



Frequently Asked Questions (FAQs)

ENERGY STAR Heat Pump - Air Conditioners specification update

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About the specification

1. What are the key changes to the specification?

- A small increase in the levels of EER and COP in three of the four capacity bands.
- Inclusion of a winter performance requirement (under H2 conditions).

The following table summarises the key changes:

Rated cooling capacity band (kW)	MEPS 2010	Current ENERGY STAR specification		ENERGY STAR version 2 effective 1 April 2010		
		EER	H1 COP	EER	H1 COP	2°C COP
<4	3.33	3.51	3.50	3.60	3.60	2.88
4 - 7.5	2.93	3.00	3.40	3.05	3.45	2.76
7.5 - 10	2.93	2.93	3.20	2.93	3.20	2.56
10 - 19	2.75	3.16	3.20	3.30	3.35	2.68

2. Where can I find a copy of the new specification?

Visit www.energystar.govt.nz for a copy of the new specification.

3. Why are these changes being made?

The energy performance levels have been increased so that approximately the top 25% of heat pumps available for sale in NZ will qualify for the ENERGY STAR mark.

The 2°C COP component has been introduced to give consumers the assurance that when they buy an ENERGY STAR qualified heat pump, it will still perform efficiently in the temperature range between zero and five degrees Celsius.

Increasing the stringency of the specification also ensures that the ENERGY STAR mark continues to add value to participating manufacturers/importers.

EECA's objective is to encourage and grow sales of these most energy efficient models.

4. How did EECA decide the new performance criteria?

The new specification was based on analysis of the sales data for the period of 1st April 2008 – 31st March 2009 and modelled 2°C performance data supplied by industry.

5. How does the update affect the Warm Up New Zealand: Heat Smart programme?



EECA will allow a three month transition period for installing heat pumps that Service Providers have in stock. A variation of contract (as per the usual process through serviceprovider@eeca.govt.nz) must be requested at least one month prior, i.e. by 1 March 2010.

Otherwise from 1 April, all heat pump models will need to qualify and be registered under the new ENERGY STAR specification.

Those Service Providers who have requested a variation will have until 30 June 2010 to **install** (not quote on) models that will not qualify under the new specification.

From 1 July 2010, only models qualifying under the new specification will be eligible for the subsidy.

Timings

6. Why was 1st April 2010 chosen to launch the specification?

The launch was timed to coincide with the revision to the standard for Air Conditioner/Heat Pumps (AS/NZS 3823.2:2009), which involves increased Minimum Energy Performance Standards (MEPS) and a change to the Mandatory Energy Performance Labelling (MEPL).

7. When can I register my models under the new specification?

Registrations under the new ENERGY STAR specification will be accepted from 4th January 2010. The registration form is available on www.energystar.govt.nz.

The ENERGY STAR heat pump database will be updated to identify models that meet the new specification as registrations are received and checked by the EECA technical team.

From 1 April, only those models meeting the new specification will be displayed on the database.

8. What happens if a product that is currently qualified doesn't meet the new specification?

From 1 April 2010, only products that qualify under the new specification and are registered with the ENERGY STAR programme can be promoted as ENERGY STAR qualified or use the ENERGY STAR mark.

Manufacturers and retailers can sell through existing stock that is already labelled, but must immediately stop labelling any more products.

Partners will be required to remove the ENERGY STAR mark from promotional material referring to non-qualifying models as close to 1 April 2010 as possible. This includes, but is not exclusive to, website pages, advertising and point-of-sale information.



Technical

9. What does "rated capacity" mean?

This is the amount of heating, or cooling, measured in kW, that the product delivers. It may not be the "maximum" amount that can be delivered, but is usually the value as stated on the product label. This is the value that the product is tested at.

10. Should I provide modelled or test data as evidence of 2°C winter performance?

From 1 April 2010 until 31 March 2011, partners can either provide test or modelled data as evidence of their products performance at 2°C winter conditions.

11. From 1 April 2011 is test data required as evidence of 2°C winter performance?

Yes, from 1 April 2011 partners will need to supply test data as evidence of their products performance under 2°C winter conditions to participate in the ENERGY STAR programme.

12. Why is EECA allowing modelled data for the first year? Why not just ask for test data?

Accepting modelled data in the first year offers those manufacturers without current test data a longer lead time to test their products under 2°C winter conditions.

At the same time it provides consumers with valuable information to help them make an informed purchase decision.

EECA is also in the process of working with an independent NZ-based test facility with the capability to test under 2°C winter conditions, which we expect to be up and running in 2010.

13. If I am supplying modelled data, what is sufficient evidence to support my registration?

Sufficient evidence may be a computer model or chart showing test data measured at other test points/temperatures and then "interpolated" between these points. EECA is happy to discuss this further with partners as required.

14. How will EECA ensure that modelled data is a fair representation of actual performance?

The modelled data submitted by ENERGY STAR partners will be closely scrutinised by EECA's technical team.

During the first year, one model from each partner's range will be check-tested under 2°C winter conditions.



The expectation is that the modelled data will fall within the validity tolerances of the test results. If a unit fails the check-test, it will be removed from the ENERGY STAR programme.

Note that this testing process has no relationship to, or bearing on, registrations for the E3 programme.

15. What is an acceptable validity tolerance between modelled results and test results?

Data must fall within the validity tolerances as set out in Part 2.8 of AS/NZS 3823.2:2009 when check-tested by EECA.

16. Will the modelled data be published on the EECA website?

No, the data will not be published on the ENERGY STAR website. It will be used solely to determine which heat pumps qualify for the ENERGY STAR programme from 1 April 2010 to 31 March 2011.

17. Will supplying modelled data to ENERGY STAR impact on my E3 registrations?

No. In previous correspondence the new ENERGY STAR criteria for COP at 2°C has been referred to as 'H2', which incorrectly suggests a direct relationship between the modelled data used for ENERGY STAR registrations and the E3 programme.

To clarify, modelled 2 degree data used in the ENERGY STAR registration process:

- will not be used for check test under the E3 programme
- will not be published by the ENERGY STAR programme (e.g. on websites or marketing materials)
- is not required to be disclosed to E3 via registrations on the Energyrating web portal/database
- does not have to be declared on the energy rating label.

18. What happens if a products test results aren't within the validity tolerances?

EECA will remove the product from the ENERGY STAR qualified product database and initiate discussions with the manufacturer to ensure that their modelling process is accurate for their remaining products.

19. Why are products banded by cooling capacity?

Performance criteria apply to different bands depending on a products **cooling** capacity (in kW). The bands are outlined in the Energy performance standard AS/NZS 3823.2:2009. This standard has been used as the basis for the ENERGY STAR specification