Summary – Proposed Home energy efficiency package

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This proposed package would deliver a significant expansion to the support for low-income households to improve the energy efficiency of their homes, reducing their cost of living and reducing their energy related emissions.

This package supports the purpose of the CERF fund, by both directly reducing energy related emissions, and addressing the distributional impacts of climate change and climate change policy.

Proposal for the scheme's design

The proposal is for a 9(2)(f)(iv) package that includes the following options / components. :

- An **extension to the Warmer Kiwi Homes (WKH) programme**, 9(2)(f)(iv)
- Extending WKH to include **highly efficient hot water heat pumps,** further to the suite of low-cost energy efficiency measures already included in the existing bid.
- An initiative to **subsidise LED lighting**. This would be a mass market subsidy to enable LEDs to compete inefficient bulbs more quickly from the market, in addition to targeted interventions through the current SEEC Fund and proposed extension to WKH (which included extra funding for LEDs amongst other energy saving products)
- 9(2)(f)(iv)

The benefits of energy efficiency investments

The potential benefits of increased uptake of energy efficiency measures such as insulation, LEDs and highly efficient water heating include:

- reduced energy costs for households,
- reduced peak electricity loads (benefits grid owners and avoids new generation needing to be built), and
- reduced emissions through reduced peak electricity consumption, particularly as lighting demand coincides with intra-day peaks (peak electricity demand is more often met with fossil fuelled generation).

Why is intervention needed?

Energy efficiency investments are financially out of reach for many low-income households, for example replacing hot water heating with more efficient options can cost approximately $5000. This programme unlocks more efficient options for those households.

9(2)(f)(iv)

Implementation:

All components of this package would be delivered by EECA. The majority would be delivered under their warmer Kiwi Homes brand. 9(2)(f)(iv)

Context for the table of options

Table 1 below sets out a menu of options to further fund energy efficiency equipment and interventions, and 9(2)(f)(iv) . It includes approximate costings, value for money, and implementation considerations.

These options are fully scalable between the minimum viable option and the recommended funding levels. Some could be expanded beyond the recommended funding levels if desired, but there are risks of capacity constraints hindering implementation.

Summary points:

- Lower cost interventions such as LEDs and 9(2)(f)(iv) will have the largest reach, and highest average value for money
- Hot water options such as hot water heat pumps have a more complex implementation pathway, but will achieve good value for money if targeted at the right households (e.g., high hot water users)
- 9(2)(f)(iv)
- 9(2)(f)(iv)

Table 1. Home energy efficiency package components

Initiative title	Description	*Targeting options*	Four-year funding cost	Minimum viable option	Potential reach (full and MVO)	Value for money comments	Implementation considerations	Proceed? (Y / N / MVO?)
Existing bid: **Current WKH Extension**	This initiative extends WKH beyond June 2024, and expands the programme through the addition of three components: - low-cost energy efficiency measures, - a community-focused outreach approach to target hard-to-reach households, and - basic home repairs.	-	**$318.0m**	**$249.7m**	Existing WKH measures would be extended to deliver 26,500 retrofits annually. The new energy efficiency components are expected to reach around 17,500 households annually. MVO would only include extension of existing programme (i.e. no new components).	Strong cost benefit ratio estimated at 4.6:1, as evidenced in Motu analysis. Builds on an existing programme with proven strong performance.	High confidence. Existing network of installers have delivered up to this level in previous years.	
Additional initiative 1: **Further extension of WKH (supplementary to the existing bid)**	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	
	Addition of hot water efficiency improvements (including hot water heat pumps) to product offering	Highly targeted to large households (owner occupier) to maximise benefits and cost of living support	**$63.8m**	**$33.3m**	7,500 retrofits over 4 years. Half for MVO.	For hot water – paybacks as low as 5 years with appropriate targeting to large households.	High confidence on deliverability given experience with existing programme and ability to leverage existing processes.	
Additional initiative 2: **LED programme**	Broad-based subsidy on LED lighting to reduce the upfront cost of purchasing LED light bulbs	Targeting would be achieved through marketing detailed programme design will determine the best approach to market	**$20.8m**	**$11.2m**	5 million bulbs over 4 years. Half for MVO.	This is a system shifting investment. There may be some low-additionality (i.e. households receiving support who do not financially need it) in the short term, but the benefits accrue in the step change that comes with almost entirely crowding low-efficiency lighting out of the residential space.	EECA has experience delivering several LED pilots and is confident that this funding could be delivered. A combination of retail and community driven approaches would be utilized.	
9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	9(2)(f)(iv)	
Total		**-**	9(2)(f)(iv)	9(2)(f)(iv)				