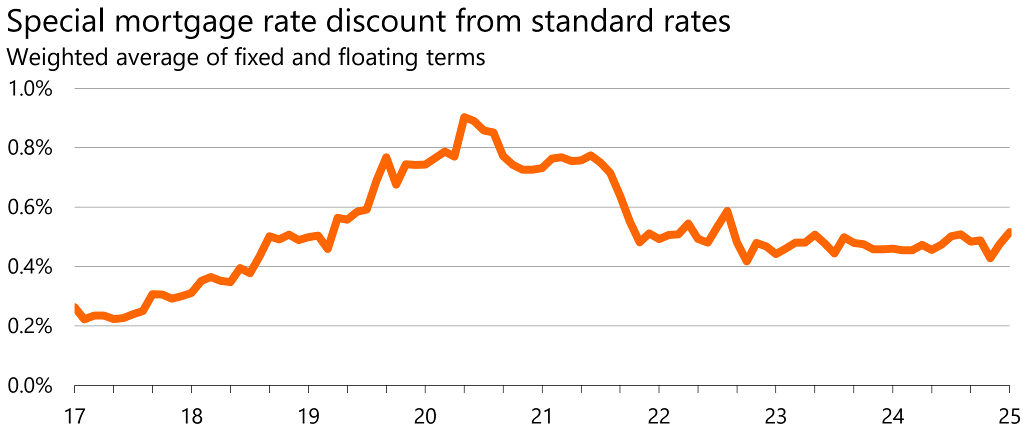
## Mortgage length of 30 years

Our analysis assumes that house buyers will take out a mortgage on a 30-year term as this is a typical mortgage length in New Zealand. Data from credit reporting bureau Centrix (2022) indicates that 57% of new mortgages in 2022 were for 30-year terms, followed by 11% on 25-year terms and 8% on 20-year terms. A shorter mortgage term means that the homeowner receives less benefit from the mortgage rate discount. However, as Chart 5 shows, homeowners are better off from year one.

## Discount beyond typical special rates

Our analysis assumes that widely available special mortgage interest rates amount to a 0.52% discount on standard advertised rates, meaning that ANZ's average discount of 0.77% amounts to an effective discount of 0.25%. If banks were to offer special interest rates with a higher discount from standard rates, then this would diminish the benefit of ANZ's *Healthy Home Loan* offer and potentially negate the financial benefits overall. Chart 9 shows that the special mortgage rate discount has held at around 0.5% over the past three years, but has reached as high as 0.9% and as low as 0.2%. A higher special mortgage rate discount typically reflects a greater concentration of lending on floating mortgages, which are also subject to a higher 1.0% discount under ANZ's *Healthy Home Loans*. A lower special mortgage rate discount would mean that borrowers under ANZ's *Healthy Home Loans* would be better off than we have calculated.

**Chart 9**




**Source: RBNZ, Infometrics**

## Our expectations for long-term mortgage rates

In modelling the benefit of Homestar over a 30-year period, we have developed a forecast of mortgage interest rates over this period. Our approach includes our existing macroeconomic forecast for an average rate of 5.4% in the first five years, and our expectation of the long-term mortgage interest rate beyond that point, for an average rate of 5.2% over the full 30-year period. Our overall conclusions on the financial benefits of Homestar are not highly sensitive to our mortgage rate forecast. However, it should be noted that a drastically higher interest rate would result in a lower benefit than stated.

## No shift in homeowner behaviour

In modelling the benefit of Homestar, we are assuming that homeowners don't adjust their spending or lending in response to the energy savings and discounted mortgage rate.

## Cost of land and buildings

The relative cost of land and buildings is an important assumption in our modelling. The cost premium of Homestar applies only to the cost of building. However, the associated mortgage discount applies to both the land and building cost. A lower building cost relative to land cost would make Homestar and the *Healthy Home Loan* scheme more financially rewarding. Conversely, higher building costs relative to land costs make the scheme less financially rewarding.

We used Aurecon (2023) estimates for the cost of building to code minimum and 6 Homestar. However, we note that the cost of building in Aurecon's analysis is double the cost of the average new dwelling consented in 2022 when this analysis was produced. It is not clear if the same percentage premiums for Homestar are applicable for lower-end housing.

We used REINZ sales data to estimate the cost of land. For terraced housing, we assumed this is built on sections of less than 250m$^2$. Limited data is available on the market price for sections under 250m$^2$ in Wellington and Christchurch, so we applied the average discount for these sections in Auckland to the average section prices in Wellington and Christchurch.

## Electricity costs continue to rise

Our analysis of electricity cost savings over 5 and 30 years is based on a forecast of sustained electricity price increases. Our forecast is based on Climate Change Commission (2019) forecasts of real residential electricity price increases adjusted into nominal terms using MBIE (2025) historical electricity price increases. If prices rise less than we have forecast, then the benefit will remain closer to that of the first year – in other words, homeowners will continue to be better off, just to a lesser extent than forecast.

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# References


Ade, R. (2018). 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. BRANZ Study Report SR391. Judgeford, New Zealand: BRANZ Ltd.

ANZ (n.d.) ANZ Healthy Home Loan package. ANZ Bank New Zealand Limited. Retrieved 8th April 2025 from: https://www.anz.co.nz/personal/home-loans-mortgages/loan-types/healthy-homes/

ANZ (2019). ANZ helps Kiwis into healthy homes. ANZ. ANZ Bank New Zealand Limited. Retrieved 17th April 2025 from: https://www.anz.com.au/newsroom/new-zealand/2019/04/anz-incentivises-kiwis-to-build-healthy-homes/

Aurecon (2023). Homestar v5 Review: 6 Homestar Specification. Aurecon New Zealand Limited: Auckland.

BERL (2019). Green Mortgages: Financial incentives to design and build high-performance homes. BRANZ External Research Report ER43. Judgeford, New Zealand: BRANZ Ltd.

BRANZ (2022). Designing to avoid houses overheating. BRANZ Bulletin 656. Judgeford, New Zealand: BRANZ Ltd.

Bullen, L., McLaren, S., & Dowdell, D. (2021). Carbon Budget of New Zealand Buildings: A Sensitivity Assessment. BRANZ External Research Report ER63. Judgeford, New Zealand: BRANZ Ltd.

Centrix (2022). April Credit Indicator. Centrix. Retrieved 8th April 2025 from: https://www.centrix.co.nz/wp-content/uploads/2022/05/Centrix-April-2022-Credit-Indicator-and-Economic-Forecast-Report.pdf

KPMG (2023). Cost-benefit analysis of the Green Star Homes Standard. KPMG.

MBIE (2023). Transition period has ended for 2021 updates to the Building Code. MBIE: Wellington. Retrieved 8th April 2025 from: https://www.building.govt.nz/about-building-performance/all-news-and-updates/transition-dates-for-the-building-code-updates-programme

MBIE (2025). Sales-based electricity costs. MBIE: Wellington. Retrieved 8th April 2025 from: https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/energy-prices/electricity-cost-and-price-monitoring

NZGBC (2021). The time is now. NZGBC: Auckland. Retrieved 17th April 2025 from: https://nzgbc.org.nz/news-and-media/the-time-is-now

NZGBC (2023). Introduction to Homestar. NZBGC: Auckland. Retrieved 15th April 2025 from: https://nzgbc.org.nz/introduction-to-homestar