Budget 2022 Initiative Summary – Main Budget Process

Extending the Warmer Kiwi Homes programme

Section 1: Overview

Section 1A: Basic Initiative Information

Lead Minister	Energy and Resources					
Department	Ministry of Business, Innovation and Employment (MBIE)					
What type of initiative is this?	*Critical cost pressure initiative*	***X***	*Manifesto commitment initiative*		*Health and Disability System Reform initiative*	
	Climate Emergency Response Fund initiative		*Savings initiative*		*Non-Spending initiative*	
Initiative description	This initiative will deliver more insulation and heating retrofits for low-income homeowners by extending and expanding the Warmer Kiwi Homes programme, administered by the Energy Efficiency and Conservation Authority (EECA). Confidential advice to Government Delivery of more retrofits will improve educational opportunities and productivity by reducing time off school and work due to illness and improve the housing stock by making it warmer and drier. It will support jobs in the energy service sector, and improve environmental outcomes by reducing marginal electricity consumption at times of peak demand.					
Is this a Cross-Vote initiative?	***N***	-				
Department contact	Privacy of natural persons					
Treasury contact						

Section 1B: Total Funding Sought

Operating funding sought ($m)	2021/22	2022/23	2023/24	2024/25	2025/26 & outyears	Total
		Confidential advice to Government				

Capital funding sought ($m)	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	Total

Section 1C: Initiative Classifications

Is this initiative seeking funding from the Climate Emergency Response Fund (CERF)?	***N***	-
Is this initiative climate-related, but not seeking funding from the CERF?	***Y***	The programme has marginal emission reduction benefits arising from more efficient electricity use at peak times (e.g. cold winter evenings), but its benefits are primarily in health outcomes.
Does this initiative align with the Crown's obligations under the Treaty of Waitangi?	***N/A***	This initiative is a cost pressure bid to continue an existing programme.

Specify if this initiative will help reduce child poverty and describe the impact	***Direct impact***	Children that live in houses that are insulated and have effective and efficient heating benefit from improved wellbeing and opportunities – reduced incidences of illness from cold and damp housing, and fewer days off school.
Does this initiative align with the Child and Youth Wellbeing Strategy?	***Y***	This initiative aligns with the following Child and Youth Wellbeing strategy outcomes: • **Children and young people have what they need** – more families live in warm, dry houses with reduced energy bills and more disposable income • **Children and young people are happy and healthy** and **Children and young people are learning and developing** – children living in houses that are insulated and have effective and efficient heating benefit from improved wellbeing and opportunities – reduced incidences of illness from cold and damp housing, and fewer days off school.
Does the initiative include funding to procure from NGOs?	***Y***	The existing programme works closely with a number of NGOs to increase the reach of insulation and heating for hard-to-reach homes. Confidential advice to Government
Does the initiative include funding to support digital and data related investments?	***N***	-
Is this a regulatory or legislative initiative (according to the guidance provided)?	***N***	-
Is this a significant investment initiative per the definition at section 4.8 of the Budget 2022 guidance?	***N***	-

	Data / Digital / ICT		Physical Infrastructure		Organisational Transformation		Specialised Equipment	

Section 2: Cost pressure information

Cost pressure driver	**X**	Volume		Price		Personnel (driven by volume/price)
Cost pressure description	Successive EECA home insulation retrofit schemes since 2009 have delivered over 365,000 insulation retrofits and over 60,000 heating retrofits. Budget 2021 included funding to extend the Warmer Kiwi Homes programme until June 2023, at which time there will still be roughly 100,000 low-income owner-occupied households that could benefit from an insulation retrofit. This initiative seeks funding to continue this programme for Confidential advice to The Warmer Kiwi Homes programme drives a significant portion of demand in the home energy efficiency market and the programme's withdrawal would have a significant effect on the market, including job losses throughout the industry (manufacturing and installation). In addition, unaddressed poor health outcomes, which result in ongoing public and private cost, would continue. It is important to ensure continuity for the programme well in advance, so that the industry can plan accordingly. Waiting until Budget 2023 to apply for/secure funding for the programme beyond June 2023 would create significant uncertainty for the sector, and require the existing programme to be rundown (i.e. service providers to shed jobs) from December 2022 given the lack of ongoing funding.					
Cost pressure management	EECA baseline spending is modest and fully allocated to deliver existing programmes. It is therefore unable to meet the requirements of this initiative. Should no further funding be approved, the Warmer Kiwi Homes programme will be rundown from December 2022 and come to an end by June 2023.					
Case for funding	If fully funded, this initiative would include: **1. Funding to extend the current *volume based* programme** Confid million funding is requested to extend the current *volume focused* programme through to Confid to reach an expected Confidential The current Warmer Kiwi Homes programme is *volume focused,* with external service providers following up leads under a commercial framework. Though any analysis into the number of under-insulated households remaining in New Zealand is very limited by the available data, it is estimated that there are around 100,000 eligible households (homeowners that are Community Services Cardholders or live in deprivation zones 8, 9 10) yet to be retrofitted with insulation under an EECA programme. We know there is still demand for both insulation and heating retrofits under this *volume based* programme – there has been a sustained high level of demand despite adjusting the level of grant funding from 90% to 80% on Budget Day 2021. C o					

Section 3: Value

Section 3A: Opportunity/Problem	
Opportunity/Problem	Insulation and heating provides significant positive health outcomes, and there is still a significant number of low-income households in New Zealand that are yet to be retrofitted. This initiative would extend the Government's current *volume based* Warmer Kiwi Homes programme beyond its scheduled end date (June 2023). Confidential advice to Government Warmer Kiwi Homes provides grants to low-income owner-occupiers for insulation and heating retrofits and has been running since July 2018. As of 2 November 2021, the programme had supported 75,000 insulation and heating retrofits since mid-2018. The current programme is *volume based*, with external service providers following up leads under a commercial framework. At the end of the programme's current funded period (June 2023), EECA estimates that there will be roughly 100,000 eligible owner-occupied households yet to be retrofitted with insulation under an EECA programme. We estimate that 80% (80,000) of these households could still be reached effectively using the current *volume based* approach. Based on insights and data from the existing programme, we consider that the remaining 20% (20,000) will be either hard-to-reach for a number of reasons including homeowners' distrust of government intervention or refusal to allow service providers to enter their homes, or unable to have a retrofit due to issues with the house itself or the cost of the retrofit. If fully funded, this initiative would continue the existing programme until Confidential advice to Government Extending and expanding the Warmer Kiwi Homes programme provides an opportunity for more households to benefit from better health outcomes and the more efficient use of electricity.

Section 3B: He Ara Waiora	
Tikanga- decisions are made by the right decision-makers, following a tikanga process, according to tikanga values	Confidential advice to Government
Manaakitanga- focus on improved wellbeing and enhanced mana for iwi and Māori, and for other affected communities and groups, demonstrating an ethic of care and mutual respect	Lower income Māori households tend to face greater barriers to adopting energy efficient appliances. Māori are also over-represented among households experiencing energy hardship (households that cannot afford to meet their household's energy needs). Energy hardship and poor housing negatively affects the health and wellbeing of occupants, as well as their ability to participate actively in their community. Without adequate support, Māori are at greater risk of having insufficient heating and deficits in comfort and home quality 'locked in'. Con

Section 3C: Outputs – The good or service the initiative purchases	
Output	**Description**
Insulation and efficient heater retrofits for low-income homeowners	The funding will be used to continue the existing programme and deliver further insulation and efficient heater retrofits to low-income households. If fully funded, EECA estimates that this initiative would deliver an additional Conf insulation and efficient heater retrofits to low-income homeowners.

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Section 3D: Impacts – The direct effect of the initiative		
Warm, dry homes	**Description of the impact**	Improved indoor temperature, reduced damp and mould, improved air quality and increased useable living space. Individuals and families who are occupants of treated dwellings will be impacted. The lowest quality houses/heating systems will see the greatest marginal improvements in these domains. These benefits will be realised immediately and endure for the lifetime of the measures: between 10 (heating) and 30 years (insulation).
	Quantification	**High impact** The connection between adequate insulation, clean heating and these housing outcomes is extremely well-established, measurable, and immediate. In August 2020 EECA published an independent interim evaluation of the current Warmer Kiwi Homes programme to date. This provided a review of the evidence base for home energy efficiency retrofit programmes and provided an updated Benefit: Cost Ratio (BCR) for the current programme of 4.7:1. The finding that benefits materially exceed costs for the programme is robust to adjustment of all assumptions, including household demographics, halving of the lifespan of insulation, and a much reduced value attributed to mortality.
	Supporting Evidence	The evidence base is **extremely strong** and is reviewed in a 2020 evaluation of the Warmer Kiwi Homes programme conducted by Motu Economic and Public Policy Research, as well as the 2011 evaluation of the predecessor Warm Up New Zealand programme, also conducted by Motu: • Grimes A. & Preval N. (2020): https://www.eeca.govt.nz/assets/EECA-Resources/Research-papers-guides/warmer-kiwi-homes-evaluation-phase-1-motu.pdf • Grimes A. et al. (2011): www.motu.org.nz/files/docs/NZIF_CBA_report_Final_Revised_0612.pdf
	Gaps in Evidence	There are no major evidence gaps, but an impact evaluation currently underway will better quantify the extent to which treated homes have achieved warm and dry indoor conditions. Initial results are due in December 2021, with a final report due in November 2022.
	Assumptions	• In quantifying the benefits of the programme, we assume that insulation retrofits have a functional lifespan of 30 years and heaters 10 years. • Our estimation of the size of the eligible and accessible market remaining vs the untreatable part of the remaining market are based on the limited data available on housing stock condition, paired with EECA estimates based on experience delivering retrofit programmes over 12 years. • Confidential advice to Government
	Implications	We have a high level of confidence in our ability to achieve the intended impacts with the current initiative, which will extend the current *volume based* programme until Confidential advice to Government
Improved health and wellbeing outcomes	**Description of the impact**	A key flow-on impact of warmer, drier homes and improved air quality is an improvement in a range of health and wellbeing outcomes, including: • reduced mortality • reduced hospitalisation • fewer GP visits • lower pharmaceutical costs • improved mental health • improved school attendance and learning • avoided lost work and productivity • improved comfort in the home • increased sense of control • support for positive social connections. This initiative will improve the health and wellbeing of occupants of treated dwellings, with benefits accruing to government through reduced health spending. Greater health benefits accrue to vulnerable populations, specifically the elderly (particularly mortality), children (particularly respiratory illness), those with pre-existing conditions and those with disabilities who have higher occupation rates in the home.

	Quantification	**High impact** The funding sought through this initiative is expected to generate an estimated Conf in benefits through reduced mortality and a further Conf through other health benefits. Health benefits represent approximately 97% of the total benefits of the Warmer Kiwi Homes programme, with reduced mortality accounting for 81%. The dominant benefits (gross and net) of the programme are attributable to the insulation component of the scheme. The main drivers of these benefits are reduced deaths from cold and hot spells (particularly among the elderly), cardiovascular disease, and injuries, and reduced symptoms of respiratory disease, arthritis and rheumatism. Improved mental health accounts for up to 50% of health benefits in some studies. Inefficient housing and fuel poverty have been shown to affect mental health by way of chronic thermal discomfort, negative wellbeing impacts of condensation, damp and mould, and financial stress related to high energy bills and the experience or fear of falling into debt. Improved mental health is also linked to improved physical health. Even in cases where health savings are not realised, there is potential for other wellbeing benefits as a result of improved indoor comfort improvement. These can include increased confidence, optimism, happiness, clear thinking, improved family cohesion, as well as addressing issues of social isolation caused by a reluctance to invite people into an unhealthy home. Less disruption of schooling and increased attendance due to illness leads to increased educational success and increased productivity in the long term for the economy. Care arrangements will vary, but often one parent will need to be at home with an ill child for 1-2 weeks per year. Increased attendance at work leads to increased productivity in the long term for the economy. Improved productivity while at work (when personal health and wellbeing are improved) is an impact in the short term.
	Supporting Evidence	The evidence base for the connection between improved indoor environment and these health outcomes is **extremely strong**, supported in particular by the 2011 evaluation of the Warm Up New Zealand programme (Grimes et al. above) and other New Zealand research, in particular: • Howden-Chapman et al. (2007) Effect of insulating existing houses on health inequality: cluster randomised study in the community • Preval, Chapman, Pierse, & Howden-Chapman, (2010). Evaluating energy, health and carbon co-benefits from improved domestic space heating: A randomised community trial: https://www.sciencedirect.com/science/article/abs/pii/S0301421510001837 This has been replicated in multiple other jurisdictions: • Gilbertson, J., M. Grimsley and G. Green (2012): www.sciencedirect.com/science/article/pii/S0301421512000791 • Thomson, H. et al. (2013): Housing improvements for health and associated socioeconomic outcomes (Review) https://researchonline.lshtm.ac.uk/856558/1/CD008657.pdf • WHO (2018) Housing and Health Guidelines. Geneva: World Health Organization.Evidence for reduced public spending on health: • Copenhagen Economics (2012): www.renovate-europe.eu/uploads/Multiple%20benefits%20of%20EE%20renovations%20in%20buildings%20-20Full%20report%20and%20appendix.pdf The evidence base for mental health impacts is growing, on the basis of several robust studies conducted in the United Kingdom and Ireland (countries with similar housing stock, climate and social dynamics to NZ). • Liddell, C., & Guiney, C. (2014). Improving Domestic Energy Efficiency: Frameworks for Understanding the Impacts on Mental Health. University of Ulster: https://pure.ulster.ac.uk/ws/portalfiles/portal/11471481/mental_health_framework_paper.pdf • Tod A.M. et al. (2012): http://bmjopen.bmj.com/content/2/4/e000922.full.pdf+html There is some evidence in the space of improved school attendance and learning: • Slotsholm, (2012): https://www.velux.com/ar-DZ/Daylight/ventilation/facts_ventilation/did_you_know/Documents/socio-economic-consequences-og-better-air-quality-in-primary-schools_slotsholm_uk.pdf Evidence for avoided lost work and productivity:

		• These benefits were identified as delivered of the WUNZ programme, but not monetised. • Preval et al. (2010): https://www.cabdirect.org/cabdirect/abstract/20103218230 • Chapman et al. (2009): https://jech.bmj.com/content/63/4/271 There is a strong and growing body of evidence related to improved comfort in the home and increased sense of control: • UK Health Forum (2014): http://ukhealthforum.org.uk/wp-content/uploads/2018/11/UKHF-HP_fuel-poverty_report.pdf • Bennett et al (2016): https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/warm-safe-well-eval-warm-home-programme-summary_1.pdf • Bartom, Basham and Shaw (2004): http://www.energybc.ca/cache/globalconsumereconomy/www.carillionenergy.com/downloads/pdf/central_heating.pdf There is some limited evidence related to support for positive social connections: • Bennett et al (2016): https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/warm-safe-well-eval-warm-home-programme-summary_1.pdf • Bartom, Basham and Shaw (2004): http://www.energybc.ca/cache/globalconsumereconomy/www.carillionenergy.com/downloads/pdf/central_heating.pdf
	Gaps in Evidence	While the health impacts and their public savings implications are very well evidenced, the commonly observed wider wellbeing benefits are rarely directly measured or monetised. As such, these are not included in the cost-benefit analysis, thereby forming a one-sided uncertainty.
	Assumptions	Given the strong evidence base the cost-benefit analysis includes no significant assumptions.
	Implications	Evidence for this impact is very strong.
Reduced energy consumption and related emissions	**Description of the impact**	Insulation and heating retrofits in low-income households results in: • Increased energy efficiency • Reduced energy consumption (including at peak times e.g. cold winter evenings) • Reduced carbon emissions • Reduced energy costs • Increased disposable income. These benefits will affect individuals and families who are occupants of treated dwellings; other business sectors where income is redistributed; and government.
	Quantification	**Moderate impact** Energy savings through improved energy efficiency of Con are expected (primarily electricity). Energy bill savings from improved heating and lighting are lower than savings in the health area. This is due to the fact that many households are under-heating their homes prior to interventions, and choose improved service (maintaining a warm home) over energy savings. Indeed, it is likely that the health benefits would not be realised without some 'takeback' of the energy savings. Any realised electricity savings at the household level translate into reduced demand on the electricity grid. Because peak demand is driven primarily by heating, reduced demand will also reduce peaks. Any energy savings will deliver environmental benefit by way of reduced resource use, carbon emissions and particulate emissions, especially in the case of other fuels than electricity**.**
	Supporting Evidence	Reduced energy costs and increased disposable income: • Grimes A. and Preval N. (2020) Warmer Kiwi Homes Evaluation 2020: Phase 1 https://www.eeca.govt.nz/assets/EECA-Resources/Research-papers-guides/warmer-kiwi-homes-evaluation-phase-1-motu.pdf • Grimes A. et al. (2011): www.motu.org.nz/files/docs/NZIF_CBA_report_Final_Revised_0612.pdf Efficient and reduced energy use: • Grimes A. et al. (2011) Warming Up New Zealand: Impacts of the New Zealand Insulation Fund on Metered Household Energy Use: https://www.mbie.govt.nz/info-services/sectors-

		industries/energy/energy-efficiency-environment/documents-library/energy-efficiency-docs/nzif-energy-report.docx.pdf • The Concept Consulting report on electricity efficiency https://www.eeca.govt.nz/assets/Resources-Main/Concept-electricity-efficiency-report.pdf
	Gaps in Evidence	The majority of New Zealand evidence for the benefit of space heaters relates to heat pumps and there is an absence of New Zealand evidence that specifically values the benefits of wood-burners or pellet-burners. Given that the majority (approximately 95%) of installs are heat pumps, this evidence gap is not significant to an understanding of the programme as a whole.
	Assumptions	In the absence of better evidence, we assume that all of the benefits which accrue to households with heat-pumps also accrue to households with pellet burners and wood-burners. This assumption is of only minor importance given the low uptake of wood-burners and pellet-burners under Warmer Kiwi Homes. Given the availability of heat-pumps (and subsidy schemes) over the past 15 years, low-middle income New Zealand households who have not yet purchased a heat-pump may be less likely to do so in the future in the absence of a subsidy programme. The studies we rely upon use an additionality estimate of 75%.
	Implications	We are confident that the gaps in the evidence are minor and the assumptions are robust.
Job stability and certainty	**Description of the impact**	This initiative would continue to support Individuals working in the energy efficiency services industry (manufacturing and installation).
	Quantification	**Moderate impact** EECA estimated that the Warmer Kiwi Homes programme supports 400-600 jobs. • A 2012 Motu report on the Warm Up New Zealand programme found that employment per 10,000 retrofits was around 150 FTEs. • There are five New Zealand insulation manufacturers who supply Warmer Kiwi Homes. More than 90% of the insulation installed through Warmer Kiwi Homes is manufactured in New Zealand. By driving more activity through the programme we are supporting jobs through the sector's supply chain.
	Supporting Evidence	• Denne, T., & Bond-Smith, S. (2011). Impacts of the NZ Insulation Fund on Industry & Employment. https://www.mbie.govt.nz/dmsdocument/147-nzif-producers-report-pdf • Grimes A. et al. (2011): www.motu.org.nz/files/docs/NZIF_CBA_report_Final_Revised_0612.pdf
	Gaps in Evidence	There is uncertainty about how much of this activity would happen anyway (i.e. rather than being additional).
	Assumptions	As noted previously, 75% additionality is assumed.
	Implications	-

Section 3E: Goals – What this initiative aims to achieve

Improvement in housing stock	**Description**	**Improving the quality of New Zealand's housing stock.** This relates directly to the housing wellbeing domain in the Living Standards Framework (the quality, suitability, and affordability of the homes we live in). This goal is also aligned with the He Ara Waiora principle of manaakitanga as improved housing stock improves the wellbeing of New Zealanders and addresses the inequity of Māori being over-represented among households experiencing energy hardship (households that cannot afford their energy needs). Confidential advice to Government
	Quantification	At the end of the programme's current funded period (June 2023), EECA estimates that there will be roughly 100,000 eligible owner-occupied households yet to be retrofitted with insulation under an EECA programme. In August 2020 EECA published an independent interim evaluation of the current Warmer Kiwi Homes programme to date. This provided a review of the evidence base for home energy efficiency retrofit programmes and provided an updated Benefit: Cost Ratio (BCR) for the current programme of 4.7:1. The majority of these benefits relate to improved health outcomes.

	Timeframes	Short-term (within 5 years)
	Evidence and Assumptions	As set out previously
	Implications	-
Improved productivity of NZ economy	**Description**	**Improving the productivity of New Zealand's economy.** As outlined in Impact 2, continued funding for the installation of heating and insulation retrofits beyond 2023 through to 2026 will reduce spending on health, lost time at work and productivity, and lost school attendance and education opportunities. Impact 3 explains that lower energy bills will increase the household's disposable income, and Impact 4 outlines how the initiative will provide continued support for the growing energy service providers market and provide job stability for providers. This relates to the income and consumption wellbeing domain in the Living Standards Framework (people's disposable income from all sources, how much people spend and the material possessions they have).
	Quantification	Goal is not readily quantifiable.
	Timeframes	Medium-term (5-10 years).
	Evidence and Assumptions	-
	Implications	-
Reductions in energy demand with associated environmental benefits	**Description**	**Achieving reductions in energy demand.** As outlined in Impact 3, continued funding for the installation of heating and insulation retrofits beyond 2023 through Confi will result in improved energy efficiency of low-income homes. Electricity savings at the household level translate into reduced demand on the electricity grid. Because peak demand is driven primarily by heating, reduced demand will also reduce peaks. Energy savings will deliver some environmental benefits by way of reduced resource use, carbon emissions and particulate emissions, especially in the case of other fuels than electricity. This relates directly to the environment wellbeing domain in the Living Standards Framework (the natural and physical environment and how it impacts people today).
	Quantification	Goal is not readily quantifiable.
	Timeframes	Short-term (within 5 years).
	Evidence and Assumptions	-
	Implications	-

Section 3F: Distributional Analysis

Question 1: Does the initiative have the following types of distributional impacts for Māori?	A	Direct		Indirect	***X***	No Impact		
	B	Targeted and tailored for Māori		Disproportionate positive impact		Other *(explain)*		
Question 2: Does the initiative have the following types of distributional impacts for Pacific Peoples?	A	Direct		Indirect	***X***	No Impact		
	B	Targeted and tailored for Pacific Peoples		Disproportionate positive impact		Other *(explain)*		
Question 3: Does the initiative have the following types of distributional impacts for children?	A	Direct		Indirect	***X***	No Impact		
	B	Targeted and tailored for children		Disproportionate positive impact		Other *(explain)*		
Question 4: Does the initiative have direct impacts on any other population groups?	**Y**	Low-income people						

Question 5: What region is this initiative expected to impact?	**X**	*All of New Zealand*		*Gisborne*		*Northland*		*Tasman*
		Areas outside regions		*Hawke's Bay*		*Offshore*		*Waikato*
		Auckland		*Manawatu-Whanganui*		*Otago*		*Wellington*
		Bay of Plenty		*Marlborough*		*Southland*		*West Coast*
		Canterbury		*Nelson*		*Taranaki*		

Section 4: Alignment

Section 4A: Strategic Alignment	
How does this initiative link with your strategic intentions/statement of intent?	This initiative aligns with EECA's strategy to "mobilise New Zealanders to be world leaders in clean and clever energy use". It aligns specifically with its *Energy Efficient Homes* strategic focus area which seeks the following outcomes: • New Zealanders live in energy efficient homes that are warm, dry and healthy • New Zealand households benefit from an efficient, well-integrated, and resilient renewable energy system.
Does this initiative link with other sectoral or whole-of-government strategies (e.g. the Pacific Wellbeing Outcomes Frameworks)?	The health benefits generated by this programme will support outcomes pursued by the Ministry of Health. This initiative will also support cross-government work on a Just Transition to ensure that regions are activated and supported to plan and manage the social, economic, and environmental impacts in the transition to a low emissions economy.
Does this initiative impact other agencies directly or indirectly? If so, how?	This initiative interacts with new requirements for rental properties, but does not overlap as only low-income owner-occupied homes are eligible for Warmer Kiwi Homes retrofits. The rental property requirements were introduced after the passage of the Healthy Homes Guarantee Act 2017, which enables standards to be set to make rental homes warmer and drier to improve the rental housing stock and health outcomes for tenants. The standards cover heating, insulation, ventilation, moisture ingress and drainage, and draught stopping. The Act required standards to be made by 1 July 2019, and implemented by 30 June 2024.

Section 4B: Alignment to Government's goals	
The Government's goals for this term are: **1) Continuing to keep New Zealand safe from COVID-19** **2) Accelerating the recovery and rebuild from the impacts of COIVD-19** **3) Laying the foundations for the future, including addressing key issues such as our climate change response, housing affordability and child poverty**	
Alignment to Government goals	This initiative aligns with the Government's goals of: • **Accelerating the recovery and rebuild from the impacts of COVID-19 –** the programme has been a success for service providers delivering retrofits in a challenging economic environment and will continue to support the growing energy service providers market and provide job stability for providers • **Laying the foundations for the future, including addressing key issues such as our climate change response, housing affordability and child poverty -** more efficient electricity use at peak times (responding to climate change) and improved wellbeing and opportunities for children living in houses that are insulated and have effective and efficient heating (child poverty).

Section 4C: Contribution to the Government's Wellbeing Objectives

The Government's five wellbeing Objectives are:

- **Just Transition:** supporting the transition to a climate-resilient, sustainable, and low-emissions economy.
- **Future of Work:** enabling all New Zealanders and New Zealand businesses to benefit from new technologies and lift productivity and wages through innovation
- **Physical and Mental Wellbeing:** supporting improved health outcomes for all New Zealanders, including protecting New Zealanders from the impacts of COVID-19.
- **Māori and Pacific:** lifting Māori and Pacific incomes, skills, and opportunities, including through access to affordable, safe, and stable housing
- **Child Wellbeing:** reducing child poverty and improving child wellbeing, including through access to affordable, safe, and stable housing.

Please note: these objectives have been agreed by Cabinet subject to wider consultation. The final versions of the objectives will be published in the Budget Policy Statement in December 2021.

Contribution to Wellbeing Objective(s)	This initiative contributes to the following wellbeing objectives: • **Just Transition (indirect)** – supports employment, provides warmer and drier homes, and enables more efficient electricity use at peak times (e.g. cold winter evenings), which results in less carbon emissions • **Physical and Mental Wellbeing (direct)** – protects against the negative physical and mental impacts of cold, damp homes. • **Child Wellbeing (direct)** – children that live in houses that are insulated and have effective and efficient heating benefit from improved wellbeing and opportunities • **Māori and Pacific (indirect)** – though EECA does not collect demographic data on applicants to the Warmer Kiwi Homes programme, the programme targets low-income households, a demographic in which Māori and Pacific communities are overrepresented.

Section 5: Delivery

Section 5A: Fit with existing activity

How does the initiative link with existing initiatives with similar objectives?	This initiative is an extension of the current Warmer Kiwi Homes programme, which EECA has delivered since July 2018. It previously delivered Warm Up New Zealand from 2009 until the end of June 2018. EECA therefore has existing relationships with service providers and an excellent understanding of the market. The current programme provides retrofits to low-income owner-occupied households as there is now a legislative requirement for rental properties to (progressively) be insulated and have adequate heating. The requirements for rental properties are set under the Healthy Homes Guarantee Act 2017, which enables standards to be set to make rental homes warmer and drier to improve the rental housing stock and health outcomes for tenants.	
Is the initiative an expansion or a cost pressure for an existing initiative?	*Y*	This initiative will continue the existing *volume based* Warmer Kiwi Homes programme for Confidential advice

Provide an overview of existing funding levels for this initiative, and/or initiatives with similar objectives, in the two tables below.

	Operating Funding profile ($m)					
	2021/22	**2022/23**	**2023/24**	**2024/25**	**2025/26**	**Total**
Existing funding for this/similar initiatives	81.668	72.430	-	**-**	**-**	**154.098**
Total funding sought for this initiative	**-**	Confidential advice to Government				
% change between existing funding and funding sought	**-**					
Comments (optional)	-					

	Capital Funding profile ($m)										
	21/22	**22/23**	**23/24**	**24/25**	**25/26**	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**	**Total**
Existing funding for this/similar initiatives	-	-	-	-	-	-	-	-	-	-	**-**
Total funding sought for this initiative	-	-	-	-	-	-	-	-	-	-	**-**
% change between existing funding and funding sought	-	-	-	-	-	-	-	-	-	-	**-**
Comments (optional)											

Section 5B: Funding sought by input

Provide a breakdown of what the requested funding will purchase. Briefly explain the formula used, or key assumptions made, to calculate the cost of each output.

Formula and assumptions underlying costings

Funding to extend the current *volume based* programme

- The current *volume based* programme is scheduled to run through to June 2023 (so no funding is sought for this programme component until 2023/24)
- Seven per cent of the total requested funding for each year of *volume based* programme extension Confide ntial covers operational expenditure for implementation, including staff, auditing the quality of retrofits, programme monitoring, marketing and promotion.
- In the *volume based* component of the programme, the average cost of an insulation retrofit per house is about $2,800 (GST exclusive), and the average cost of installing an affordable, effective heater is about $2,300 (GST exclusive). The average cost of an insulation and heating retrofit combined is approximately $5,100 (GST exclusive).

Confidential advice to Government

	Funding profile ($m)					Total
Input – Operating	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2025/26**	
Input Information						
Volume based programme – grant funding	-	Confidential advice to Government				
Volume based programme – implementation costs	-					
Confidential advice to						
FTE-specific Input Information (if applicable)						
New FTE funding	-	Confidential advice to Government				
Additional FTE overhead funding	-					
Total	-					
# of FTE's (employees and/or contractors)						2
What's the % increase in FTE compared to baseline FTE numbers						12

	Funding profile ($m)										Total
Input – Capital	**21/22**	**22/23**	**23/24**	**24/25**	**25/26**	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**	
	-	-	-	-	-	-	-	-	-	-	-

Total	-	-	-	-	-	-	-	-	-	-	-

Appropriations	The existing appropriations for the Warmer Kiwi Homes programme are: *Implementation of the Grant Scheme for Warm, Dry Homes (M28)*, which is limited to the implementation of the grant scheme for warm, dry homes, and *Grant Scheme for Warm, Dry Homes (M28),* which is limited to grants for retrofits to improve the thermal performance of dwellings occupied by low-income owners. These appropriations expire on 30 June 2023, but will be replaced with similar appropriations suitable Confidential advice to

Section 5C: Options analysis

Options analysis	• EECA baseline spending is modest ($16.3 million) and is fully allocated to existing delivery programmes and therefore unable to meet the requirements of this initiative. • EECA forecasts that its unallocated retained earnings will be approximately $1 million at 30 June 2022 but it is prudent that EECA does not commit these funds at this time as our forecast deficit for 2021/22 may change in the next 6 – 7 months.
Counter-factual question	Should no further funding be approved, the Warmer Kiwi Homes programme will be run down from December 2022 and come to an end by June 2023. The programme's withdrawal from the market will result in job losses throughout the industry (manufacturing and installation), and unaddressed poor health outcomes that result in ongoing public and private cost, would continue.

Section 5D: Scaled option

Option overview	This option would continue the current *volume based* programme for one year beyond the currently funded period through to June 2024 (programme is currently funded until June 2023). Confidential advice to Government It would provide less certainty in terms of continuity of the programme for service providers in the market.

Provide a breakdown of what the minimum viable option would purchase. If the formula used or key assumptions made differ from those used for the primary option, briefly explain these. Add additional rows to the table as needed to capture each output separately.

Formula and Assumptions	This option would deliver approximately 26,500 additional insulation and heating retrofits to low-income households.

	Operating Funding profile ($m)					
Input - Operating	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2025/26 & outyears**	**Total**
Grant funding	-	-	68.000	-	-	**68.000**
Implementation costs	-	-	5.118	-	-	**5.118**
Total	**-**	**-**	**73.118**	**-**	**-**	**73.118**

	Capital Funding profile ($m)										
Input - Capital	**21/22**	**22/23**	**23/24**	**24/25**	**25/26**	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**	**Total**
	-	-	-	-	-	-	-	-	-	-	**-**
Total	-	-	-	-	-	-	-	-	-	-	**-**

Appropriations	The existing appropriations for the Warmer Kiwi Homes programme are: *Implementation of the Grant Scheme for Warm, Dry Homes (M28)*, which is limited to the implementation of the grant scheme for warm, dry homes, and *Grant Scheme for Warm, Dry Homes (M28)*, which is limited to grants for retrofits to improve the thermal performance of dwellings occupied by low-income owners. These appropriations expire on 30 June 2023, but will be replaced with similar appropriations suitable for the extended programme.

Section 5E: Monitoring and Evaluation

The current Monitoring and Evaluation Plan for the Warmer Kiwi Homes programme provides for regular evaluation of the impact and delivery model. The Plan will be reviewed and updated to reflect any adjustments made if funding is received for the expansion of the programme. C
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A full empirical study of the Warmer Kiwi Homes programme is currently being conducted to support an improved understanding of its energy and wellbeing impacts and behaviour, with preliminary results available in December 2021 and final results in November 2022. The results will inform an updated cost benefit analysis, applying rigorous methodology for valuing the range of impacts of housing interventions and responding to Treasury's Living Standards Framework.

Confidential advice to Government

Section 5F: Implementation readiness

Workforce: Are additional FTEs or contractors required?	Confidential advice to Government
Workforce: Resourcing considerations	EECA has existing resources delivering the *volume based* programme – additional resource will be integrated alongside EECA's existing in-house capability and capacity.
Timeframes	Confidential advice to Government
Delivery Risks	
Market capacity	EECA does not expect any market capacity constraints in the delivery of this initiative. EECA will continue to monitor for any COVID-19 related or other supply chain issues that may arise.
Previous delivery experience	This initiative is an extension of the current Warmer Kiwi Homes programme, which EECA has delivered since July 2018. It previously delivered Warm Up New Zealand from 2009 until the end of June 2018. EECA therefore has an excellent understanding of the market existing relationships with service providers and installers. It will use existing systems and processes in place to ensure service providers are delivering retrofits to the required standards and to manage payments of grants to service providers for work completed.