







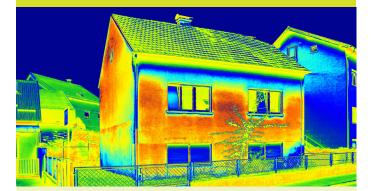
### **About the Environment Hive**

The Environment Hive is a new and exciting collective giving initiative of Lord Mayor's Charitable Foundation, aimed at growing our impact in the community by collaborating with like-minded people who are passionate about transitioning to a more sustainable and equitable future.

In its inaugural year, the Environment Hive will fund Community Housing Industry Association (CHIA) Victoria to complete an energy upgrade at a community housing site in Victoria.

## Why fund energy efficiency and solar in community housing?

Energy efficiency and rooftop solar are important due to the benefits they provide. These include reduced costs of living for householders through gas and electricity savings, protection from both hot and cold temperature extremes, employment generation opportunities, and low-cost emissions reductions. Key reasons to fund energy efficiency and solar in community housing



### 1. To provide protection from both hot and cold temperatures

As the climate changes, Victoria will experience more frequent and intense extreme heat events.<sup>1</sup>

The January 2009 heatwave in Victoria was unprecedented with maximum temperatures 12-15°C above normal and a record of three successive days above 43°C in Melbourne. While the devastating Black Saturday fires tragically killed 173 people, there were also 374 more heat-related deaths during that period. Deaths of those aged 65 and older more than doubled.<sup>2</sup>

Less vegetated suburbs can be 10°C warmer than vegetation dense areas. In Greater

During the heatwave that occurred in late January 2018, Ambulance Victoria reported 31 cardiac arrests on one day alone.<sup>3</sup>

Melbourne, this heat island effect is strongly correlated with areas of disadvantage, in particular the western, northern and south-eastern suburbs. These effects are amplified again when housing is poorly constructed, not well insulated and expensive to heat and cool.









#### 2. To reduce our emissions economically

Clearly, we are vulnerable to the changing climate. We are also significant contributors to global emissions. Victoria's per capita greenhouse gas emissions are among the highest in the world. Victoria produces approximately 20 tonnes per person while the global average is around five tonnes per person.<sup>4</sup> This is primarily a consequence of our emissions from energy.

#### Victoria produces four times more greenhouse gas emissions per person than the global average.<sup>4</sup>

Energy efficiency is a cost-effective way of reducing emissions. The cost of upgrading the

energy efficiency of a house is more than paid back by the reduced spend on heating, cooling, lighting and other energy costs. Improving the energy performance of community housing will reduce emissions for vulnerable people and the not-for-profit organisations supporting them.



### 3. To reduce energy costs and energy poverty rates

Low-income families, pensioners and other vulnerable people are under pressure from rising energy costs and face increasing difficulty paying electricity and gas bills that often represent 15 per cent of household budgets. The impacts of energy poverty are growing, with around 42,000 families struggling to deal with rising power costs in Australia. Energy efficiency and rooftop solar are inexpensive ways for households to cut their energy bills. In fact, it has been estimated that strengthening the energy efficiency requirements of Australia's residential building code could reduce household electricity and gas bills by \$18.9 billion between now and 2050.<sup>5</sup>

" Staying connected to energy and water supply is a daily battle for some Victorians. People can feel pressure to lower their consumption to potentially detrimental levels just to manage their bills. Simply turning the kettle on can cause anxiety."<sup>6</sup> While the climate, financial and health benefits of energy efficiency and renewables are accepted, the uptake of both remain relatively limited. Low income and other vulnerable

households are even less likely to invest due to the upfront costs, despite being the most likely to benefit.







### **Project overview**

#### The Environment Hive will fund Community Housing Industry Association (CHIA) Victoria to:

- 1. Identify an appropriate Victorian community housing site, which can be retrofitted as an example for both the sector and the residential market more widely. The homes will include typical property attributes of affordable housing in Victoria, and the wider residential market, such as:
  - Built between 1975-2004 (prior to the mandatory energy efficiency requirements)
  - Brick veneer or weatherboard building envelope
  - Minimum insulation
    and draught-proofing
  - Gas hot water systems
  - Incandescent or compact fluorescent lighting throughout; and
  - A gas furnace heater, or similar
- 2. Upgrade the selected homes with a range of solutions which may include:
  - Solar
  - LED lighting
  - Heat pumps (for hot water)
  - Split-cycle air-conditioning/heating
  - Ceiling insulation
  - Weather-proofing
  - Double-glazing
  - Under-floor insulation
  - Batteries and demand management (if cost effective)

The project will use an innovative new digital platform to undertake energy assessments, assess the viability of various upgrades and assist with the procurement of clean energy solutions. The platform is being deployed by the Victorian community housing sector and is designed to enable mass implementation of these types of solutions.

### **Project outcomes**

This energy upgrade project will reduce the cost of living for householders, protect them from extreme heat and the extended cold, and reduce our very significant energy related greenhouse gas emissions.

It will particularly help people with pre-existing health conditions that require either heating or cooling, however it will also help vulnerable households who are increasingly diverting funds from other essential areas such as buying food, medicines and other items.

This will be a demonstration project that can be scaled up.









### How to join

Membership to the Environment Hive is open to anyone who would like to make a difference by giving collectively with others. You can become a member of the group with a tax-deductible contribution of at least \$1,000 or more.

Our goal is to raise \$25,000 from members to fund this exciting project. Lord Mayor's Charitable Foundation will match up to \$25,000 raised, making this a great opportunity to leverage your giving further.

As a member you will have the opportunity to attend presentations hosted by Lord Mayor's Charitable Foundation and network with others who also share similar interests.

Join the Environment Hive today at: Imcf.org.au/ways-to-give/environment-hive

If you have any questions about this proposal, please contact:

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#### About Community Housing Industry Association (CHIA) Victoria

CHIA Victoria works to support the growth of community housing as the most effective and efficient means of ensuring more disadvantaged Victorians can enjoy the dignity of safe, secure and appropriate housing.

For more information, please visit **chiavic.com.au** 

#### **End notes:**

- 1. Bureau of Meteorology and CSIRO, "<u>State of the Climate</u> 2016"
- 2. Victorian Government Department of Human Services, "January 2009 Heatwave in Victoria: an Assessment of Health Impacts", 2012
- 3. The Age, "Melbourne weather: Several die as extreme heat sweeps across the state", 19 January 2018
- Department of the Environment and Energy, "<u>State and</u> <u>Territory, Greenhouse Gas Inventories 2015</u>," May 2017
   Australian Durant of Ethicking, "2010 Australian
- Australian Bureau of Statistics, "**3101.0 Australian Demographic, Statistics, Jun 2015**," 17 December 2015 The World Bank. "**World Development Indicators**," 1 July 2017
- Australian Sustainable Built Environment Council (ASBEC) and ClimateWorks Australia, "<u>Built to Perform: An industry led</u> pathway to a zero carbon ready building code", 2018
- Victorian Council of Social Service (VCOSS), "Power struggles: Everyday battles to stay connected", 2017

Hyperlinks last accessed September 2018.