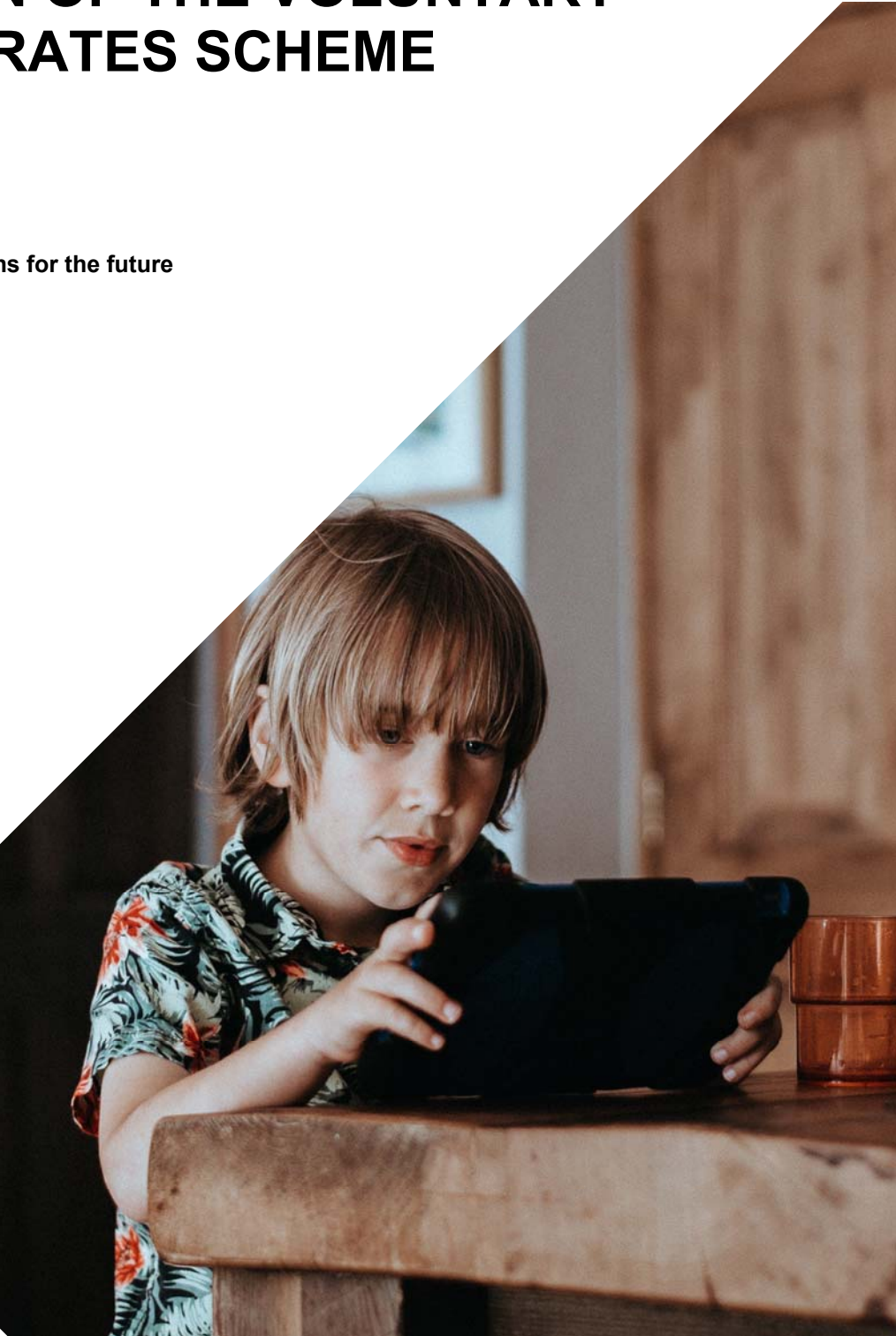


# EVALUATION OF THE VOLUNTARY TARGETED RATES SCHEME

## Final Report

Evaluation findings and lessons for the future

11 April 2018







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# PREFACE

This report has been prepared for the Energy Efficiency and Conservation Authority (EECA) by Bryan Field and Donella Bellett from MartinJenkins (Martin, Jenkins & Associates Limited).

MartinJenkins advises clients in the public, private and not-for-profit sectors, providing services in these areas:

- Public policy
- Evaluation and research
- Strategy and investment
- Performance improvement and monitoring
- Organisational improvement
- Employment relations
- Economic development
- Financial and economic analysis.

Our aim is to provide an integrated and comprehensive response to client needs – connecting our skill sets and applying fresh thinking to lift performance.

MartinJenkins is a privately owned New Zealand limited liability company. We have offices in Wellington and Auckland. The company was established in 1993 and is governed by a Board made up of executive directors Kevin Jenkins, Michael Mills, and Nick Davis, plus independent directors Sir John Wells (Chair) and Hilary Poole.





# EXECUTIVE SUMMARY

## Context

EECA engaged MartinJenkins to evaluate the effectiveness of VTR. They wanted to understand:

- the effectiveness of VTR as a mechanism to enable people to insulate their homes, and if it should continue or not
- if it should continue, whether changes could be made to make it more effective
- its own role in VTR, and if other parties could be better placed to administer the scheme.

The evaluation was designed to give rapid and pragmatic feedback.

The following things were beyond the scope of this evaluation:

- this was not an evaluation of any other insulation programmes (such as Warm Up New Zealand [WUNZ])
- this evaluation did not assess the benefits of insulation (this work has been done already)<sup>1</sup>
- this evaluation did not assess the performance of the insulation industry, nor did it evaluate the performance of individual ISP companies
- estimating the quantity of additional insulation retrofits that VTR has enabled.

## About Voluntary Targeted Rates

Voluntary Targeted Rates (VTR) is a scheme whereby home-owners can finance insulation retrofits through adding the cost to their council rates bill over a 9–10 year period. The scheme was initiated by the Energy Efficiency and Conservation Authority (EECA) and is implemented by the eight participating councils.<sup>2</sup> EECA's main role is recruiting councils and auditing the quality of a sample of the installations.

Since 2009/10 almost 28,000 homes have been insulated using VTR, most of which were in Auckland and Wellington. Two-thirds of homes that were insulated using VTR also received a WUNZ grant.

## Method

This evaluation was conducted using a mix of methods to ensure that a range of feedback and perspectives were captured to inform the evaluation. The specific methods used included:

- an analysis of EECA-held operational data on VTR

<sup>1</sup> <http://www.healthyhousing.org.nz/research/past-research/evaluation-of-warm-up-new-zealand-heat-smart/>

<sup>2</sup> Including Auckland City Council, Greater Wellington Regional Council, Dunedin City Council, Clutha District Council, Hawke's Bay Regional Council, New Plymouth District Council, South Taranaki District Council and Marlborough District Council. In addition, two councils offer a VTR independent of EECA, these are Invercargill City Council and Bay of Plenty Regional Council (only available in Rotorua).



- in-depth interviews, including:
  - representatives from the owners / management of six insulation service provider (ISP) companies
  - representatives of four councils that offer a VTR insulation scheme – three of which work with EECA and one which offers a scheme independent of EECA
  - five VTR customers
- a survey of the sales staff from ISP companies.

We designed a fit for purpose approach to meet EECA's needs. The scale, scope and timing of the evaluation was designed in response to the available time and budget.

Mixed methods (qualitative interviewing and review of EECA data) were used to incorporate as wide a range of data sources and perspectives as possible. It should be noted that the evidence is strongly informed by the perspectives of key stakeholders — a mix of stakeholder groups (including EECA, ISP company owners and sales staff, and VTR customers) were involved so that qualitative feedback wasn't dominated by any one group.

It is also important to note the small number of customers who were interviewed. We talked to five customers, all of whom agreed to be involved (ie they self-selected), the customers we talked to do not necessarily represent the perspectives or characteristics of all VTR users.

## Findings

### How effective is VTR as a mechanism to enable people to insulate their homes?

This research suggests that VTR acts as a behavioural nudge designed to result in additional insulation retrofits, and that it has a positive impact on the number of homes insulated per year in the areas it is offered.

ISP sales people provided clear and strong feedback that they think if councils that don't currently offer VTR were to start doing so, the number of homes insulated per year would increase markedly. This feedback was supported by the councils and ISP company owners we interviewed.

ISP companies (owners and sales people) said that VTR is an important payment option for their customers. This was supported by the customers themselves — the sample we talked to all reported that they used the VTR because it was convenient. Customers liked:

- the convenience of VTR, particularly that there was only one form to fill in and the ISP sales person sometimes filled it out for them.
- that there was no up-front cost
- that the weekly repayments were small.





Some council stakeholders, and an ISP company owner, mentioned that customers liked that the debt stays with the house.<sup>3</sup> This wasn't cited by any of the five VTR users that were interviewed. However, this does not mean it is not a motivator for some people.

Four out of the five VTR customers that we interviewed said that they could have paid for their insulation using their savings, but chose to use VTR anyway. This suggests that the VTR is providing a behavioural nudge for customers by making it easy, and overcoming their present bias.<sup>4</sup> This does not preclude the use of VTR to overcome a financial barrier — we must remember that the customer sample size is small and those who are more financially vulnerable may not have had the time to be interviewed. However, it does suggest that the behavioural nudge factor is more significant.

Other forms of finance exist for customers — many of these are interest-free, but are paid back over a much shorter time period than VTR (one to two years versus nine years). VTR seems to be more convenient for customers than other payment options and providers told us that they often choose it over cheaper financing options.

Stakeholders said that VTR worked best with an openly available WUNZ programme (two thirds of users of VTR also received a WUNZ grant, most of these used it before WUNZ was targeted towards low income households). This period also coincided with wide-spread marketing of insulation by EECA. We can't tell from the available evidence whether WUNZ, EECA's marketing (or a combination of both) had the biggest impact on the VTR uptake.

Overall, we think that the VTR has a positive impact on the number of insulation retrofits per year in the areas it is offered, although most VTR insulations over the past nine years have also used a WUNZ grant. EECA's operational data on VTR suggests that there are about 2,500 VTR insulations per year occurring without a WUNZ grant (and an unknown number of insulations that occur without VTR or a WUNZ grant).

## Should it continue?

Assuming that VTR is effective (see above) and EECA can recover much of the operational costs, the only remaining reason to discontinue is risk. If EECA is prepared to accept the risks outlined below there is no reason to stop VTR.

There are three possible reasons to discontinue VTR: it is ineffective; too costly; or too risky.

If we assume, based on the previous section that VTR motivates additional installations then cost and risk are the two factors to consider.

### Cost

The marginal cost to EECA of fulfilling its roles in VTR is currently less than \$100,000 per year. The most significant cost is the audits for five percent of the installs (\$307.50 per install). The remaining

<sup>3</sup> While this was generally the case, council stakeholders told us that Buyers could compel Vendors to settle the VTR debt prior to the sale of the property.

<sup>4</sup> **Present bias** refers to the tendency of people to give stronger weight to payoffs that are closer to the **present** time when considering trade-offs between two future moments. See: <https://www.behavioraleconomics.com/mini-encyclopedia-of-be/present-bias/>.



costs are for relationship management with councils, including travel and accommodation, and a small amount of time for processing claims. However, it does still represent a sum of money that EECA could re-prioritise to other initiatives and this adds up over several years.

If there are 2,500 installations per year this poses a cost to EECA of about \$40 per installation. It's sensible to assume that not all of those installations wouldn't have happened without VTR. If we assume that 30 percent of them wouldn't have happened without VTR, the cost per additional installation is \$133. This is a reasonable cost compared with a grants scheme. This cost could also be reduced significantly by charging a fee for quality assurance.

## Risk

EECA staff have expressed some concerns about EECA's lack of ability to enforce quality standards. Unlike in WUNZ, EECA cannot select ISPs based on their performance or undertake enforcement activities. Councils are responsible for that.

When an installation is put into the contract management system by an ISP<sup>5</sup> EECA has knowledge of it and five percent of them are audited for quality and safety. Failed audits are uncommon (94.1 percent pass rate),<sup>6</sup> but some ISPs have worse audit records with more fails and worse defects. Councils require that an ISP remedies the issues when an installation fails an audit. ISPs said that they generally organise to have an ISP company representative present for the audits and issues are resolved on the spot.

The concern of EECA staff is that those ISPs with worse audit records are doing more regular fail-worthy installations that are outside the five percent that are audited (and therefore not remedied). If any of these causes a safety-related incident EECA's reputation could be damaged (and this also puts people's property and personal safety at risk). If VTR insulations are not being reported to EECA, then the likelihood of this risk will be very difficult to assess. Our discussions with EECA have clarified that this is potentially an issue with VTR installations that happen together with clean-heating appliances (eg heat-pumps) and sometimes the ISP company may neglect to record the job in the Grants Enterprise Management (GEM) tool. We note that EECA could reduce the occurrence of these situations by engaging regularly with ISP companies on the proper use of the GEM tool (ie reiterating that the ISPs **must enter all VTR insulation jobs in GEM**), and regularly comparing data with the relevant councils to see if there have been insulation jobs that have not been recorded in GEM.

While it is true that there is not a direct financial incentive for the ISP companies to remedy failed audits (as there is with WUNZ), the ISP companies said that they work hard to protect their reputations as quality service providers. They know that EECA report back to the councils on the outcomes of the audits, and ISPs with high fail rates will not have their VTR contracts renewed by the councils.<sup>7</sup>

There are a number of ways that EECA could mitigate this risk — relevant mitigation strategies include:

<sup>5</sup> Not all VTR insulation installations get put into EECA's contract management system by the ISPs. Where councils offer other measures through targeted rates (e.g. heating), and insulation is included only as a component of the job, they are sometimes not put into the system. When this happens EECA has no knowledge of the installations and they are not part of the pool selected for audit.

<sup>6</sup> For comparison purposes, WUNZ has an overall average pass rate of 90.2 percent.

<sup>7</sup> Feedback received from ISP companies and some councils.



- providing councils information on ISP companies' quality performance (ISP companies should receive reports on their own quality performance, and how they relate to the industry average) and giving them guidance on how to procure quality service providers
- fundamentally changing the nature of EECA's role in the intervention to take more direct responsibility for VTR; this would increase the costs, but it could also increase the effectiveness of VTR
- developing a formal contracting relationship between EECA and councils where services are exchanged; this would probably be difficult to negotiate and administer
- discontinuing EECA's involvement in VTR altogether; which could result in poorer quality installations overall.

## How do stakeholders value VTR?

All stakeholders valued the quality assurance component of VTR despite it not being used to sell it. Customers also highly valued the convenience. Councils valued it as a way to improve housing quality. ISPs saw it as an important payment option for customers. Councils and ISPs expressed frustration with the claims process and this was echoed by EECA delivery staff who also saw reputational risks.

Customers who used VTR said that they value the convenience of VTR and the quality of the work (although the quality was not cited as a core reason for choosing VTR). They did not see that EECA had much involvement in VTR — this probably makes sense as EECA's role is not customer-facing and it seems like VTR is not sold based on EECA's involvement.

Councils saw value in the benefits that the scheme posed to their ratepayers (including improved indoor environments and better health outcomes) and to small businesses in the region (ie the ISP companies). They mentioned that Councillors really like VTR, and that it was a way to improve housing quality. VTR is aligned to their energy/low-carbon/clean air objectives.

EECA delivery staff value more households receiving the benefits of insulation and the quality assurance VTR provides. However, some delivery staff were concerned that EECA did not have any direct way to force ISP companies to remedy any quality issues. They felt this represented a reputational risk for EECA.

The ISP company owners that we talked to indicated that VTR was an important payment option for their customers and saw the benefits to them were the same as the benefits to the customer. This implies it is important from a customer service / obtaining more sales perspective. They also valued having a centralised organisation watching out for the quality of installations. However, quality does not seem like something VTR is 'sold' on.

Quality assurance is valued by all the stakeholders we interviewed. There are significant impacts on effectiveness and safety if an installation is not done well.

Councils and ISPs expressed frustration with the claims process. They saw it as complex and frustrating with large delays on some occasions. EECA staff are also frustrated by some aspects of



the claims process, particularly address verification which is time-consuming and inefficient for EECA at times.

## Are there other parties that could be better placed to take on EECA's roles?

It is possible for councils to run VTR without EECA but it is unclear how many would. It is also likely to be cheaper to New Zealand for EECA to run the quality assurance.

Council and ISP stakeholders said that the two large VTR councils could sustainably continue to offer the VTR without EECA's involvement, but they thought that smaller councils would struggle to do so.

There are two councils that offer a VTR scheme for insulation independent of EECA and we included one of them in our interviews for comparison. The council that offers a VTR scheme independent of EECA said that they pay \$40,000–50,000 per year for quality assurance — this amount is almost as much as it costs EECA to provide quality assurance for the whole VTR. That feedback suggests that it costs the country less per installation for EECA to do quality assurance for many councils than it does for one council to do its own.

EECA was seen by councils and ISP companies to be doing a good job with running the quality assurance system, they also saw this role as being very important — particularly that a single agency was overseeing quality at a national level. Given that quality assurance was important to the stakeholders, and that they thought EECA was doing a good job of filling this role, we think that it is important for EECA to retain this role in the future.

## If it continues, what changes could be made to make it more effective?

### Reviewing the VTR application and claims processes

The application process for VTR funding in some council areas were very long (several weeks) compared with other council areas (generally a few days). We would encourage EECA to understand why this is and to work with the councils to improve processing times, since this directly impacts on the customers' experiences.

ISP companies, councils and EECA delivery staff all gave feedback that indicated that the VTR claims process needs to be reviewed. The complaints these stakeholders had about claims processing warrants further investigation to clarify the issues and identify if there is anything EECA can do to improve efficiency and transparency of the process.

### Increased promotion

The biggest drivers of VTR uptake were WUNZ policy settings and marketing. The highest uptake of VTR coincided with the time when grants were most widely available and there was widespread marketing of insulation by EECA.



Many of the stakeholders (including ISP company owners, sales people, councils and VTR customers) mentioned that more promotion was a key way to improve the effectiveness of the VTR at incentivising additional insulation retrofits.

Some ISP company owners and some councils said that promoting the VTR through councils' rates invoices could be an excellent and low-cost way of promoting the VTR to potential customers. This promotion could be further targeted to customers using data on when properties were built, and whether or not they have already been insulated via WUNZ and / or VTR.

Applying the principles of behavioural economics<sup>8</sup> to the promotion of VTR could have an impact on the programme's effectiveness. For example, the key messages of promotional material:

- should focus on the benefits of insulation (ie making it attractive) and that these benefits are realised immediately (ie the benefits are timely), and the weekly costs are low (ie the costs are also timely)
- could include a case study about families / people who have insulated and their experiences (ie making it social)
- could include a pre-populated application form and a list of contact details for local ISP companies (ie making it as easy as possible).

We also note that there is scope here for EECA to undertake a quasi-experimental trial to optimise the effectiveness of this messaging (ie taking a range of approaches to the marketing and messaging in each council area to test which approach, or combination of approaches leads to the highest VTR uptake).

## **Increase in geographic coverage**

EECA-associated VTR is available to about 55 percent of New Zealand's population.<sup>9</sup> In addition to this, VTR schemes that are operated independently from EECA are available to an additional three percent of New Zealand's population. This means that 42 percent of New Zealanders do not have a VTR scheme available in their council areas to help them insulate their homes.

ISP company owners said that VTR should be offered in more areas. This feedback came from both the company owners we interviewed, and the ISP sales people that we surveyed. We agree that expanding the VTR into more council areas would increase its impact. While EECA has worked extensively with councils to convince them to offer a VTR, they have had limited success in convincing new councils to join the scheme.

## **Improved access to customers for research and evaluation purposes**

EECA is unable to contact VTR users directly despite having a list of them. Issues with the way the information is collected and privacy implications mean that to engage with VTR users they need to be contacted through the councils. An improvement would be ensuring that councils and ISPs include provision for EECA to contact customers directly in their paperwork with customers.

<sup>8</sup> Making it **easy, attractive, social** and **timely**.

<sup>9</sup> Subnational population estimates as at 30 June 2017, Statistics NZ.



## Recommendations

Based on the findings of our evaluation, we have developed a set of recommendations for EECA to consider to improve the effectiveness and efficiency of VTR. These fall into two broad categories: operational improvements and lessons for future programmes.

Note that we have also done some thinking about some ideas for the design of future insulation support schemes in case the ambition of the Government for insulation support schemes increases significantly. This advice is presented in Appendix 3.

### Operational improvements

We recommend that EECA:

- continue VTR but look into covering EECA costs by charging service providers a small fee (which providers could then pass on to customers)
- decide on criteria for targeting specific council areas
  - where EECA plans to expand into a new council area, attempt to baseline insulation retrofit activity beforehand to assist with further understanding of additionality in the future
- investigate and resolve potential issues with the VTR application and claims processes
- investigate whether there is a low-cost way to mitigate the quality risks raised by EECA staff — potential mitigation strategies range from soft options (eg providing councils better information and procurement advice) to hard options (eg EECA taking direct responsibility for VTR)
  - we would encourage EECA to pay particular attention to the last two financial years to understand and resolve the recent drop off in pass rate for VTR audits
- work with councils to promote VTR through rates invoices
  - this should include information on the benefits of insulation, and should be targeted at the owners of homes built pre-2000 that have not been insulated through WUNZ or VTR
  - there is an opportunity here to conduct a quasi-experimental trial to test the effectiveness of different variations of the promotion (eg different messages included with the invoice, including pre-populated application forms).

### Lessons for future programmes

We recommend that EECA:

- design programmes in the future that ensure there are contractual freedoms for EECA to contact customers directly for research and evaluation purposes.



# INTRODUCTION

## Context

The Energy Efficiency and Conservation Authority (EECA) have engaged MartinJenkins to evaluate the effectiveness of the Voluntary Targeted Rates (VTR) scheme, and give them some advice on future policy settings for the VTR.

The VTR is a scheme whereby home-owners can finance insulation retrofits through their rates in some local council areas. The scheme is administered by the Energy Efficiency and Conservation Authority (EECA) and is implemented by the eight participating councils. It is primarily targeted at people who are not eligible for a Warm Up New Zealand (WUNZ) grant, but who may still have difficulty raising the capital to pay for insulation up front.

VTR is part of EECA's residential support offering. It is intended to work together with WUNZ to help remove financial barriers to people insulating their homes. The current WUNZ scheme is focussed on insulating the homes of people with low incomes, and is due to cease in mid-2018. An evaluation of VTR will help inform EECA about options for continuing to support people to insulate their homes after WUNZ ceases.

The scheme is designed to be cost neutral for participating councils (who charge users of the VTR interest, and in some cases, an administration fee). The main cost to EECA of administering the VTR is the cost of quality assurance (EECA audit 5% of the jobs to ensure that the insulation has been installed safely, and that it works as intended).

Insulation service providers (ISPs) are key stakeholders of the VTR, as they engage directly with people seeking to insulate their homes. Other stakeholders with a direct interest in VTR include EECA, participating councils, and current and future users of the VTR.

In commissioning this work, EECA are primarily interested in:

- the effectiveness of VTR as a mechanism to enable people to insulate their homes, and if it should continue or not
- if it should continue, whether changes could be made to make it more effective
- understanding its own role in VTR, and if other parties could be better placed to administer the scheme.

## Intervention logic model of VTR

Figure 1 is an intervention logic model for VTR. The intervention logic model captures the purpose and intentions of the policy diagrammatically. It also shows the expected outputs and outcomes of the VTR. The focus for this evaluation is on the activities and outputs layers of the intervention logic model, as well as the key short term outcome<sup>10</sup>: VTR incentivises earlier and additional insulation retrofits by making funding available immediately.

<sup>10</sup> Readers should note that the other outcomes are contingent on achieving this outcome.

