

9(2)(a)

22 December 2025

Dear 9(2)(a)

## Re: Official Information Act Request: Hot Water technology

Thank you for your request under the Official Information Act 1982. Your request was made on Thursday 4 December 2025 following EECA's Select Committee Annual Review hearing, during a brief conversation between ourselves. In summary, you requested:

*Information regarding the cost and range of Hot Water retrofit technology.*

Please refer to **Appendix One** for EECA's response to your request. Please let us know if you wish to discuss this further.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Please note that it is our policy to proactively release our responses to official information requests where possible. Our response to your request will be published shortly at <https://www.eeca.govt.nz/about/news-and-corporate/official-information/> with your personal information removed.

Yours sincerely



Murray Bell  
Group Manager, Policy and Regulation

## Appendix One: Cost and Range of Hot Water retrofit technology

### Retrofit to existing hot water system:

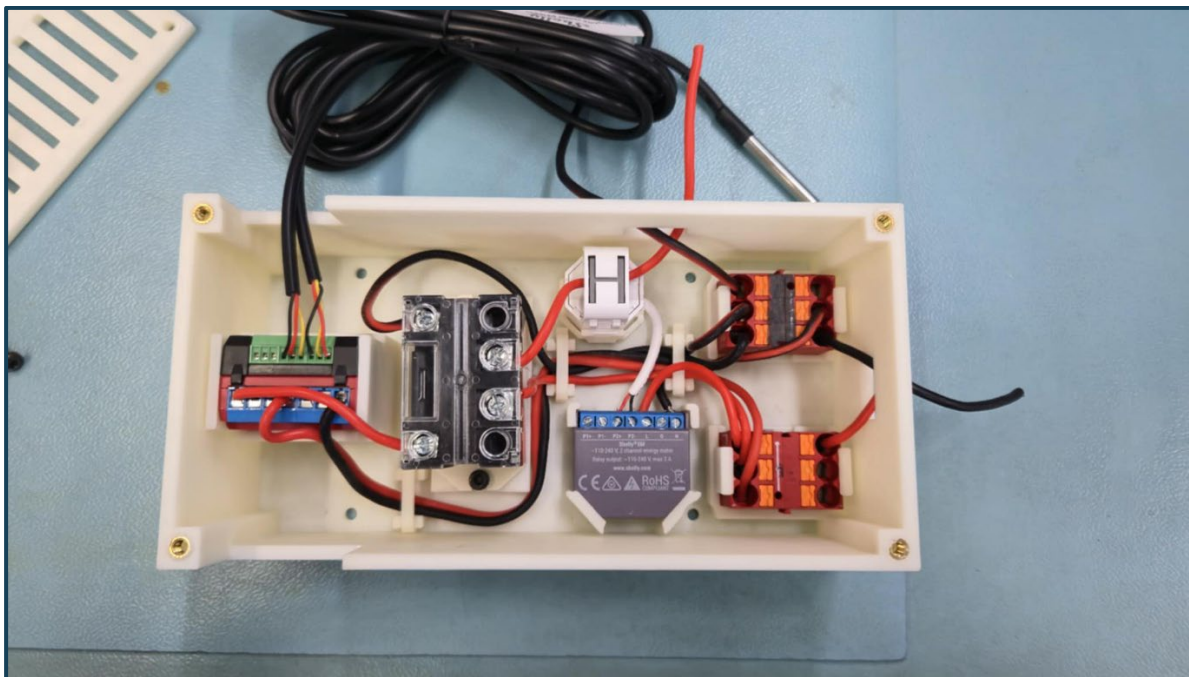
#### FlexTalk 2.0 Pilot

In collaboration with the Electricity Engineers' Association, EECA installed standardised 'smart' connectivity and interoperability (including home energy management systems) in ~150 homes across New Zealand.

For this pilot, EECA retrofit a locally sourced intelligent thermostat from technical distributor, Ivory Egg (refer to Image one), that communicates with a Home Energy Management System (HEMS) from the same supplier (refer to Image Two.) The thermostat can be fitted to any Electric Hot Water Cylinder (EHWC) and costs around \$450 including fitting. HEMS can orchestrate all major electricity loads in the home (as well as hot water). The HEMS costs ~ \$900 plus fitting.

Data is currently being collected from these projects which will be crucial in showcasing how this approach can unlock cost-effective, data-driven energy efficiency and distributed flexibility and deliver consumer savings.

For more information about FlexTalk, visit: [The EEA leads FlexTalk in partnership with the Energy Efficiency and Conservation Authority and industry. Read reports from the initial trial.](#)



*Image One: Thermostat which connects to the hot water cylinder. This sends data to the HEMS system, which enables the HEMs to work.*



*Image Two:* HEMS – Homey Pro. This plugs into the wall via a three-point plug and communicates using 4G or Wi-Fi.

#### **Scaled DF Pilots:**

Building on the FlexTalk pilot, EECA are rolling out 5 x scaled pilots on constrained parts of EDB networks. The pilots are designed to show that flexibility can be used to defer, delay or avoid network upgrades. Each pilot will target ~500 homes and retrofit existing appliances with connectivity or co-fund installation of new intelligent technologies (e.g. smart solar inverters)

#### **GridSmart Intelligent Hot Water Thermostat**

Under the Counties Energy scaled pilot. Rinnai (under the GridSmart brand) are supplying their version of a smart thermostat to retrofit to EHWCs. These units cost \$550 plus fitting.

EECA will compare functionality of the Rinnai solution to the Ivory Egg solution but remain open to all technology solutions to give consumers choice.

#### **Retrofit with a new hot water system:**

##### **Heat Pump water heater pilot**

Hot water accounts for about a third of the energy used in the average home. A HPWH uses just a third of the energy of a traditional electric cylinder or gas system. In 2024/25, EECA undertook a




HPWH pilot with 70 home installations across the country. These homes are of different climates, family sizes, and incomes. EECA is now monitoring their performance in order to provide a better understanding of the real-world energy savings that heat pump water heaters can offer.

In this pilot, the unit costs ranged from \$1900 to \$7800 (\$5800 on average), plus installation which ranged from \$1600 to \$9500 (\$4600 on average).


We found that HPWHs on the market have varying levels of controllability, though many include timers or programmable controls. More information can be found in our market insights report: [Heat-pump-water-heater-project\\_Market-insights-report.pdf](#),

### Webpage: Hot water heat pumps in the home

#### Comparison of household water heating

	Unit and installation cost	Running cost p/y		kg CO2 emissions
Hot water heat pump 	\$7,500	\$333		149
Electric hot water cylinder 	\$3,000	\$1,176		527
Gas continuous flow 	\$3,000	\$1,071	\$706*	969

\*Excludes annual gas connection cost



Very low High

Image three: Comparison of household water heating

\*Note, this figure is based on a four-person household with average hot water usage. A full list of assumptions and can be found in the webpage referenced below.

For more information, refer to: [Hot water heat pumps in the home | EECA](#)

#### Other notes

There are also suppliers of new Electric Hot Water Cylinders with thermostats fitted, in the market.

### Cost Summary

Install type	Product	Indicative cost (including fitting)	Indicative cost (excluding fitting)
Retrofit to existing hot water system	Ivory Egg HEMS (hot water only)	\$450.00	unknown
	Ivory Egg HEMS (whole home)	\$900.00	unknown
	GridSmart Smart Thermostat (hot water only)	\$550.00	unknown
Retrofit with a new heat pump water heater system	Various products and brands	\$10,400 on average	\$5,800 on average