



community  
energy action  
charitable trust



ANNUAL REPORT



## A letter on behalf of our Board of Trustees.

A year of challenges would be how I sum up the 2018 year when reflecting on the shift in focus of the Energy Efficiency and Conservation Authority (EECA) to the insulation of rental properties. This saw CEA focus on direct work with rental property management companies and property investors. Collectively getting the message out to the rental sector took some effort locally and on the wider front with EECA, but a good prompt into action was the 2019 mid-year Government deadline for rentals to be insulated. From an organisational and service perspective to landlords or their representatives we needed to ensure we could offer a 'painless experience' in line with one of our strategic goals of being customer centric and easy to use processes and systems—we will continue to stay focused on this.

CEA has continued to work with the New Zealand Red Cross' Earthquake Project, in supporting and insulating earthquake affected residents homes of the North Canterbury earthquakes – this has been a relationship that commenced following the Christchurch series of earthquakes. While earthquakes can be significant disruptors and changes people's lives significantly, being able to provide some support and comfort to families has been rewarding for the team at CEA.

In 2018 David Griffiths stood down from the Board and we supported him in doing this and thank him for his financial oversight and rental sector knowledge. We also welcomed Robert Linterman onto the Trust. Robert comes from a business management and central government background and was until recently integral to the EECA home insulation national project.

On behalf of the Trustees I would like to thank the CEA team for their efforts and responding to the organisational changes that come with projects concluding and working toward CEA's strategic focus.

To remain sustainable the Trust Board of CEA recognises it needs to be fit for the future and be prudent in our operation, provide value to our customers and funders, while delivering a quality insulation and home energy check solutions. We also recognise that we need to keep working with our funders to provide solutions to their organisations objectives and that will be a focus of the 2019 year.

**Don Chittock**  
Chair of the Trust Board, 2016-present

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## WORDS FROM CHIEF EXECUTIVE, CAROLINE SHONE

As in previous years our staff, supporters, volunteers, funders and partners continue to embody the fundamental character and excellence that defines Community Energy action (CEA). In the heart of what we do is our unfailing commitment to provide practical, sustainable energy efficient solutions to help create a healthy living and working environment for all, in the communities we work in.

The following pages hold the stories, statistics and highlights that paint a picture of what has been achieved by CEA, through 2018. It shows that CEA continued to diversify and expand its reach across the South Island.

Throughout 2018, CEA continued to work with homeowners, landlords, tenants, other NGOs, local and central government and public and private sector businesses. Not only was our independent advice on offer but also energy efficient options tailored to meet the needs of both individuals and business requirements and budgets, as well as subsidies for heating and insulation.

So let's talk about some of our 2018 highlights, they include:

- The continuation of the earthquake support programme, following the North Canterbury earthquake of 2016. This was yet another collaboration with New Zealand Red Cross. The programme proved to be extremely beneficial to those recipients most effected by the earthquake and who had assistance through it, across the Hurunui, Kaikoura and Marlborough communities. Additional financial support from the Lotteries Earthquake Fund assisted this programme.
- CEA's Curtain Bank, one of the many services CEA offers had another successful year, again, helping nearly 800 households with curtaining for their windows, as well as reducing the amount of material going to landfill.
- Increasing our work on the West Coast, working in with local councils and businesses.
- Increasing our work with property managers and landlords working through the new guidelines of the Residential Tenancies Act.
- Our continued longstanding successful work through partnership with the Energy Efficiency Conservation Authority (EECA) and their new Warmer Kiwi Homes New Zealand wide \$142m four year insulation programme, which was launched at CEA's offices by the Hon Megan Woods.

"CEA has to continue from board level down to be a voice highlighting the issues we see in the areas we work in, bringing this to the attention of local and national government representatives as well as other community groups."

- Our partnership with Environment Canterbury (ECAN) and their Clean Heat programme, supported families requiring heating in replacement for non-compliant fires through the air shed areas across Canterbury. In 2018 ECAN also launched its Healthier Canterbury Rates scheme.
- Working with the Christchurch City and Waimakariri Councils, upgrading the insulation of their social houses.
- The successful completion of the Christchurch City Council's Build Back Smart initiative.

Our partnerships with EECA and ECan will continue through 2019.

Although we have had another successful year and helped thousands in our community, it still shocks me that there are still a large number of preventable deaths each winter. Those deaths being directly attributed to living in cold and damp houses. Children and older people are at increased risk of respiratory problems and cold related illnesses.

Although the number of houses insulated continues to increase, through the subsidised insulation programmes there are still tens of thousands across Canterbury and the West Coast who still live in either inadequately insulated homes or do not have any insulation at all.

Achieving change in the community, can be frustrating as it takes time and a real understanding of the demographics of the areas we work in. CEA has to tailor its services to meet the needs of the individuals. In a concerted effort I have continued focussing on building relationships across our community, not only with local and central government representatives, public and private sector representatives, as well as policymakers.

I do believe that by doing this CEA is highlighting the problems and ways in which it can help to eliminate the causes of cold related issues in housing and implementing ways to educate the homeowners.

I do take comfort though in knowing that CEA's work is helping to create warmer homes, but, as we all know there is still a long way to go, to eradicate cold, mouldy, damp homes.

In the last decade we've had a strong focus working on the basics, addressing the symptoms of the issues faced by the community. For example, installing insulation in cold homes,

or providing free, double layered curtains to homes that need them.

CEA has to continue from board level down to be a voice highlighting the issues we see in the areas we work in, bringing this to the attention of local and national government representatives as well as other community groups.

Our organisation rarely wades into domestic issues, but we are called to use our voice where empathy demands it just as we are called to use our skills and expertise where household and homeowners require it.

Next year will see more challenges for the Trust and its staff, who will have to adapt and change appropriately to meet not only our working environment challenges, but also to ensure CEA's sustainability. CEA has to be a financially viable entity, to be able to continue its charitable work focus.

These challenges and the difficulties of sustaining a charitable trust, as well as the market competition will continue in the years ahead, but with focus, hard work, commitment and passion we will be successful.

To do this will include continuing working alongside the public and private sectors (and increasing that reach) and the collaborative partners we have. I am sure this will help us with our on-going work of the last 25 years, as 2019 will see CEA's 25<sup>th</sup> anniversary.

I would like to take the opportunity to thank all of CEA's employees and volunteers for their commitment throughout the year and to all our collaborative partners and funders, who have helped CEA achieve its goals in 2018.

I look forward to working with all of you in 2019 and beyond.

**Caroline Shone**  
2013-present



# 2018 Snapshot...

...Over  
**1,350**  
households insulated

**18,688m<sup>2</sup>**  
of curtain fabric  
saved from landfill

Assisting  
**777**  
homes with free  
recycled curtains

**137**  
presentations performed  
by CEA staff regarding  
energy efficiency advice

**547**  
Home Energy Checks  
performed by CEA  
Assessors

**238**  
households assisted  
with winter heating  
costs (firewood,  
electricity, or gas)

**319**  
households affected  
by the November  
2016 Earthquake  
received home  
improvement  
interventions

Over  
**5,000**  
people received  
assistance from CEA  
during 2018



*Keeping Our Community Warm*

# Community Energy Action

CEA is committed to providing practical, sustainable energy efficient solutions to help create a healthy living and working environment for all in our community.

## CEA started...

...during the early 90's, when New Zealand faced an energy crisis. Steeply rising residential energy prices, coupled with a nationwide shortage, sent panic into the minds and pocket of many Kiwis. Recognising the serious impact of this on low income earners Ian McChesney, Delle Small, and Richard Cottrell formulated a plan, and undertook several workshops to develop practical energy efficiency measures for low income earners.

From there, Community Energy Action Charitable Trust (CEA) was born, and has evolved since, tailoring our services to suit the needs of the community.

Over the 24 years of CEA's existence, tens of thousands of homes have been insulated. This, in conjunction with CEA's other services, ensures people within our community are better educated about energy efficiency, warmer, healthier, and are living more energy efficient lives.

However, there is still an immense amount of work to be done. It is estimated that up to 80,000 homes in the Canterbury region alone are either uninsulated or under-insulated, with over 600,000 homes in total within New Zealand being inadequately insulated.

Energy efficiency as a means to achieve a warm, dry, healthy home is at the core of CEA's values. Wherever possible, we will look at a holistic solution for the home, rather than focusing on separate areas within the house.

Our mission is to provide practical energy efficient solutions that improve the physical and mental health of the occupants of every household.

## So, how do we help people achieve a warm, healthy home?

CEA offers a number of different services which can assist occupants in achieving overall home health:

- Insulation (ceiling, wall, and underfloor), subsidised and non-subsidised,
- Free, good quality, recycled curtains through the CEA Curtain Bank,
- Free, independent Energy Efficiency Advice Service,
- Home Energy Checks (assessments of whole home health),
- Ventilation advice,
- Heating advice and some grants,
- Affordable energy efficiency tools.

## Area of operation

From the Rangitata River in the South Canterbury region, up to Blenheim, and over to the West Coast.

CEA has been operating since 1994, and will continue to meet the needs of vulnerable people in our community.



Many areas, including Kaikoura, Hurunui, and Marlborough, have suffered damage from the November 2016 North Canterbury Earthquake. CEA has focused on assisting these areas throughout 2018, utilising the Earthquake Hardship Programme with New Zealand Red Cross.





## Housing and health

Housing is a key determinant of health and is recognised by the World Health Organisation (WHO) as having a profound impact on people's physical and mental health, and overall wellbeing.

The WHO states that health risks involved with living in a cold home include respiratory and cardiovascular diseases, and illness and deaths from exposure to unhealthy in-home temperatures, usually caused by indoor air pollution such as excess moisture.

The WHO also states that the minimum temperature for healthy living areas should be 21°C and bedrooms should be 18°C. It is recommended a higher temperature (21°C) in bedrooms for those households with babies, elderly, or sufferers of respiratory illnesses. This is to efficiently provide optimum thermal comfort for occupants, maintaining healthy air temperatures so as not to exacerbate illnesses, and not to promote conditions for mould growth and condensation.

With asthma hospitalisations on the rise, and one in six Kiwis affected by respiratory diseases in New Zealand, it is more important now than ever to ensure homes in our community are healthy, dry, warm, and energy efficient.

Energy poverty (being unable to afford to keep your home adequately heated) is also a major issue throughout New Zealand, and especially in Christchurch. It is estimated that between 22,000 and 30,000 households in Christchurch suffer from energy poverty.

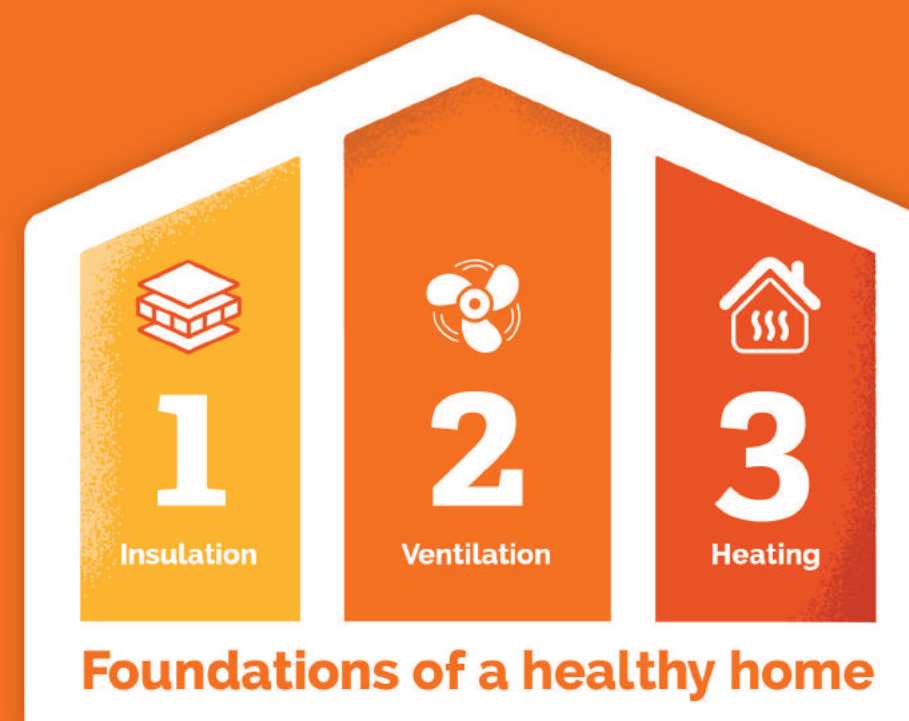
## What is whole home health?

Insulation, ventilation, and heating are noted as the main components to creating a healthier environment according to the WHO. These three factors are considered the three pillars of a healthy home.

At CEA, along with these three factors, we look at all aspects that affect the health of the home — a home's characteristics, occupants' behaviour and habits, power bill, the energy consumption, number of residents and any other factors that are specific to the household. We use this information to make comprehensive recommendations about how to get the most out of the home and create the healthiest living environment for its occupants.



**Efficient use of insulation, ventilation, and heating results in lower energy consumption, and a warmer, drier, healthier home**



**Good quality insulation helps keep the heat in during winter and out during summer. This makes your home easier and more cost effective to heat properly, and more comfortable and healthier to live in.**

Insulation is a product that is installed in the ceiling, walls, and underfloor cavities. It works by trapping layers of still air, reducing the heat conductivity, and allowing less warm air to escape the home.

Insulation performance is measured in R-value which is rated by density, thickness, and type of material. Over time, insulation may shrink and lose its loft, and the effectiveness of it is reduced.

This is much more likely if a house was built prior to the year 2008, a top up of more insulation may be needed. However, tens of thousands of houses in this area still have no insulation where insulation is needed.

**Ventilating a home properly is a crucial factor in maintaining a healthy home, and in turn the health of the occupants.**

A poorly ventilated home can cause condensation, which can lead to mould and dampness in your home, exacerbating health conditions such as asthma and bronchitis. The simplest way we recommend to ventilate the house is to open windows on opposite ends for 10-15 minutes per day, even on colder days. This easy task can create a huge difference in the quality of air in the home, making it easier to heat the home, and can help eliminate condensation.

We recommend that every home has externally vented extractor fans (not into the ceiling) in the bathroom and kitchen, and laundry if applicable.

**Having an efficient source of heating (and using it correctly) is essential to keeping the home warm, dry, healthy and energy efficient.**

Several types of heating may be used within the home such as wood burners, pellet fires, heat pumps, convection heaters, and more.

Heat pumps are one of the most energy efficient sources of heating. When used correctly they can be four times as efficient as a convectional heater; e.g. for every \$1 you spend, you get up to \$4 worth of heat.

Quite often heat pumps (and many other heating appliances) are used incorrectly due to lack of education. CEA Assessors and Energy Advisors educate households on correct use of heat pumps and other heating appliances during Home Energy Check Assessments and through the free Energy Advice Service.

Staff also discuss the most appropriate heating appliance for the size of the room, considering energy efficiency, thermal comfort, and what would benefit the occupants best.



## Effects of a cold, damp, unhealthy home on occupant's overall health

These are just some of the effects on overall wellbeing caused from living in an unhealthy environment:

- Exacerbated respiratory conditions such as asthma, bronchitis, and pneumonia (single largest infectious cause of death in children worldwide).<sup>1</sup>
- Children can lose up to 12 days of schooling per year due to severe respiratory conditions. This has an adverse effect on education and learning development. Adults are estimated to lose up to five working days a year from respiratory conditions, resulting in loss of income, work development and productivity issues, and high stress levels.<sup>2</sup>
- Negative effects on mental and emotional wellbeing, as living in a cold, damp home can make people feel undervalued in society. Along with thermal discomfort, stress from financial hardship due to medical costs and days off school/work, inadequate insulation leading to higher power bills can have detrimental effects on the mental and emotional health of occupants.<sup>3</sup>
- Higher hospital admissions, as proven by CEA's evaluation report on the Healthy Homes Programme (see page 11 for summary). This puts an additional financial burden on costs for our health system.
- Poor quality housing, providing insufficient protection from the outside, from noise, and from intrusion can be the source of deterioration in mental and emotional wellbeing, and increased anxiety, depression, insomnia, paranoia, and social dysfunction.<sup>3</sup>
- Living in a cold, damp home can have adverse effects on social wellbeing also, as unhealthy occupants often miss social events and opportunities due to illnesses.<sup>3</sup>

<sup>1</sup> World Health Organisation (WHO). Pneumonia, 2016. Published online at <http://www.who.int/mediacentre/factsheets/fs331/en/>

<sup>2</sup> Asthma and Respiratory Foundation, Dr Telfar Barnard L, Zhang J. The impact of respiratory disease in New Zealand: 2016 update. Published on [www.asthmafoundation.org.nz/research/key-statistics](http://www.asthmafoundation.org.nz/research/key-statistics)

<sup>3</sup> Bonnefoy X. Inadequate housing and health: an overview. Int J. of Environment and Pollution, p.411-429, 2007. Published on World Health Organisation (WHO) at [www.euro.who.int/\\_data/assets/pdf\\_file/0017/121832/E90676.pdf](http://www.euro.who.int/_data/assets/pdf_file/0017/121832/E90676.pdf)



## Healthy Homes research — proven results for insulation and other interventions

The Canterbury Healthy Homes Programme was a collaborative partnership between CEA, CDHB, EECA, PHOs, ECAN, Orion and MainPower. The aim was to help manage the demand on reduced hospital bed numbers as a result of the earthquake.

The programme provided over 1500 households with insulation installations and 450 heating appliances, along with many other interventions such as curtains and energy advice. Data was produced for 900 of the 1500 households who received interventions. The Evaluation Report<sup>4</sup> of the programme was released during 2016 and is summarised below:

- Research has shown improvements in housing (especially insulation) result in better physical and mental health and wellbeing.
- The majority of this investment focused on providing insulation to Canterbury people with health needs; defined as those with two or more admissions to hospital for diagnoses affected by cold living conditions, such as respiratory disease.
- The health of this group of people was considerably improved following home insulation;
  - **There was a 29% reduction in the number of hospital bed days in the 12 months following insulation compared with the 12 months prior.**
  - **This equated to a reduction in hospital costs of almost \$1m within the first year — equivalent to the investment made by the Canterbury DHB to insulate the homes of the high health need patients.**
- The return on investment for health was achieved within 12 months and, assuming similar benefits over time, the total return on investment for all funders will be achieved within five years based on hospital admission benefits alone.

<sup>4</sup> Shone, C; Hamilton G, Johns K. Healthy Homes Investing in Outcomes November 2011 – November 2014, Quantitative Analysis, 2016. Available at [cea.co.nz/research](http://cea.co.nz/research)





# OUR STAFF AND VOLUNTEERS

## Our people

CEA has a dedicated team of people who all share a common goal; to see people in our community living sustainably in warm, dry, healthy homes.

Even through the tough times of the 2010 and 2011 Christchurch Earthquakes, CEA staff showed resilience, much like the city itself, and rose back up quickly to assist those in need. CEA has grown and shrunk to suit the needs of our community over 24 years of existence, to assist the most vulnerable.

Our team currently consists of four different sections, all being equally important pieces to the puzzle that helps CEA operate successfully. From assessors, insulation installers, volunteers and staff in the Curtain Bank, and our customer service and administration team — all play a pivotal role in ensuring our customers get the assistance they need.

## Health and Safety

CEA has an active Health and Safety Committee of five staff, coming from different departments of the organisation. This ensures all sections and their varying health and safety needs are met.

Regular meetings are held every month and minutes are passed onto all staff to check and sign in agreement of their understanding.

As we have new and ongoing projects, health and safety is paramount to ensuring that all of our staff, customers, sub-contractors, and the wider public are safe, even when project circumstances differ. CEA has found that consistency, with an adaptable approach, is key to ensuring a safe working environment.

<sup>1</sup> Asthma and Respiratory Foundation, Dr Telfar Barnard L, Zhang J. The impact of respiratory disease in New Zealand: 2016 update. Published on [www.asthmafoundation.org.nz/research/key-statistics](http://www.asthmafoundation.org.nz/research/key-statistics)

“In the finance and admin team we work hard to ensure our customers have a positive experience from the very first contact. Most of us have been working for CEA for many years. No two days are the same, and truly, some days we have more drama than Shortland Street!”

Most of all we enjoy working together to achieve our common goal of helping others in our community to ensure they are living in warm, dry, healthy homes.”

Finance and Administration Team —  
(Left to right) Sue, Meg, Beth,  
Angela, Suzie, Uma.



“I was privileged to be involved in the NZ Red Cross funded programme that helped people who had suffered as a result of the earthquakes in the Hurunui, Kaikoura and Marlborough districts. I arranged for our highly qualified and experienced Home Energy Advisors to visit affected properties referred to us by New Zealand Red Cross, the Hurunui, Kaikoura and Marlborough District Councils, EQ Support Workers and others.

The end result was we were able to make the homes warmer, drier, better ventilated by funding insulation, heating, ventilation, curtains and other work at the properties. We also supported more than 400 households with payments towards their electricity accounts or by providing firewood.”

Paul Auld — Programme Coordinator



## Staff training

All of our assessors are trained as Home Performance Advisors (HPA). This qualification is industry-recognised, and focusses on providing independent, effective advice on home performance. We also have a number of trained staff who are trained NZ Green Building Practitioners.

Some have also completed internationally recognised training on the use of infrared cameras — giving CEA a unique approach when assessing overall home health. The cameras have been appropriately used to identify hot water cylinder pipe bursts, home heating flows, and provide further understanding for occupants to see how energy and heat is being used or lost in their homes.

CEA has also put other staff through specific training courses to ensure CEA is continuously developing its staff and providing the best service for its customers.

## Māori and Pasifika Ambassadors

Language is often listed as one of the biggest barriers to people receiving assistance. This is why during 2018 CEA focussed more on investing efforts into connecting with different ethnic communities through its nominated ethnic ambassadors.

Three years ago, CEA appointed two existing staff members as Māori and Pasifika community ambassadors. These roles, taken up by Hayley Mahanga and Uma Neli, meant CEA could dedicate time and resources to create closer connections within these communities — reaching the most vulnerable in the Māori and Pasifika communities through outreaching to both individuals and other organisations.

It is well researched that Māori and Pasifika are some of the most vulnerable ethnicities in our community. Hospitalisation for asthma is much higher in these ethnic groups than any other; (Māori 3.4 times higher, and Pacific peoples 3.9 times higher). Mortality rates due to respiratory conditions are also higher in these groups.<sup>1</sup>



## Warm Up New Zealand

Insulation plays a vital role in ensuring whole home health but is not affordable for many. A standard 100m<sup>2</sup> home can cost on average \$4,000 to insulate the underfloor and ceiling space. This does not include extra protection from the cold, such as vapour barriers and pipe lagging, which for some properties is necessary to prevent dampness and heat loss.

The Government's insulation programme, Warm Up New Zealand (WUNZ), which finished in June 2018, aimed to make homes warmer, drier, and healthier through subsidised retrofitted insulation for low-income homeowners and tenants. The Energy Efficiency and Conservation Authority (EECA) was the main Government contributor for the programme, where third party funders (CEA, and other organisations) were also involved. The eligibility criteria for the Warm Up New Zealand subsidy as below:

House was built before the year 2000, **and either**,

- owner occupied home with a valid Community Services Card,
- or,**
- a rental property and your named tenant has a valid Community Services Card.

Grants were also available for low-income households and tenants with high health needs if:

- income is just above Community Services Card threshold (up to \$20,000) and have high health needs related to cold, damp housing,
- or,**
- you are referred by the Ministry of Health's Healthy Homes Initiative programme.

EECA, the Government, CEA, and other funding partners of the WUNZ programme recognise the importance and benefits of insulation and welcomed the programme for insulations proven benefits to occupants' health. CEA was an approved service provider of the programme for the Canterbury and West Coast regions.

We would also like to recognise our third party funders including Orion, Mainpower and The Rata Foundation.

## Warmer Kiwi Homes

As the WUNZ programme came to an end June 2018, EECA announced the current Warmer Kiwi Homes programme. The Hon Megan Woods announced the new \$142m programme at CEA offices.

This is a four-year Government programme offering grants covering:

- 67% of the cost of ceiling and underfloor insulation – in some areas, generous funding from community organisations means the cost to the homeowner is even lower for insulation,
- and,**
- From year two - 67% of the cost of a heat pump or an efficient wood burner or pellet burner for the main living area. (Grants for heaters are capped at \$2,500).

The eligibility criteria for the Warmer Kiwi Homes as below:

House was built before the year 2008, and,

- have a valid Community Services Card,
- or,**
- live in an area identified as lower-income

**Eligibility requirement for a grant for a heater as below:**

- must not have an existing fixed heater in the main living area - e.g. a heat pump, wood or pellet burner, flued gas heater or central heating system.
- Also, homeowners will need to have ceiling and underfloor insulation installed to EECA standard before being eligible for a grant for a heater.



EECA subsidised...



**696**  
households

**36%**  
of these had a  
verified health  
condition

**55%**  
had at least  
one occupant  
aged 65+

During 2018  
CEA insulated...



**1,350**  
households





During 2018  
the Curtain Bank assisted...



**777**  
households



**1,935**  
lives  
impacted



**18,688m<sup>2</sup>**  
curtain fabric  
recycled

## Why are curtains so important?

Single-glazed windows are known to be one of the 'weakest links' within a house with regards to heat loss. Single-glazed windows can lose up to 20% of the heat generated if they are not adequately curtained. Double-layered curtains are the most cost effective way to reduce heat loss.

Double-layered, good quality curtains have a number of benefits for the household:

- Curtains help control the temperature of the home by preventing heat loss (or heat gain in summer).
- By preventing heat loss, the home is less susceptible to mould and condensation.
- Households use less energy on heating and air conditioning as curtains (when used properly) can keep the home warmer in winter and cooler in summer.
- Curtains also create privacy within the home
- They can also help with light control and therefore regulating sleeping patterns especially important for children and newborns. Increasing evidence shows that not enough or poor quality sleep can negatively affect a child's behaviour, learning, health, wellbeing, and weight.

## Our job in the community

Over the years there has been a radical growth in households requiring the Curtain Bank service. Generous donations of curtains from the public have made it possible for curtains to be repurposed into new households (and in multiple rooms).

CEA is fortunate to have a steady supply of donated curtains from the community, and year after year the supply and quality of product has increased. This shows that the community recognises the importance of the Curtain Bank and supports its assistance to the vulnerable.

The feedback from customers and referrers about the Curtain Bank remains extremely positive. They see the Curtain Bank as an essential service to the communities they work with.

Along with receiving public donations of curtains, businesses within the upholstery and curtaining industry often donate end of roll fabric. Their donations are hugely appreciated.

The majority of curtains given out at the Curtain Bank are now being lined regardless of whether they have a thermal backing or not and the quality of the lining being used has been upgraded.

Our Mobile Curtain Bank continues to be an efficient means of supplying curtains to those who are unable, due to health or mobility issues, to visit the Curtain Bank in person.

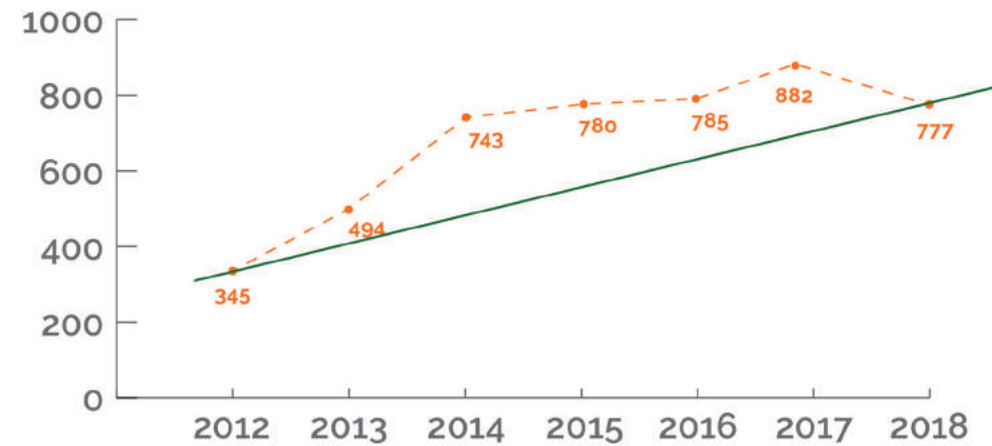
The Mobile Curtain Bank also regularly travels to rural towns in Canterbury and Marlborough, helping those in more isolated areas get access to good quality curtains.

2018 saw CEA commence delivery of curtains to the West Coast. Nearly 40 households received assistance.

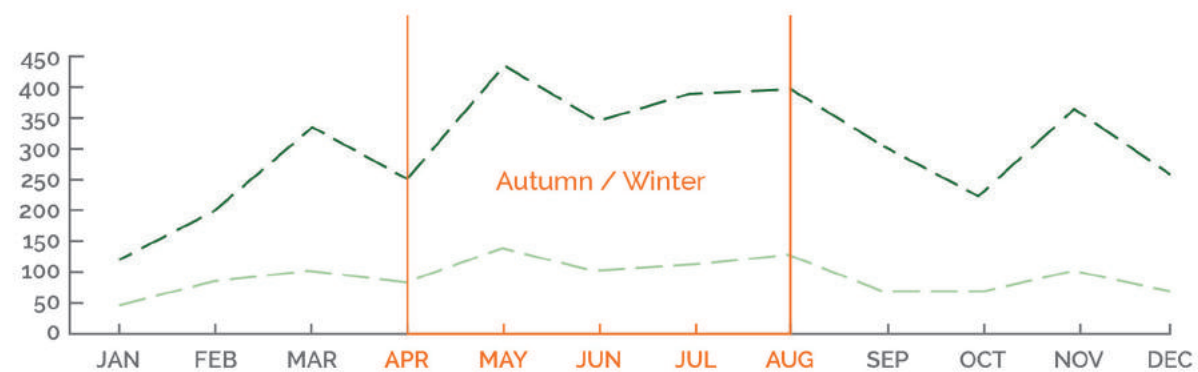




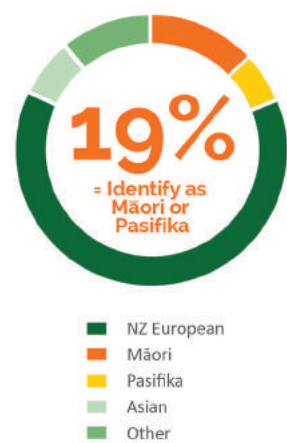
Number of households assisted by the Curtain Bank from 2012 to 2018



Windows curtained in 2018 per month



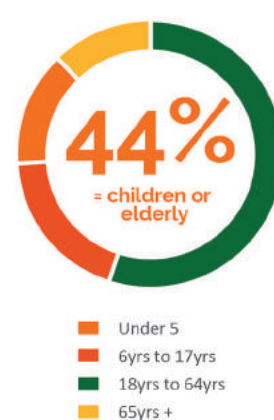
Ethnicities



Home Ownership



Age of Occupants



Above: Curtain Bank volunteers, staff, and CEA's Chief Executive, Caroline Shone.

## Staff and volunteers

The CEA Curtain Bank employs four permanent part-time staff members. This includes our Curtain Bank Manager, Gayle Katene, who has dedicated her time to the Curtain Bank for 14 years. It also includes our Mobile Curtain Bank Assistant who drives our mobile van to assist those who cannot otherwise travel into the CEA Curtain Bank premises. She also empties the Curtain Bank donation bins which are located across Canterbury, helps put up curtains, and assists the Curtain Bank where needed. We have two experienced machinists who provide hemming and adjustments to curtains, ensuring they are sent out fitting the client's windows correctly.

To help keep up with demand, we have a devoted team of volunteers who sort, measure, and fold curtains at our Curtain Bank premises. Our volunteers have been a fundamental part of our operations, some of which have been working in the CEA Curtain Bank for many years. In particular, two of our volunteers are celebrating 10 years of volunteering at the CEA Curtain Bank in 2018.

Our volunteers utilised excess materials to sew items such as doorstops, bags and cushion covers to help support and generate income for the Curtain Bank.

Throughout 2018, a number of local community groups and individuals volunteered their time. We are extremely grateful for the help and support.



“ The Kaikoura District Council whole heartedly supports the Curtain Bank service delivered by CEA.

[CEA offered] high quality double layered curtains to keep individuals warm over the first two winters post-earthquake. This service actively helps engage communities and empowers individuals to move forward.”

Susi Haberstock – Community Services Manager, Kaikoura District Council

## Sponsors

CEA's Curtain Bank has been generously supported by a variety of funders for many years, helping provide free, quality recycled curtains to those who need them throughout the Canterbury region.

The majority of funding comes from CEA Charitable Trust, with other supporters including Genesis Energy, Lotteries Grants Board, and The Trusts Community Fund (TTFC).

Thank you to these funders for the support, without your help, the Curtain Bank would not exist.







## Residential Tenancies Act

In mid-2016, new legislation was introduced through the Residential Tenancies Act (RTA) requiring all rental homes to have ceiling and underfloor insulation by 1 July 2019 (where it is physically possible to retrofit). Rental properties that already have insulation must be upgraded if the ceiling and underfloor insulation is no longer in reasonable condition, or if it did not meet or exceed the required R-value levels at the time it was installed.

There was also a number of other requirements introduced for landlords, including to provide a statement on new tenancy agreements about the location, type and condition of insulation, and the requirement for working smoke alarms in the home.

It was a main focus for CEA during 2018 to educate landlords and tenants on the new requirements and deadlines and making landlords aware of the subsidies available to them. As mentioned in the previous page, subsidies for landlords ended in June 2018.

CEA worked closely with those in the industry including property managers, organisations, tenants, social housing units, and individuals. By attending expos and events, through direct contact, marketing via appropriate newsletters, media releases and informative articles, as well as social media platforms, and industry presentations, we have been able to get our message across.

CEA was able to offer subsidies through the EECA WUNZ programme, and other avenues of funding where applicable, to help landlords afford the costs of insulating their rental properties.

Many landlords mentioned that insulating their rental properties was a way of protecting their investment by ensuring properties were warmer, drier, healthier, and more energy efficient.

This also helped many tenants to look after rental properties in regard to heating, ventilation, and behavioural influences. CEA was able to team up with landlords to provide educational services to tenants about these influences and their importance in creating a healthy home for occupants to live in.

Landlords have also noted they were able to find higher quality tenants and create a better landlord-tenant relationship with transparency around what has and hasn't been insulated (and if not, why not).

Insulating these rental properties meant tenants have more affordable power bills, improved health and less medical bills, and a more comfortable, overall healthier environment to live in.

## Elderly Health

For many people over 65 years old, insulation is an unaffordable expense. Without subsidies, many elderly would go on living in cold, damp homes which often exacerbates illnesses and respiratory conditions.

With an aging population, elderly health is a high priority for CEA and many other organisations who work directly with this group. CEA has worked hard to create and maintain partnerships with these organisations, to ensure those over 65 years old are receiving the help they need.

One of these partnerships is with Age Concern Canterbury. With a common goal to see older people living in healthier homes and leading more sustainable lives.

## Diverse funding streams

CEA is in a good position to offer many different subsidies for individual households through its varied funding partners and programmes. CEA has a range of subsidies available to assist vulnerable households with installing insulation, all subject to eligibility criteria.

For those who could not afford the remaining costs upfront, CEA offered interest free payment options to ensure those financially constrained households didn't miss out on insulating their home at a subsidised price.

Alongside subsidised work, CEA also provided many homes with non-subsidised insulation installs for those customers who do not meet the eligibility criteria.

These were customers who wanted high quality work done, knowing that any surplus made by CEA goes to supporting initiatives such as the CEA Curtain Bank, and helping vulnerable households stay warm in their local communities.





**CEA's Energy Advice Service is designed to educate and empower households to feel more confident, giving them more control with a better understanding of their energy use.**

## Why is education important?

CEA's holistic approach to home health means that we look at more than just insulation. Our staff understand that good housing is a key determinant of both physical and mental wellbeing for the occupants. The impact of living in a cold, damp home is detrimental to these areas of wellbeing, with many research papers proving this.

Educating occupants on simple behavioural changes that can be made in the home is equally as important as insulation, as it makes heat retention more effective and can help maintain the overall health of the home.

Our educational services are designed to help households better understand how their energy is being used, giving them more control over their power bills. CEA also works directly with organisations and community groups to educate their staff and clients.

CEA's educational services include:

- Presentations to community groups, organisations, and referrers within a number of different industries,
- Energy Advice Service
- Home Energy Checks and Design Well Checks
- Online education
- Educational calendars
- Annual Curtain Bank educational morning tea

## Educational presentations and community engagement

CEA also provides a range of informative presentations and workshops for individuals, community groups, organisations, and referrers. Last year, CEA staff including Energy Advisors, Marketing staff, and CEA's Chief Executive, performed over 130 presentations to various groups and individuals in the community.

Some of the people who were recipients of these presentations included Members of Parliament, various district councils, local community boards, organisations within the health industry (GP's and health clinics), schools, and Students' Associations.

CEA is also active sharing energy advice at events and information days in our areas of operation. These included Age Concern expos, student/staff information days at various universities and polytechnics, and a range of other community group events.

## Energy Advice Service

CEA offers an independent Energy Advice Service which is free for anyone who needs information on all aspects of energy efficiency, with the aim of empowering and educating occupants about home health. This service has been funded by CEA's long-standing funding partner, Orion, since its inception in 2009 and has helped countless households better understand energy efficiency in their home.

Advice can be provided over the phone, via email, and even in person. During 2018, our Senior Energy Advisors and other staff members helped over 300 households with energy advice over the phone. Countless emails were also received and responded to. We also have a display area at our premises showcasing different aspects of home health.

Some popular topics on the Energy Advice line include questions around occupant's power bills, how to get rid of condensation, and a variety of heating appliance queries.

The Energy Advice Service is vital for educating people about how to manage and best utilise power in their home. By doing this, CEA helps households keep a more consistent use of electricity, rather than having unexpected highs and lows without any understanding why.

Research from the European Union (EU) shows that non-government organisations (NGOs) are important intermediaries between household communities and the Government. It's important for NGOs to provide accurate, independent and impartial information or advice. In many cases, personalised advice from NGOs can lead to appropriate solutions and overcome barriers to action for occupants.

<sup>1</sup> Teegen, Hildy & Doh, Jonathan & Vachani, Sushil. (2004). The Importance of Nongovernmental Organizations (Ngos) in Global Governance and Value Creation: An International Business Research Agenda. Journal of International Business Studies. 35. 463-483. 10.1057/palgrave.jibs.8400112.





## Home Energy Checks

In 2018, CEA assessors performed 547 Home Energy Checks. These audits allowed CEA to assess and inform occupants on the overall health of their home, and look at cost effective, energy efficient measures to keep their home healthy, warm, and dry. CEA's trained assessors perform comprehensive Home Energy Checks for landlords, tenants, and homeowners to investigate a number of factors within the home. These include:

- insulation, ventilation, and heating,
- quality and functionality of curtains,
- hot water temperatures and water flow rates,
- the impact energy consumption has and how it reflects on a consumer's power bill,
- small behavioural changes that could be made to improve energy use,
- and any other influences on the home's overall health, appliances and lighting.

Occupants are then educated on these factors while being walked through their home with a qualified Energy Assessor. An extensive written report of recommendations is provided to the occupants after the assessment.

The report is full of immediate actions that can be taken, and ongoing future actions to make — all are prioritised into importance and affordability according to the household's income and situation.

As a result of undertaking these assessments, CEA can provide other assistance the household may need. These could include insulation, free recycled curtains, heating assistance, lighting upgrades, and wood burner training.

This pinpoints how critical CEA's holistic view to home health is, and why it is vital to continue the work we do to provide a range of support services for our community.

2018 Home Energy Check Assessments  
survey results. Out of 100 responses

**99% surveyed would recommend this service**  
**99% surveyed said they learnt something new**

## Design Well Checks

CEA's Design Well Checks include assessments of new building plans, where a qualified Energy Assessor provides impartial advice about how to make the new home as energy efficient as possible, accounting for occupancy and lifestyle factors. Some factors the Assessor looks at include orientation of the home, heating options, and hot water cylinder placement.

Design Well Checks were developed because CEA staff noticed a growing number of energy efficiency problems in newly built homes. Energy efficiency advice through the Design Well Check would have been helpful during the preliminary discussions of these new builds to ensure the occupants had the most energy efficient homes.

## Annual Curtain Bank morning tea

Every year, CEA hosts the Curtain Bank morning tea to promote awareness of CEA services, the Curtain Bank, and up-to-date energy advice. Referrers and interested stakeholders are invited to listen to presentations from CEA staff members about how the Curtain Bank can benefit their clients, and tips to pass onto their community about energy efficiency.

In early 2018, CEA hosted the Curtain Bank morning tea with attendees from a wide range of organisations, including from the health and medical sector, social sector and NGOs attended.

## Online education

Every year, CEA's focus increases more on sustainability and environmentally friendly options for its educational services — paperless ways of engaging and communicating with the community about energy efficiency.

CEA has used social media platforms Facebook, Instagram, and Twitter as a means of communication with the public and other organisations, becoming a source of tips and updates on all things energy efficiency related.

We found that using these platforms was a great way for those in vulnerable situations to reach out to us where they may have otherwise felt uncomfortable calling us directly — in fear of 'asking for help'. It has opened up another avenue of communication where some barriers to asking for help are eliminated.

## Annual educational calendars

Every year, CEA team up with another organisation or charity to create a calendar full of educational tips about energy efficiency. In 2018, CEA teamed up with Mitre 10 Mega Greymouth and Mitre 10 Westport on the West Coast to release our 2019 calendars.

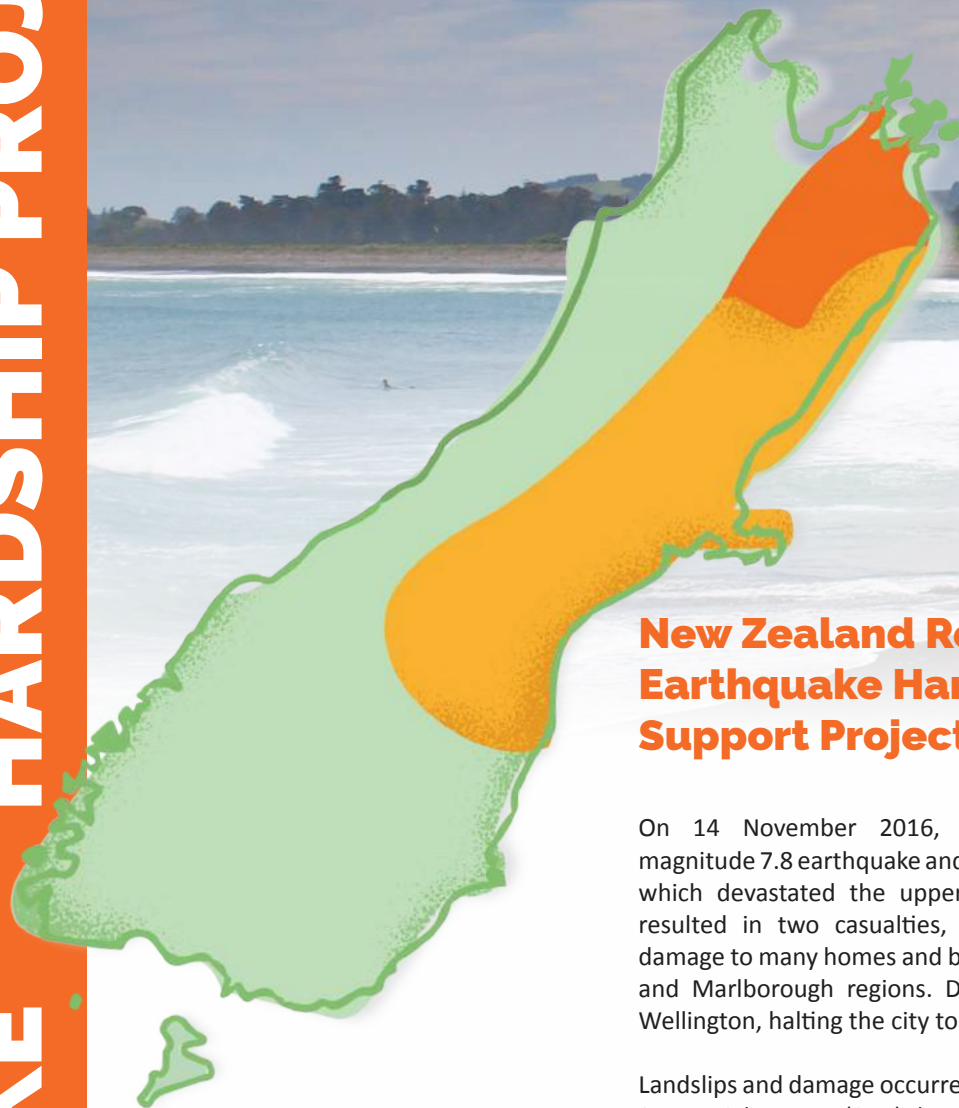
The partnerships between CEA and the two organisations came about through a common interest in ensuring a healthy living environment for all in our community, and the desire to support local charities and businesses.

The Mitre 10 Mega Greymouth calendar supported the local charity West Coast Search & Rescue Trust. The calendar was a step back in time, looking at the interesting historical past of the West Coast. The images and input of historical information was provided by Mayor of Grey District, Tony Kokshoorn.

The Mitre 10 Westport calendar supported SPCA Westport, showcasing images of previous foster animals from the shelter in their new healthy, warm, dry forever homes.

Both calendars displayed seasonally appropriate energy efficiency advice for each month of the year. Alongside this, we also include CEA's signature temperature strip which tells occupants if the room is at a healthy temperature.





## New Zealand Red Cross Earthquake Hardship Support Project

On 14 November 2016, North Canterbury suffered a magnitude 7.8 earthquake and a number of severe aftershocks, which devastated the upper South Island. The earthquake resulted in two casualties, many injured, and widespread damage to many homes and buildings in the Kaikoura, Hurunui, and Marlborough regions. Damage also stretched as far as Wellington, halting the city to a stop.

Landslips and damage occurred on many major roads, including State Highway 1 (SH1) between Picton and Waipara. The closure of SH1, the Inland Kaikoura Road and the Main North Line railway line effectively cut off all land routes into Kaikoura and other settlements in the area, isolating them. The Inland Kaikoura Road did not open until 30 November 2016, with restricted access, which continued for the rest of the year. The damage impacted on local businesses, the agricultural industry, tourism, and had a detrimental effect on the residents.

The November 2016 Earthquake Hardship Support Project was a collaborative partnership between CEA and New Zealand Red Cross aiming to provide support to those affected by the November 2016 earthquakes, which started mid 2017 with a duration of two years.

Two types of assistance are available through this programme:

1. Winter Heating Assistance Grants to help households with heating costs (firewood, electricity, or gas).
2. Home improvements, temporary or permanent, in the form of Home Performance Assessments (HPA), insulation, curtains and rails, ventilation, heating, contractor costs, and other support where needed.



## Effects of the North Canterbury Earthquakes on the community

CEA staff know that every home is unique, and assesses them accordingly. Meaning that when a home is damaged by earthquakes, floods, fires, or other events, every home will suffer different issues.

Many of the households affected by the earthquake were in rural areas, and the occupants in some cases living in isolation. Some of the challenges we had to face during this project were connecting with these isolated households and making them aware of the help available to them.

We did find that people in those isolated areas were resilient, and had a strong attitude of 'do-it-yourself'. Some have had more than several visitors walk through their home before CEA staff were able to help them (and not all the experiences they had from previous organisations had been good ones). CEA staff were totally aware of this, and treated these situations delicately and with sympathy.

CEA staff have worked closely with the district councils, community connectors, area navigators, schools, and other organisations to ensure the most vulnerable in these areas were reached.

Positive feedback from recipients so far has proven the overwhelming need for assistance in these areas. CEA will continue to aid these households during 2019, ensuring help is accessible to those in need.







**400**

homes in the West Coast insulated by CEA



**69%**

of West Coast households identified as low-income/CSC holders



**107**

homes insulated on the West Coast by CEA in 2018

## Helping West Coasters since 2015

CEA staff have been working across the West Coast region since 2015, insulating over 400 households in total and counting!

The West Coast community has a lower income than the national average median income<sup>1</sup>, assistance with the cost of insulation, education on energy efficiency, and tools to help maintain a healthy home was welcomed.

CEA has worked with the Buller District Council and the Grey District Council in previous years to bring their social housing units up to standard for insulation. We will continue to work with these local Councils to help improve the homes and lives of residents in their region.

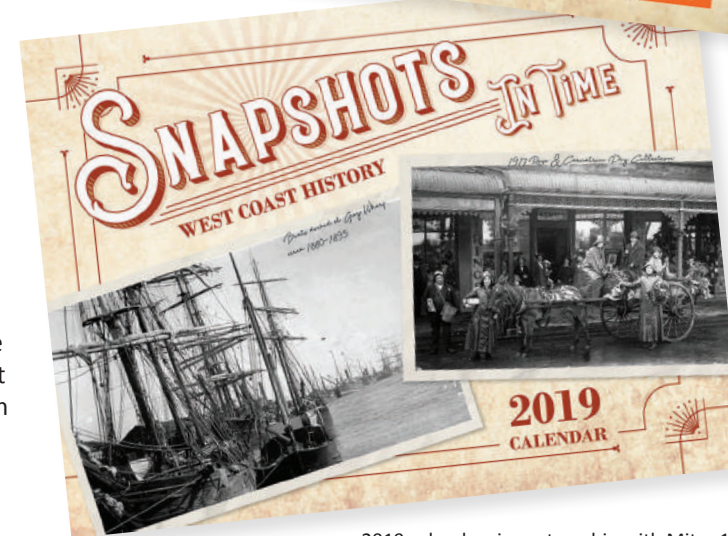
69% of households insulated by CEA on the West Coast in 2018 were identified as low-income households having a Community Services Card. We will be continuing to assist those across the West Coast; developing key relationships and fostering education on sustainability and holistic home health.

## Community connections

CEA continued to develop its existing partnerships with local businesses in Greymouth, Hokitika, and Westport. These organisations assisted CEA with logistics issues regarding stock and product, and aided in marketing our services available to the communities they serve.

As mentioned on previous pages, CEA teamed up with local organisations Mitre 10 Mega Greymouth and Mitre 10 Westport to create our 2019 calendars. The calendars supported two local charities; West Coast Search & Rescue Trust and SPCA Westport. Coupled with the functionality of a calendar, CEA's signature temperature strips, and seasonal energy saving advice, the feedback was extremely positive.

Very minimal assistance and funding options are available for those in vulnerable living environments on the West Coast. This is something CEA is continuously working on with local councils, Government, and other organisations.



2019 calendars in partnership with Mitre 10 Mega Greymouth, Mitre 10 Westport, West Coast Search & Rescue Trust, SPCA Westport.

<sup>1</sup> Statistics NZ, West Coast Region. Published on [http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request\\_value=14641&tabname=Income](http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=14641&tabname=Income)





## Partnership for cleaner air

A big part of CEA's goal is to help create healthier environments both for inside and outside the home. CEA has worked with Environment Canterbury (ECan) since 2014. CEA is recognised for its unbiased assistance to the most vulnerable households.

ECan's Air Quality Programme is an ongoing initiative to improve the air quality of the Canterbury Clean Air Zones (Christchurch, Kaiapoi, Rangiora, Ashburton), in an effort to meet the National Environmental Standards for Ambient Air Quality.

CEA's role in the programme is to work with households within the clean air zones which have wood burners that are over 15-20 years of age (consent expired). After assessing these homes by one of CEA's trained Energy Advisors, a quote is issued and an advisor discusses with the homeowner about the affordability of the quote.

CEA provides recommendations to ECan regarding funding, based on a number of factors i.e. financial circumstances of the homeowner, health issues present, and ages of occupants in the household.

If funding is approved, CEA liaises with the household and a heating company to have either a heat pump or low emission wood burner installed.

The average cost of replacing a wood burner with a new ultra-low emission burner can be between \$6,000-\$8,000 — unaffordable for many and often not a priority.

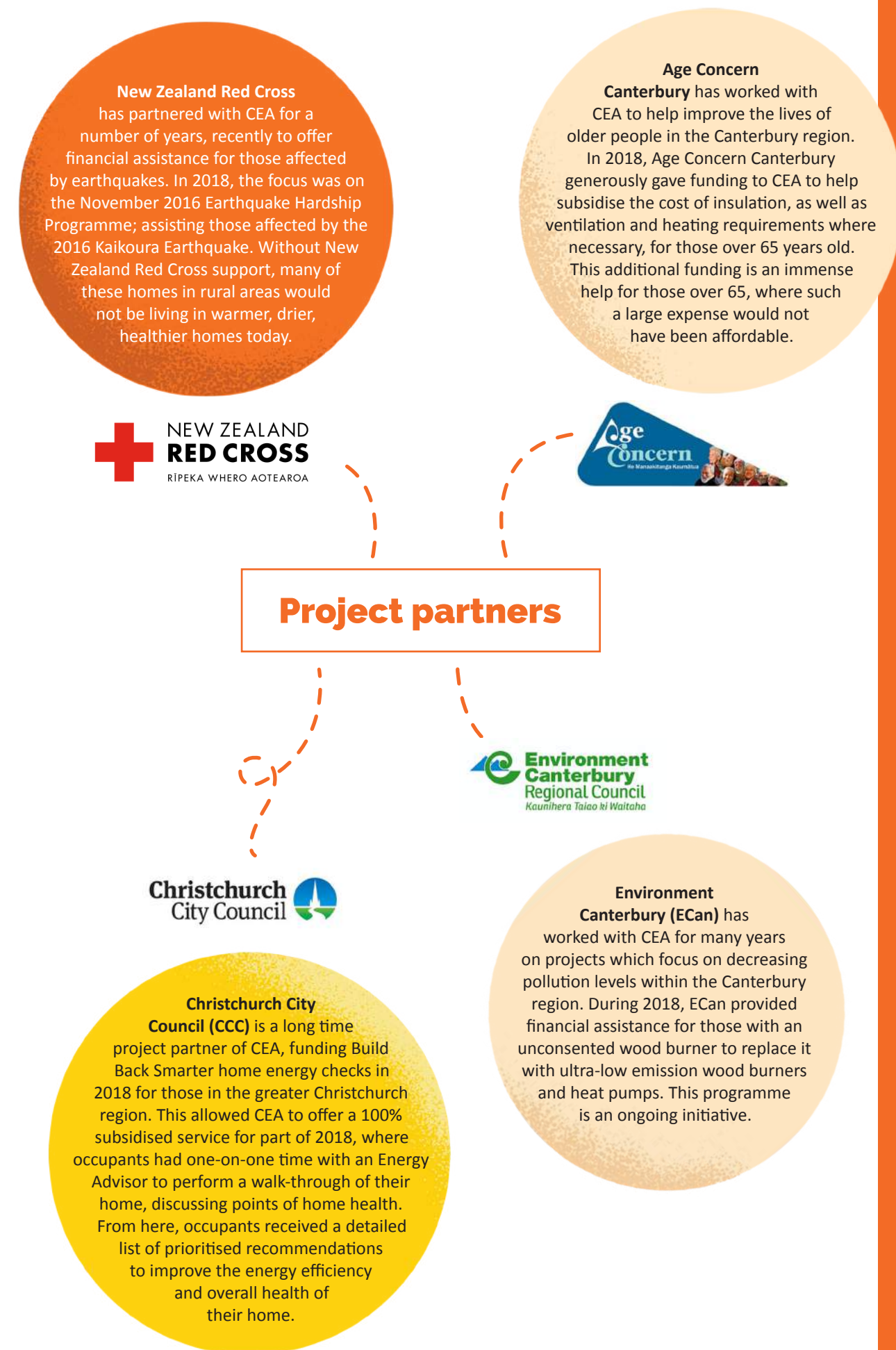


### Areas of focus

Christchurch  
Ashburton  
Kaiapoi  
Rangiora

# ENVIRONMENT CANTERBURY AIR QUALITY PROGRAMME









## Non-subsidised jobs

Financial support is also generated through our non-subsidised insulation jobs for households in higher income brackets who do not qualify for insulation subsidies.

We would like to extend a thank you to all those who have chosen CEA as their insulation provider on non-subsidised jobs, as any surplus made goes towards assisting the most vulnerable in our community. You have helped us in our goal to keep people warmer, drier, and more healthier in their homes.

## Statement of comprehensive revenue and expense for the year ending 31 December 2018.

	2018	2017
<b>REVENUE</b>	<b>\$5,403,781</b>	<b>\$3,807,402</b>
Less cost of sales	\$4,018,692	\$2,838,527
<b>GROSS MARGIN</b>	<b>\$1,385,089</b>	<b>\$968,875</b>
Other income	\$206,464	\$234,942
<b>TOTAL REVENUE</b>	<b>\$1,591,554</b>	<b>\$1,203,817</b>
Less expenditure	\$1,757,564	\$1,753,899
<b>Total comprehensive revenue &amp; expense</b>	<b>\$(166,011)</b>	<b>\$(550,082)</b>

## Independant Audit Report

The information in this financial report has been summarised from the Annual Accounts of Community Energy Action for the year ending December 2018. The external auditor was BDO Christchurch. A full financial report is lodged with Charities Services and is also available on request from Community Energy Action.

### Sources of income in 2018

CEA's sources of income consisted of:

- Products sold
- Insulation and other non-subsidised services
- Grants provided
- Curtain Bank made products

### Surplus income

CEA will use its surplus income for:

- Continue funding vulnerable customers in the community who do not meet the criteria required to access other funding
- Help educate the community around energy efficiency
- Invest in developing technology to ensure CEA's staff, equipment, and means of communications are modern and effective
- Support the funding of the Curtain Bank



# Looking to the future

## CEA's vision

Not for Profit (NFP) organisations are known to support and act on various causes, all pertaining to different missions and values of each individual organisation.

However, all NFP organisations face the same problems including the ever decreasing funding available to help them, like CEA, to do the work they need and want to do.

Many, as ourselves here at CEA are embracing innovation and challenging old ways of working. There's more collaboration between NFPs, and with the private and public sectors.

With nearly 25 years of experience and a proven track record, the staff and myself will continue working to fulfil our vision and mission.

### What makes CEA different?

CEA aims to make a positive difference in our community where our families and whānau live in warmer, drier and healthier homes, and our businesses use renewable resources more efficiently.



## The future of energy efficiency

People may ask what is energy efficiency? Once, it was just about using less. Now it's about creating holistic and sustainable solutions with less impact. Energy efficiency combines educating people about consumption, as well as offering solutions to reduce energy use.

Energy efficiency also relies on a greater use of sustainable resources like solar and wind. Using less energy is, of course, better, but future energy efficiency inspires so many more innovations.

In 2019 we will be looking ahead re-aligning our strategy to look at our environment as well as financial sustainability.

The impact humans have made on the environment in the last century may be irreversible, but by continuing to work with our community, its businesses, governments, science and innovators and by uniting everyone can do their bit to help turn a negative into a positive impact.

Environmental sustainable development draws on concepts of little waste, lower consumption and switching to green, environmentally-sustainable resources like solar and wind or materials which can constantly be up-cycled.

Cradle-to-cradle design and thinking are changing the way we consume and how we handle waste, focusing on solutions which only have a positive impact and leave virtually no footprint.

Our relationships are key to this and must be maintained to allow CEA to carry on its work. CEA's staff look forward to continue working with our people, community, funders, partners, stakeholders and local and national government to make a difference over the next 25 years.

## Mission statement



## Sustainability through diversification







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