# THE E3 PROGRAM

The Equipment Energy Efficiency (E3) Program undertakes a range of activities to improve the energy efficiency of appliances and equipment in Australia and New Zealand.

To reduce energy use and emissions, the Australian Government, states and territories and the New Zealand Government collaborate to deliver minimum energy performance standards (MEPS), energy rating labelling (ERL), compliance, registration, and education.

Over the past 12 months, the E3 Program has contributed more than $1.2 billion to the Australian economy and $200 million to the New Zealand economy in avoided energy costs.

# ACHIEVEMENTS 2018-19

The [**E3 Prioritisation Plan**](http://www.energyrating.gov.au/news/prioritised-work-program-e3) identifies how E3 will accelerate policy development and regulate products to deliver energy and emissions savings.

The Plan identifies nine priority areas: lighting, non‑domestic fans, swimming pool pumps, refrigerated storage and display cabinets, air conditioners, domestic refrigerators, televisions, industrial products, and hot water products.

The E3 Program continues to regulate other products covered by legislation, with priorities updated regularly to reflect new and emerging products, changes in technologies and developments in international regulations.

# POLICY DEVELOPMENT

**Air conditioners**

On 19 December 2018, the COAG Energy Council (Energy Council) agreed to the proposed changes recommended in the Air Conditioners Decision Regulation Impact Statement (RIS). On 1 April 2019, the *Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination* *2019* was published and registered.

The Determination introduced a zoned energy rating label for air conditioners with star ratings based on seasonal energy efficiency ratings as well as applying MEPS to single duct portable air conditioners for the first time. The Determination comes into force on 1 April 2020.

**Household Refrigerators**

A new Standard (*AS/NZS 4474:2018/Amdt 1:2019)* reflecting the recommendations of the Household Refrigerator and Freezer Decision RIS was published in December 2018. The RIS agreed by Energy Council in November 2017 recommended tightening MEPS applicable to household refrigerating appliances and adopting the international test standard.

**Lighting**

Following on from the COAG Energy Ministers agreement on 20 April 2018 to further improve lighting energy efficiency regulation by phasing out inefficient halogen lamps in Australia and introducing minimum standards for LED lamps in Australia and New Zealand in line with EU standards, E3 has monitored the EU regulatory process. Consultation with stakeholders on draft regulations for Australia and New Zealand will commence in 2020.

**Street lighting**

A Model Business Case for Street Lighting and Smart Controls Upgrades has been developed to aid local governments, main road agencies and utilities to model, analyse and procure LED and smart controls for street lighting. The business case is available for download at <https://www.slsc.org.au/slsc-publications/model-business>.

**Televisions**

Work has commenced on the development of a Consultation RIS for televisions, expected for release by June 2020.

**Chillers**

E3 released a consultation paper on 20 June 2018 proposing reforms to the regulation of liquid chilling packages (“chillers”) for energy efficiency. Following two rounds of consultations and submissions, E3 released a further consultation paper on 12 December 2018 and submissions closed on 1 February 2019.

**Swimming Pool Pumps**†

The COAG Energy Council agreed, on 19 December 2018, to introduce energy efficiency swimming pool pump regulations. Mandatory labelling and MEPS will commence 12 months after a revised method of test is introduced through Australian Standard AS 5102.1, Performance of household electrical appliances - consumption and performance.

**Electric Motors**

On 20 April 2018, the COAG Energy Council agreed to the terms of the *GEMS (Three Phase Cage Induction Motors) Determination 2018*. The Determination commenced on 14 May 2019 and introduced major changes to the energy efficiency regulation of electric motors including: adopting the International Electrotechnical Commission (IEC) 60034-2-1 Ed. 2.0 test standard and introducing a ‘family of models’ arrangement for registrations.

**Industrial Products**

The E3 Program undertook a wide scoping study and now has a full data set that can assess opportunities across various industry sectors.

A draft discussion paper exploring potential test methods for pumps, boilers and compressors was circulated to a Technical Working Group in 2018.

Consultation RIS on the products will be developed in 2019-2020.

**Hot Water**

# LOOKING FORWARD

# In 2019-2020, E3 will be looking at:

* the outcomes of the GEMS Legislative Review for opportunities to:
  1. improve the effectiveness of the GEMS Program
  2. streamline processes
  3. strengthen compliance.

E3 proposed a roadmap for reform of the regulation of hot water systems for energy efficiency. E3 consulted extensively with stakeholders on the roadmap and, following receipt and consideration of submissions, begun considering next steps.

# GEMS REGISTRATION

In 2018–19, the GEMS Regulator approved 5,120 applications in Australia and responded to 851 enquiries. On average, applications were approved in 1.24 days. One exemption request was granted. As at 30 June 2018, a total of 22 Determinations were in effect under the GEMS Act.

**GEMS Stakeholder Survey**

The fourth annual survey of users of GEMS registration and enquiry services was conducted in June 2019. Overall stakeholder satisfaction has been above 80 percent since the first survey. In 2018-19 it was 83 percent. Key survey results are available on the Energy Rating website at [www.energyrating.gov.au](http://www.energyrating.gov.au).

# GEMS COMPLIANCE

The GEMS Regulator completed check tests of 77 models of 14 GEMS products. Of these, 65 met GEMS requirements and twelve did not. The GEMS Regulator cancelled registration of five models, took alternative enforcement action for four models, and referred three model’s non-compliance to another Regulator.

The GEMS Regulator accepted one enforceable undertaking where the other party agreed to take specific remedial actions in relation to non-compliance detected through check testing.

GEMS inspector market surveillance activities revealed:

* consistently very high (approximately 97 percent) registration compliance for a range of household GEMS products
* overall labelling compliance has improved compared to 2017–18 and is now at approximately 93 percent with the poorest rates of compliance coming from televisions and computer monitors.

The GEMS Regulator regularly receives allegations of non-compliance from consumers, industry, and other government departments which are assessed, and if appropriate, investigated. Most of the allegations relate to registration and labelling compliance. As a result of an investigation into one of these allegations, GEMS inspectors gave four infringement notices for the alleged supply of unregistered models of GEMS products. Enquiries are continuing with respect to the other allegations received throughout 2018–19.