

MONITORING, VERIFICATION AND ENFORCEMENT OF ENERGY EFFICIENCY POLICY


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POLICY DESIGN CONSIDERATIONS


- ▶ Trade offs often have to be made when a new policy is implemented.
 - ▶ Often driven by industry cost implications
 - ▶ This can impact later once policies are implemented on the ability to monitor and evaluate
 - ▶ Self or part funding policies can create unintended consequences for compliance
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MONITORING

Key Performance Indicators


- ▶ Ensure labels are applied at point of sale (retails stores)
 - ▶ Products comply with their stated registration performance levels
 - ▶ Independent testing of sample products
 - ▶ Bench marking consumer awareness and understanding
 - ▶ Track partner spend (marketing – promotion)
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EVALUATION

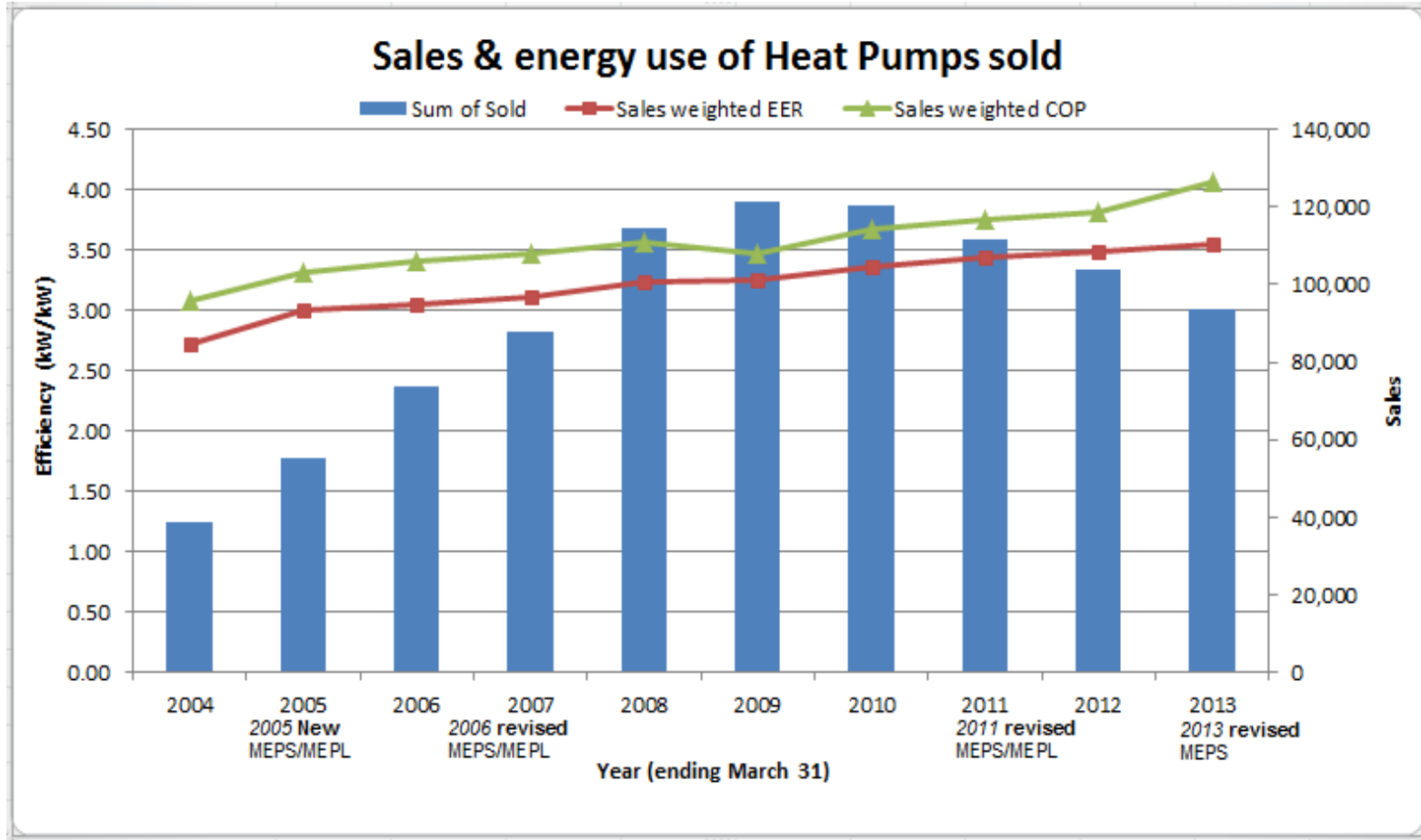
- ▶ Determine the benefits and document
 - ▶ Test the original assumptions
 - ▶ Identify the impacts of interventions
 - ▶ I.e. marketing influence
 - ▶ Support future energy forecasting
 - ▶ Allow rational investment decisions to be made
 - ▶ Sell the programme effectiveness to decision makers
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EVALUATION

How New Zealand Evaluates Energy Savings from their Products Programme:

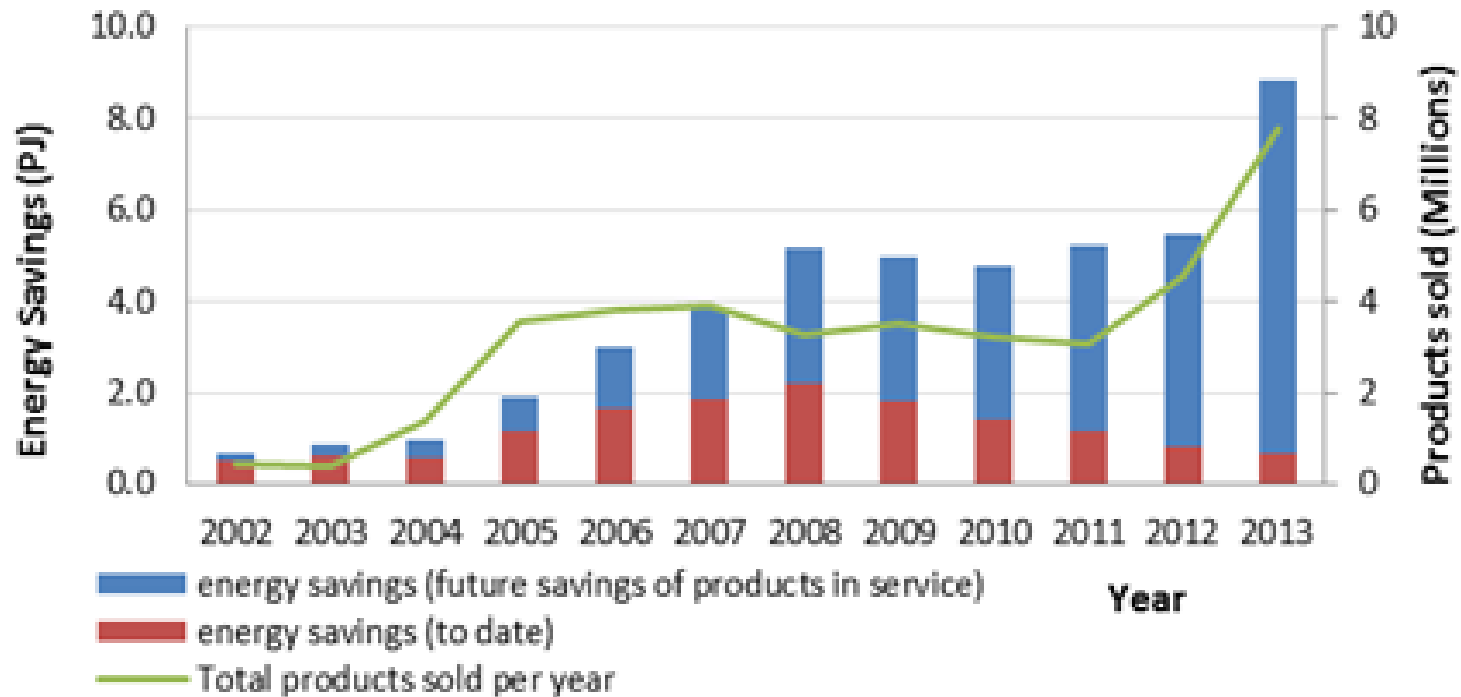
- ▶ Determines the energy performance for each product sold (by model)
 - ▶ Profiles the usage patterns
 - ▶ Collects sales data for every model
 - ▶ Compares to the counter factual
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EVALUATION



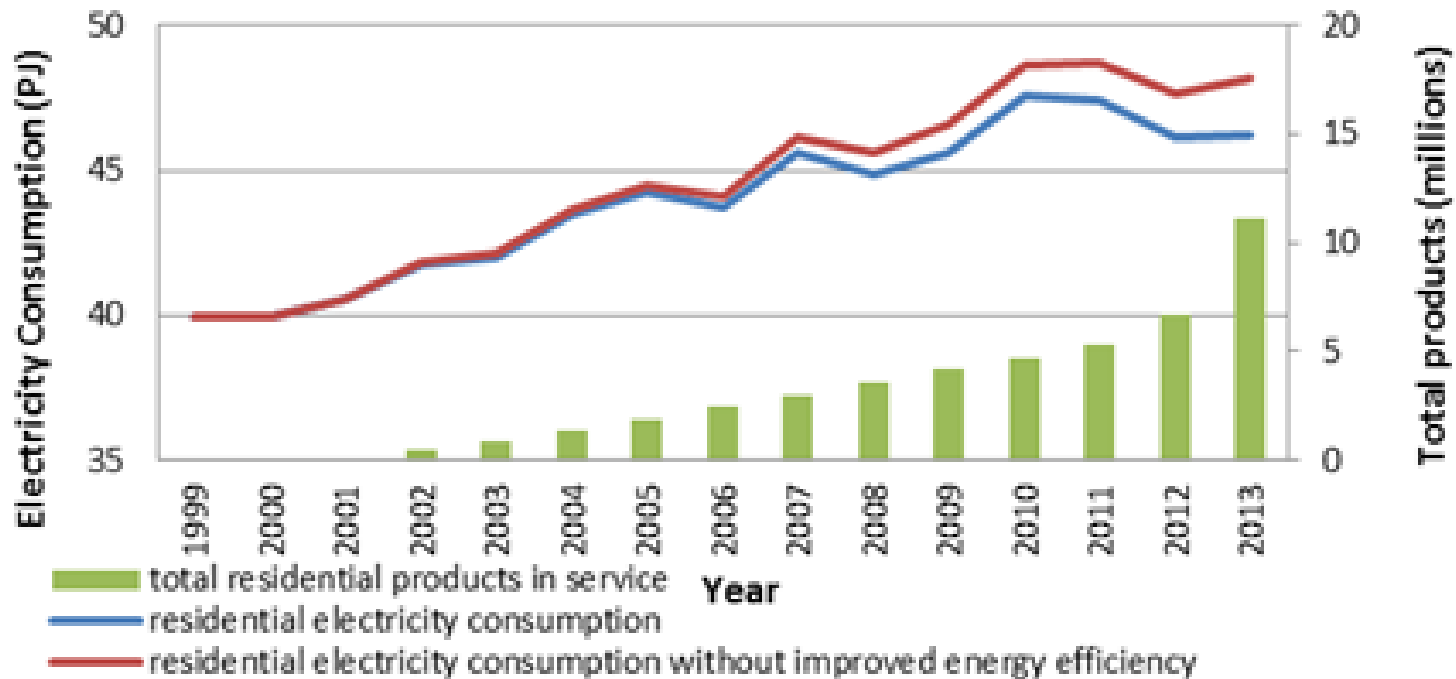
EVALUATION

Figure I: Programme lifetime savings per annum



EVALUATION


Figure 2: Savings in residential electricity consumption



EVALUATION

Residential									
PRODUCT CLASS	SALES			ENERGY SAVINGS			\$ SAVING		
	Total Sales 2013	% Change from 2012	Total sales since 2002	2013 energy saving	Total savings to date	Total Savings (lifetime of products)	2013 energy saving	Total savings to date	Total Savings (lifetime of products)
				PJ	PJ	PJ	\$ mill	\$ mill	\$ mill
Refrigerators & Freezers	187,756	3.0	2,071,086	0.85	4.37	14.03	26.0	134.4	435.1
Dishwashers	86,975	20.6	882,948	0.23	1.08	3.38	6.9	33.2	104.3
Clothes Washers	127,155	4.7	1,504,229	0.20	1.44	2.98	6.1	44.4	90.8
Clothes Dryers	45,169	-3.8	605,884	0.02	0.20	0.26	0.5	6.2	8.2
Air Conditioners	49,596	-13.6	556,372	0.41	1.46	4.89	12.5	44.5	150.4
Electric Water heaters	48,189	-6.6	624,232	0.03	0.19	0.69	0.8	5.8	21.4
Set top Boxes	140,789	68.7	224,262	0.01	0.01	0.11	0.3	0.4	3.5
Distribution transformers	Confidential			NA	NA	NA	NA	NA	NA
Televisions	427,617	NA	427,617	0.15	0.15	1.76	4.5	4.5	53.9
Gas water Heaters	19,400	NA	19,400	0.00	0.00	0.02	0.0	0.0	0.6
CFL	2,612,134	NA	2,612,134	0.00	0.00	0.28	0.0	0.1	0.8
EPS	693,455	-6.2	1,432,961	NA	NA	NA	NA	NA	NA
Total	4,459,036		11,115,441	1.88	8.89	28.14	57.7	273.5	869.0


COMPLIANCE

- ▶ **Consumer International have defined the basic rights of consumers one is**
 - ▶ **The right to be informed** - To be given the facts needed to make an informed choice, and to be protected against dishonest or misleading advertising and labelling.
 - ▶ Energy Efficiency compliance programmes are fundamentally a protection of this right
 - ▶ **Consumers transact with Confidence**
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COMPLIANCE PYRAMID



COMPLIANCE

- ▶ Address or remedy the offence
 - ▶ Sanction appropriately for the offence
 - ▶ Consistency with action taken for other offences
 - ▶ Transparency in what occurred and the outcome.
 - ▶ Stopping the offence, immediately if necessary
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COMPLIANCE

- ▶ Public Alerts
- ▶ Naming and shaming
- ▶ Compliance Advice letters
- ▶ Warning letters
- ▶ Settlements / Undertakings
- ▶ Prosecution

Less Serious



Damaging Breaches

COMPLIANCE

- ▶ How does policy monitoring, verification, and enforcement (MVE) affect energy efficiency?
 - ▶ What are the main barriers to effective MVE?
 - ▶ What can economies do to improve and streamline MVE?
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